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Office-Related Antibiotic Prescribing for Persons Aged ≤14 Years — United States, 1993–1994 to 2007–2008

In 2003, the Institute of Medicine identified antibiotic resistance as a key microbial threat to health in the United States and recommended promoting appropriate antibiotic use as an important strategy to address this threat (*1*). Antibiotic use contributes to development of antibiotic resistance on both the individual and country level (*2*). To examine trends in pediatric antibiotic prescribing in physician offices, CDC analyzed data from the National Ambulatory Medical Care Survey (NAMCS) for the period 1993–1994 to 2007–2008. This report summarizes the results of that analysis, which found that antibiotic prescribing rates for persons aged ≤14 years who had visited physician offices decreased 24% from 300 antibiotic courses per 1,000 office visits in 1993–1994 to 229 antibiotic courses per 1,000 office visits in 2007–2008. Among the five acute respiratory infections (ARIs) examined, antibiotic prescribing rates decreased 26% for pharyngitis and 19% for nonspecific upper respiratory infection (common cold); prescribing rates for otitis media, bronchitis, and sinusitis did not change significantly. Although the overall antibiotic prescribing rate for persons aged ≤14 years has decreased, the rate remains inappropriately high. Further efforts are needed to decrease inappropriate antibiotic prescribing for persons aged ≤14 years.

NAMCS is a national probability sample survey of visits to nonfederal, office-based physicians conducted annually by CDC. NAMCS samples visits during randomly assigned 1-week reporting periods throughout the year and collects patient demographic information, diagnostic codes for up to three diagnoses, and prescription information from the medical record. Diagnoses of the five ARIs, most episodes of which do not require antibiotic treatment, were identified using the following *International Classification of Diseases, Ninth Revision, Clinical Modification* codes for the primary diagnosis: 381.0, 381.4, 382.0, 382.4, 382.9 (otitis media); 466.0, 490 (bronchitis); 462, 463 (pharyngitis); 461, 473 (sinusitis); and 460, 465 (nonspecific upper respiratory infection [common cold]). Details of NAMCS methodology have been described previously.* To quantify and assess antibiotic prescribing practices, the first five drug prescriptions recorded for each visit were examined, and the number of antibiotic prescriptions counted. Data were weighted to produce national estimates, and combined in 2-year periods to improve the reliability of estimates.

The population-based antibiotic prescription rate was defined as the average annual number of antibiotic prescriptions recorded for persons aged ≤14 years during the 2-year period, divided by the population aged ≤14 years during the same period. Population denominators were the average of the Census Bureau's postcensal estimates of the civilian, noninstitutionalized population of the United States for each July during the 2-year period (*3*). The visit-based antibiotic prescription rate was defined as the average annual number of antibiotic prescriptions recorded for persons aged ≤14 years during the 2-year period, divided by the average annual number of physician office visits by persons in that age group during the same period. In addition, an average annual office visit rate, regardless of antibiotic prescribing, was calculated for patients aged ≤14 years. Significance of trends (at $p<0.05$) was tested

* Available at http://www.cdc.gov/nchs/ahcd/ahcd_scope.htm#namcs_scope.

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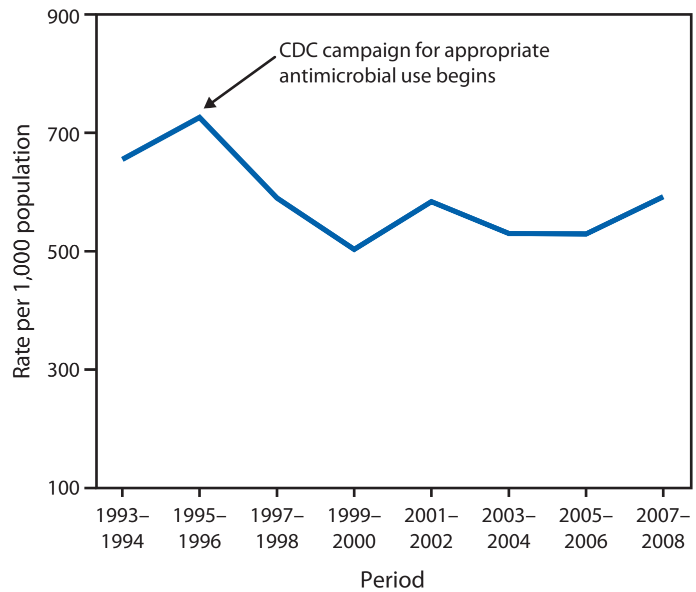
by assuming a linear trend in weighted least-squares regression analysis. The two-tailed t-test was used to compare proportions ($p<0.05$ level of significance).

The number of participating physicians and average annual response rates for each 2-year period of the study ranged from 2,500 to 3,500 and from 62% to 72%, respectively. The number of completed patient record forms for patients aged ≤14 years ranged from 6,500 to 9,400, and the number of these forms showing an antibiotic prescribed ranged from 1,300 to 2,500 for each 2-year period.

From 1993–1994 to 2007–2008, the overall average annual office visit rate, regardless of antibiotic prescribing, increased significantly ($p<0.05$), from 2,180 (95% confidence interval [CI] = 1,974–2,386) per 1,000 persons aged ≤14 years to 2,581 (CI = 2,291–2,871), an increase of 18%. However, the visit rate for the five ARIs examined decreased during the same period by 14%, from 654 (CI = 574–734) per 1,000 persons aged ≤14 years to 560 (CI = 471–648).

From 1993–1994 to 2007–2008, the overall average annual population-based rate of antibiotic prescriptions decreased 10%, from 655 (CI = 570–739) per 1,000 persons aged ≤14 years to 592 (CI = 492–691) (Figure 1). However, this decline was not constant; the rate decreased from 1995–1996 to 1999–2000 and was stable thereafter. For the five ARI diagnoses examined, the average annual population-based prescribing rate decreased 24%, from 448 (CI = 387–510) antibiotic prescriptions per 1,000 persons aged ≤14 years in 1993–1994 to 342 (CI = 277–406) in 2007–2008.

FIGURE 1. Average annual antibiotic prescribing rates for physician office–related visits per 1,000 population aged ≤14 years — National Ambulatory Medical Care Survey, United States, 1993–1994 to 2007–2008



Physician office visit–based antibiotic prescribing rates decreased 24% during the study period, from 300 (CI = 276–324) antibiotic prescriptions per 1,000 visits by persons aged ≤14 years to 229 (CI = 206–253) (Figure 2). The average annual decrease was 6.7%. The antibiotic prescription rate per 1,000 office visits decreased 11% for the ARI diagnoses, including

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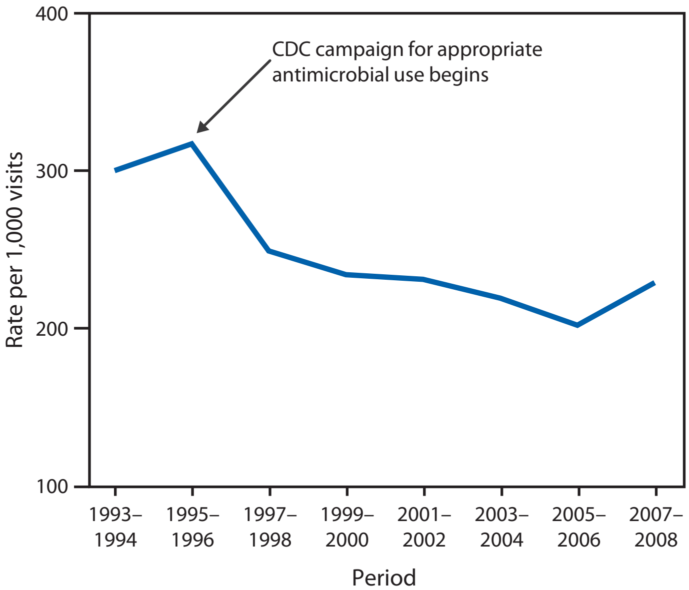
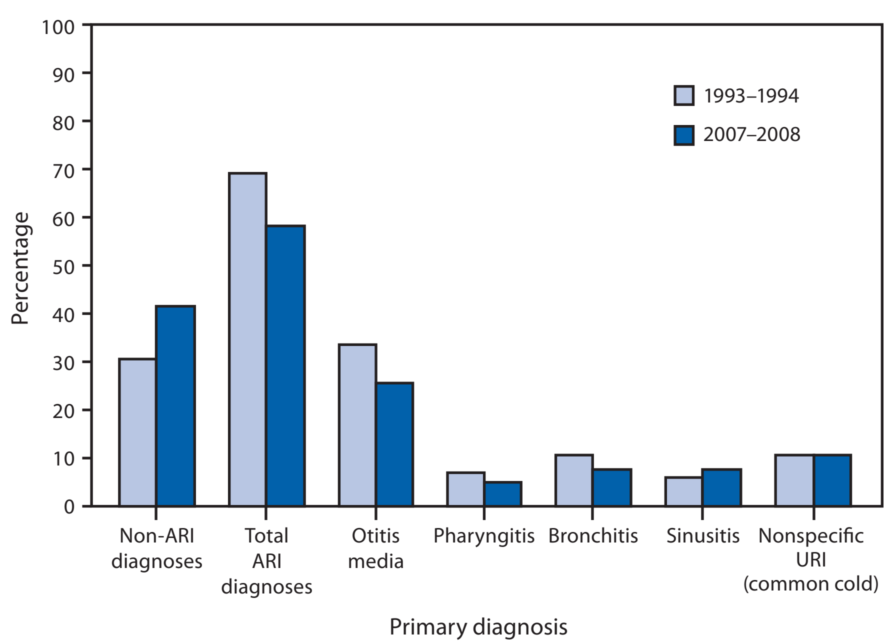
FIGURE 2. Average annual antibiotic prescribing rates for persons aged ≤14 years per 1,000 physician office visits — National Ambulatory Medical Care Survey, United States, 1993–1994 to 2007–2008



19% for nonspecific upper respiratory infection and 26% for pharyngitis. Prescribing rates for the other three ARIs did not change significantly. Despite the decrease, in 2007–2008, ARIs still accounted for 58% of office visits where an antibiotic was prescribed for a person aged ≤14 years (Figure 3). However, this proportion was smaller than the 69% of office visits calculated for 1993–1994 (Figure 3).

FIGURE 3. Average annual percentage of physician office visits by persons aged ≤14 years where an antibiotic was prescribed, by primary diagnosis — National Ambulatory Medical Care Survey, United States, 1993–1994 and 2007–2008



Abbreviations: ARI = acute respiratory infection; URI = upper respiratory infection.

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Editorial Note

The findings in this report show an overall decrease in both population-based and visit-based antibiotic prescribing rates for persons aged ≤14 years in the United States from 1993–1994 to 2007–2008. Changes in the population-based prescribing rates likely reflect a combination of factors, including a decreased need for antibiotics because of introduction of pneumococcal conjugate vaccine and decreased office visits for ARI (*4*). The 24% decrease overall and 11% decrease in ARI-related visit-based antibiotic prescribing rates also suggest that physician prescribing behavior has changed.

Although these changes in physician behavior are encouraging, several areas require further intervention. First, 58% of the antibiotics prescribed in the office setting in 2007–2008 were for five ARIs, most episodes of which do not require antibiotic treatment but are common outpatient diagnoses for which patient expectations, as well as physician behavior, contribute to inappropriate antibiotic use (*5*). Second, prescribing antibiotics for otitis media has not decreased significantly, despite the American Academy of Pediatrics 2004 release of guidelines recommending watchful waiting for otherwise healthy children aged ≥2 years without severe symptoms of otitis media or with an uncertain diagnosis (*6*). The results for otitis media contrast with those for pharyngitis, where a significant decrease in antibiotic prescribing was observed from 1993–1994 to 2007–2008, perhaps because rapid diagnostic testing for group A streptococcus improved prescription decision-making. With expanding resistance profiles among common pathogens, treatment options are dwindling, and reducing inappropriate use of antibiotics is increasingly important.

Similar issues are being addressed in Europe, where young children also are the main recipients of antibiotics and most antibiotics are given for upper respiratory infections (*7*). Studies in Germany, where the volume of

What is already known on this topic?

Inappropriate antibiotic use contributes to antimicrobial resistance, a major health threat in the United States. Children frequently are prescribed antibiotics in U.S. physician offices and most typically for acute respiratory infections (ARIs), even though most ARI episodes do not require antibiotic treatment.

What is added by this report?

The antibiotic prescribing rate for persons aged ≤14 years in U.S. physician offices decreased 24%, from 300 antibiotic courses per 1,000 office visits in 1993–1994 to 229 antibiotic courses per 1,000 office visits in 2007–2008. However, in 2007–2008 ARIs still accounted for 58% of all office-based antibiotic prescribing, and prescribing rates for otitis media, sinusitis, and bronchitis had not changed significantly.

What are the implications for public health practice?

Antibiotic prescribing for persons aged ≤14 years in the United States remains inappropriately high. Further intervention is needed to decrease inappropriate antibiotic prescribing for this population.

antibiotic use is in the bottom third among countries in the European Union (*8*), have shown that more than one third of the population had taken antibiotics in the previous year (*9*). Far higher rates of antibiotic use have been observed in southern and eastern Europe (*9*). The European Union has made reducing antibiotic use among children a priority with creation in October 2009 of the Antibiotic Resistance and Prescribing in European Children network (*10*).

The findings in this report are subject to at least two limitations. First, only the primary diagnosis was examined, and antibiotic prescriptions were attributed to that diagnosis. Antibiotics also might have been prescribed for the second or third diagnoses, which might have resulted in misclassification. Second, only antibiotic prescribing related to office visits was considered; prescribing related to telephone or e-mail encounters was excluded, thus potentially underrepresenting the frequency of antibiotic prescribing for children.

In 1995, CDC launched the Campaign for Appropriate Antibiotic Use in the Community, which in 2003 was renamed Get Smart: Know When Antibiotics Work. The purpose of the program is to educate parents and health-care providers about the importance of appropriate antibiotic use. In November 2009, recognizing the need for increased global cooperation in combating antibiotic resistance, the United States and European Union created the Trans-Atlantic Task Force on Antimicrobial Resistance.[†] In November 2010, CDC's third annual Get Smart About Antibiotics Week was held in the United States at the same time Antibiotic Awareness Day was held in the European Union. CDC also launched a companion program focused on in-patient settings called Get Smart for Healthcare.

These observances stress that inappropriate antibiotic use anywhere leads to antibiotic resistance everywhere, and that reducing inappropriate antibiotic use is a global responsibility. CDC's Get Smart program encourages local and state health departments, individual practitioners, and public and private organizations to partner with them to reduce inappropriate antibiotic use by participating in Get Smart Week 2011, which will be held November 14–20, 2011. Additional information is available at http://www.cdc.gov/getsmart or via e-mail (getsmart@cdc.gov).

[†] Additional information available at http://www.whitehouse.gov/the-press-office/us-eu-joint-declaration-and-annexes.

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National and State Vaccination Coverage Among Children Aged 19–35 Months — United States, 2010

The National Immunization Survey (NIS) monitors vaccination coverage among children aged 19–35 months using a random-digit–dialed sample of telephone numbers of households to evaluate childhood immunization programs in the United States. This report describes the 2010 NIS coverage estimates for children born during January 2007–July 2009. Nationally, vaccination coverage increased in 2010 compared with 2009 for ≥1 dose of measles, mumps, and rubella vaccine (MMR), from 90.0% to 91.5%; ≥4 doses of pneumococcal conjugate vaccine (PCV), from 80.4% to 83.3%; the birth dose of hepatitis B vaccine (HepB), from 60.8% to 64.1%; ≥2 doses of hepatitis A vaccine (HepA), from 46.6% to 49.7%; rotavirus vaccine, from 43.9% to 59.2%; and the full series of *Haemophilus influenzae* type b (Hib) vaccine, from 54.8% to 66.8%. Coverage for poliovirus vaccine (93.3%), MMR (91.5%), ≥3 doses HepB (91.8%), and varicella vaccine (90.4%) continued to be at or above the national health objective targets of 90% for these vaccines.* The percentage of children who had not received any vaccinations remained low (<1%). For most vaccines, no disparities by racial/ethnic group were observed, with coverage for other racial/ethnic groups in 2010 similar to or higher than coverage among white children. However, disparities by poverty status still exist. Maintaining high vaccination coverage levels is important to reduce the burden of vaccine-preventable diseases and prevent a resurgence of these diseases in the United States, particularly in undervaccinated populations (*1*).

NIS uses a quarterly, random-digit–dialed sample of telephone numbers to reach households with children aged 19–35 months for the 50 states and selected local areas and territories,† followed by a mail survey to the children's vaccination providers to collect vaccination information. Data were weighted to represent the population of children aged 19–35 months, with adjustments for households with multiple telephone lines, household nonresponse, and exclusion of households without landline telephones.§ During 2010, the household response rate¶ was 63.8%; providers returned vaccination records for 71.2% of all children with completed household interviews, for a total of 17,004 children with provider-reported vaccination records included in this report. Because the number of Hib** vaccine and rotavirus†† vaccine doses required differs according to manufacturer, coverage estimates for these vaccines take into account brand of vaccine used. Logistic regression was used to examine differences among racial/ethnic groups, controlling for poverty status. Statistical analyses were conducted using t-tests based on weighted data and accounting for the complex survey design. A p-value of <0.05 was considered statistically significant.

During 2010, national coverage with all recommended vaccines increased or remained stable compared with 2009 (Table 1). Coverage with vaccines with longstanding recommendations has remained stable since the mid-1990s§§ (i.e., diphtheria, tetanus toxoids, and acellular pertussis vaccine [DTaP], poliovirus vaccine, varicella vaccine, and ≥3 doses of HepB). For MMR, after a decrease from 92.1 in 2008 to 90.0 in 2009, coverage with ≥1 dose increased to 91.5% in 2010. Although coverage with the primary series of Hib vaccine remained stable at 92.2%, coverage with the full series (primary series plus booster dose) increased to 66.8% in 2010 from 54.8% in 2009. For the most recently recommended vaccinations, coverage with rotavirus vaccine increased to 59.2% in 2010 from 43.9% in 2009. Within the 2010 sample, rotavirus vaccination coverage increased from 51.9% among children born during January–June 2007 to 69.8% among children born during

* Additional information about the 2010 health objectives is available at http://www.healthypeople.gov/2010/document/html/volume1/14immunization.htm#_toc494510242. Information about the 2020 health objectives is available at http://healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=23.

† The 11 local areas separately sampled for the 2010 NIS included six areas that receive federal immunization grant funds and are included in the NIS sample every year (District of Columbia; Chicago, Illinois; New York, New York; Philadelphia County, Pennsylvania; Bexar County, Texas; and Houston, Texas) and three previously sampled areas (Los Angeles County, California; Dallas County, Texas; and El Paso County, Texas). Washington is split into eastern counties and western counties (a list of specific counties is available online at http://www.cdc.gov/vaccines/stats-surv/nis/faqs.htm). The territory of the U.S. Virgin Islands (including St. Croix, St. Thomas, St. John, and Water Island) was included in the 2010 NIS sample. Data from the U.S. Virgin Islands are excluded from national coverage estimates.

§ A description of the statistical methodology of NIS is available at http://www.cdc.gov/nchs/data/series/sr_02/sr02_138.pdf.

¶ The Council of American Survey Research Organization (CASRO) household response rate, calculated as the product of the resolution rate (percentage of the total telephone numbers called that were classified as either nonworking, nonresidential, or residential), screening completion rate (percentage of known households that were successfully screened for the presence of age-eligible children), and the interview completion rate (percentage of households with one or more age-eligible children that completed the household survey). Additional information is available at http://casro.org/codeofstandards.cfm.

** Coverage for Hib vaccine for the primary series was based on receipt of ≥2 or ≥3 doses, depending on product type received. The Merck Hib vaccines require a 2-dose primary series with doses at ages 2 months and 4 months, and the Sanofi Pasteur Hib vaccines require a 3-dose primary series with doses at ages 2, 4, and 6 months. Coverage for the full series, which includes the primary series and a booster dose, was based on receipt of ≥3 or ≥4 doses, depending on product type received. Both Merck and Sanofi Pasteur Hib vaccines require a booster dose at ages 12–15 months.

†† Coverage for rotavirus vaccine was based on ≥2 or ≥3 doses, depending on product type received (≥2 doses for Rotarix [RV1], licensed in April 2008, and ≥3 doses for RotaTeq [RV5], licensed in February 2006).

§§ A figure depicting coverage with individual vaccines from the inception of NIS in 1994 through 2010 is available at http://www.cdc.gov/vaccines/stats-surv/nis/nis-2010-released.htm.

TABLE 1. Estimated vaccination coverage among children aged 19–35 months, by selected vaccines and dosages — National Immunization Survey, United States, 2006–2010*

	2006		2007		2008		2009		2010	
Vaccine	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
DTP/DT/DTaP										
≥3 doses	95.8	(±0.5)	95.5	(±0.5)	96.2	(±0.5)	95.0	(±0.6)	95.0	(±0.6)
≥4 doses	85.2	(±0.9)	84.5	(±0.7)	84.6	(±1.0)	83.9	(±1.0)	84.4	(±1.0)
Poliovirus	92.8	(±0.6)	92.6	(±0.9)	93.6	(±0.6)	92.8	(±0.7)	93.3	(±0.7)
MMR ≥1 dose	92.3	(±0.6)	92.3	(±0.9)	92.1	(±0.7)	90.0	(±0.8)	91.5	(±0.7)†
Hib§										
≥3 doses	93.4	(±0.6)	92.9	(±0.7)	90.9	(±0.7)	83.6	(±1.0)	90.4	(±0.9)†
Primary series	N/A		N/A		N/A		92.1	(±0.8)	92.2	(±0.8)
Full series	N/A		N/A		N/A		54.8	(±1.4)	66.8	(±1.3)†
HepB										
≥3 doses	93.3	(±0.6)	92.7	(±0.7)	93.5	(±0.7)	92.4	(±0.7)	91.8	(±0.7)
1 dose by 3 days (birth)¶	50.1	(±1.1)	53.2	(±1.3)	55.3	(±1.3)	60.8	(±1.3)	64.1	(±1.3)†
Varicella ≥1 dose	89.2	(±0.7)	90.0	(±0.7)	90.7	(±0.7)	89.6	(±0.8)	90.4	(±0.8)
PCV										
≥3 doses	86.9	(±0.8)	90.0	(±1.0)	92.8	(±0.6)	92.6	(±0.7)	92.6	(±0.8)
≥4 doses	68.4	(±1.1)	75.3	(±1.3)	80.1	(±1.1)	80.4	(±1.2)	83.3	(±1.0)†
HepA (≥2 doses)**	N/A		N/A		40.4	(±1.2)	46.6	(±1.4)	49.7	(±1.4)†
Rotavirus††	N/A		N/A		N/A		43.9	(±1.4)	59.2	(±1.4)†
Combined series										
4:3:1:3:3:1§§	76.9	(±1.0)	77.4	(±1.1)	76.1	(±1.1)	69.9	(±1.2)	74.9	(±1.2)†
4:3:1:3:3:1 with Hib excluded	77.6	(±1.0)	78.3	(±1.1)	78.7	(±1.1)	77.5	(±1.1)	77.8	(±1.1)
4:3:1:3:3:1:4¶¶	60.1	(±1.2)	66.5	(±1.3)	68.4	(±1.2)	63.6	(±1.2)	70.2	(±1.3)†
4:3:1:3:3:1:4 with Hib excluded	60.4	(±1.2)	67.0	(±1.3)	70.6	(±1.2)	70.5	(±1.2)	72.7	(±1.2)†
Children who received no vaccinations	0.4	(±0.1)	0.6	(±0.1)	0.6	(±0.2)	0.6	(±0.1)	0.7	(±0.2)

Abbreviations: CI = confidence interval; DTP/DT/DTaP = diphtheria, tetanus toxoids, and pertussis vaccine; diphtheria and tetanus toxoids vaccine; and diphtheria, tetanus toxoids, and acellular pertussis vaccine; MMR = measles, mumps, and rubella vaccine; Hib = *Haemophilus influenzae* type b vaccine; HepB = hepatitis B vaccine; HepA = hepatitis A vaccine; N/A = not available; PCV = pneumococcal conjugate vaccine.

* For 2006, includes children born during January 2003–June 2005; for 2007, children born during January 2004–July 2006; for 2008, children born during January 2005–June 2007; for 2009, children born during January 2006–July 2008; and for 2010, children born during January 2007–July 2009.

† Statistically significant increase in coverage compared with 2009 ($p<0.05$).

§ Primary series: receipt of ≥2 or ≥3 doses, depending on product type received. Full series: receipt of ≥3 or ≥4 doses, depending on product type received (primary series and booster dose). Hib coverage for primary or full series not available until 2009.

¶ HepB administered between birth and age 3 days.

** HepA coverage not available before 2008.

†† Rotavirus vaccine includes ≥2 or ≥3 doses, depending on the product type received (≥2 doses for Rotarix [RV1] and ≥3 doses for RotaTeq [RV5]). Estimates of rotavirus vaccination coverage not available before 2009.

§§ 4:3:1:3:3:1 series, referred to as routine, includes ≥4 doses of DTP/DT/DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, ≥3 doses of Hib, ≥3 doses of HepB, and ≥1 dose of varicella vaccine.

¶¶ 4:3:1:3:3:1:4 series, referred to as routine, includes ≥4 doses of DTP/DT/DTaP, ≥3 doses of poliovirus vaccine, ≥1 doses of measles-containing vaccine, ≥3 doses of Hib vaccine, ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV. Beginning in 2011, in accordance with the *Healthy People 2020* objectives, the routine series will replace ≥3 doses of Hib vaccine with the full series of Hib vaccine (receipt of ≥3 or ≥4 doses, depending on product type).

January–June 2009. Coverage with ≥2 doses of HepA increased to 49.7% in 2010 from 46.6% in 2009, coverage with the first dose of HepB within 3 days of birth (birth dose) increased to 64.1% in 2010 from 60.8% in 2009, and coverage with ≥4 doses of PCV increased to 83.3% in 2010 from 80.4% in 2009. As in 2009, the seven-vaccine series (4:3:1:3:3:1:4)¶¶ reported in 2010 excludes the Hib vaccine because of the Hib vaccine shortage that occurred during December 2007–September 2009 (*2,3*). Coverage with the modified seven-vaccine series (excluding Hib vaccine) increased to 72.7% in 2010 from 70.5% in 2009 (Table 1).

Coverage varied by race/ethnicity.*** Among black children, coverage with ≥4 doses of PCV and rotavirus vaccine was lower compared with white children (Table 2). Compared with white children, coverage with ≥1 dose of varicella vaccine was higher among black, Hispanic, American Indian/Alaska Native, and Asian children. Also compared with white children, coverage among Hispanic children was higher for ≥1 dose of MMR and ≥2 doses of HepA, and coverage among American Indian/Alaska Native children was higher for the primary and full series of Hib vaccine and ≥3 doses of HepB. With the exception

¶¶ Includes ≥4 doses of DTP/DT/DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, ≥3 doses of Hib vaccine, ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV.

*** Race was self-reported. Persons identified as white, black, Asian, or American Indian/Alaska Native are all non-Hispanic. Persons identified as Hispanic might be of any race. Children identified as multiracial selected more than one race category.

TABLE 2. Estimated vaccination coverage among children aged 19–35 months, by selected vaccines and dosages, race/ethnicity,* and poverty level† — National Immunization Survey, United States, 2010§

	Race/Ethnicity												Poverty level			
	White, non-Hispanic		Black, non-Hispanic		Hispanic		American Indian/ Alaska Native		Asian		Multiracial, non-Hispanic		Below		At or above	
Vaccine	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
DTP/DT/DTaP																
≥3 doses	95.1	(±0.8)	95.3	(±1.6)	95.1	(±1.4)	97.3	(±2.2)	95.7	(±2.9)	92.4	(±3.5)	93.5	(±1.4)¶	95.7	(±0.7)
≥4 doses	84.5	(±1.3)	83.7	(±2.7)	84.4	(±2.5)	81.8	(±7.5)	88.3	(±4.0)	82.8	(±4.8)	80.8	(±2.2)¶	86.1	(±1.2)
Poliovirus	93.2	(±0.8)	94.0	(±1.6)	93.8	(±1.6)	94.6	(±3.5)	92.8	(±3.5)	90.2	(±3.9)	92.4	(±1.5)	93.6	(±0.8)
MMR ≥1 dose	90.6	(±0.9)	92.1	(±1.9)	92.9	(±1.6)**	93.4	(±6.3)	91.7	(±3.6)	89.7	(±3.8)	91.3	(±1.6)	91.4	(±0.8)
Hib††																
≥3 doses	90.3	(±1.2)	89.4	(±2.3)	92.0	(±1.7)	93.9	(±3.0)**	85.7	(±5.7)	87.3	(±4.4)	88.1	(±1.8)¶	91.4	(±1.0)
Primary series	92.3	(±1.1)	90.9	(±2.2)	93.3	(±1.5)	95.7	(±2.7)**	89.0	(±5.3)	90.4	(±3.8)	89.8	(±1.7)¶	93.4	(±0.9)
Full series	67.5	(±1.6)	65.4	(±3.4)	64.8	(±3.1)	77.1	(±7.4)**	69.5	(±6.8)	70.1	(±5.8)	61.3	(±2.7)¶	69.7	(±1.5)
HepB																
≥3 doses	91.4	(±0.9)	92.1	(±1.8)	92.5	(±1.7)	97.2	(±2.3)**	91.7	(±3.5)	89.9	(±3.8)	91.5	(±1.5)	92.0	(±0.8)
1 dose by 3 days (birth)§§	63.2	(±1.6)	64.1	(±3.6)	65.5	(±3.1)	71.9	(±9.6)	62.6	(±7.2)	64.4	(±6.4)	67.2	(±2.7)¶	62.8	(±1.6)
Varicella ≥1 dose	88.9	(±1.1)	91.5	(±2.0)**	92.3	(±1.8)**	95.7	(±2.7)**	92.5	(±3.4)**	88.9	(±3.9)	89.6	(±1.8)	90.6	(±0.9)
PCV																
≥3 doses	92.8	(±0.9)	92.6	(±2.0)	93.4	(±1.8)	94.5	(±3.0)	87.8	(±5.4)	90.6	(±3.8)	91.1	(±1.6)¶	93.5	(±0.9)
≥4 doses	84.2	(±1.2)	79.7	(±3.0)**	83.9	(±2.3)	85.3	(±5.0)	78.9	(±6.0)	83.0	(±4.7)	78.7	(±2.2)¶	85.6	(±1.1)
HepA (≥2 doses)	45.8	(±1.6)	48.6	(±3.7)	57.0	(±3.1)**	NA¶¶		50.8	(±7.5)	49.8	(±6.6)	51.0	(±2.7)	49.1	(±1.6)
Rotavirus***	60.2	(±1.7)	52.7	(±3.6)**	60.5	(±3.2)	NA¶¶		62.6	(±7.0)	57.7	(±6.5)	51.5	(±2.7)¶	62.9	(±1.6)
Combined series																
4:3:1:3:3:1†††	73.6	(±1.5)	74.5	(±3.1)	77.2	(±2.7)**	77.2	(±7.8)	74.4	(±6.3)	75.8	(±5.3)	73.5	(±2.4)	75.5	(±1.4)
4:3:1:3:3:1 with Hib excluded	76.7	(±1.4)	77.4	(±3.0)	79.4	(±2.7)	78.7	(±7.7)	81.4	(±4.8)	78.4	(±5.1)	76.2	(±2.3)	78.5	(±1.3)
4:3:1:3:3:1:4§§§	69.9	(±1.6)	66.9	(±3.4)	72.0	(±2.9)	73.1	(±8.1)	67.3	(±6.7)	73.0	(±5.4)	67.2	(±2.5)¶	71.6	(±1.5)
4:3:1:3:3:1:4 with Hib excluded	72.7	(±1.5)	69.3	(±3.4)	74.1	(±2.8)	74.5	(±8.1)	70.2	(±6.5)	75.6	(±5.2)	69.5	(±2.5)¶	74.3	(±1.4)

Abbreviations: CI = confidence interval; DTP/DT/DTaP = diphtheria, tetanus toxoids, and pertussis vaccine; diphtheria and tetanus toxoids vaccine; and diphtheria, tetanus toxoids, and acellular pertussis vaccine; MMR = measles, mumps, and rubella vaccine; Hib = *Haemophilus influenzae* type b vaccine; HepB = hepatitis B vaccine; HepA = hepatitis A vaccine; N/A = not available; PCV = pneumococcal conjugate vaccine.

* Native Hawaiian or other Pacific Islanders were not included because of small sample sizes.

† Poverty level was determined for all children. Children were classified as below poverty if their total family income was less than the poverty threshold specified for the applicable family size and number of children aged <18 years. All others were classified as at or above poverty. Poverty thresholds reflect yearly changes in the Consumer Price Index. Thresholds and guidelines available at http://www.census.gov/hhes/www/poverty.html.

§ Children in the 2010 National Immunization Survey were born during January 2007–July 2009.

¶ Estimates are statistically significant at p<0.05. Children living at or above poverty were the reference group.

** Estimates are statistically significant at p<0.05. Non-Hispanic white children were the reference group.

†† Primary series: receipt of ≥2 or ≥3 doses, depending on product type received; full series: primary series and booster dose includes receipt of ≥3 or ≥4 doses depending on product type received.

§§ HepB administered between birth and age 3 days.

¶¶ Estimate not available if the unweighted sample size for the denominator was <30 or CI half width / estimate >0.588 of CI half width >10.

*** Includes ≥2 or ≥3 doses, depending on product type received (≥2 doses for Rotarix [RV1] and ≥3 doses for RotaTeq [RV5]).

††† 4:3:1:3:3:1 series includes ≥4 doses of DTP/DT/DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, ≥3 doses of Hib, ≥3 doses of HepB, and ≥1 dose of varicella vaccine.

§§§ 4:3:1:3:3:1:4 series includes ≥4 doses of DTP/DT/DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, ≥3 doses of Hib, ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV.

of the difference in coverage between white children and black children for ≥4 doses of PCV, all differences remained statistically significant after controlling for poverty status.

Coverage among children living below poverty level††† was lower than coverage among children living at or above poverty level for ≥3 and ≥4 doses DTaP, the primary and full series of the Hib vaccine, ≥3 and ≥4 doses PCV, rotavirus vaccine, and the 4:3:1:3:3:1:4 series with and without Hib (Table 2). Coverage with the birth dose of HepB was higher among children living below the poverty level compared with children living at or above the poverty level.

Vaccination coverage continued to vary by state, particularly for the more recently recommended vaccinations (Table 3). Coverage with rotavirus vaccine in 2010 significantly increased in 40 states compared with 2009, and coverage ranged from

††† Poverty status categorizes income into 1) at or above the poverty level and 2) below the poverty level. Poverty level was based on 2009 U.S. Census poverty thresholds, available at http://www.census.gov/hhes/www/poverty.html.

TABLE 3. Estimated vaccination coverage for vaccination series (modified)* and selected individual vaccines among children aged 19–35 months, by state and local area — National Immunization Survey, United States, 2010[†]

	MMR (≥1 dose)		PCV (≥4 doses)		HepB (birth)[§]		HepA (≥2 doses)[¶]		Rotavirus**		Vaccine series (modified)*	
State/Area	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**
United States	**91.5**	**(±0.7)[††]**	**83.3**	**(±1.0)[††]**	**64.1**	**(±1.3)[††]**	**49.7**	**(±1.4)[††]**	**59.2**	**(±1.4)[††]**	**72.7**	**(±1.2)[††]**
Alabama	95.4	(±2.3)	86.1	(±4.1)[††]	70.7	(±5.5)	50.5	(±6.2)	63.4	(±6.1)[††]	72.4	(±5.5)
Alaska	88.4	(±3.9)	75.7	(±5.9)	71.2	(±6.0)	44.7	(±6.8)	47.1	(±6.8)[††]	66.1	(±6.5)
Arizona	87.7	(±4.9)	79.9	(±5.9)	80.4	(±5.2)	51.0	(±6.7)	60.7	(±6.7)[††]	71.1	(±6.3)
Arkansas	90.5	(±4.2)[††]	79.5	(±5.8)[††]	82.4	(±5.0)[††]	34.2	(±6.4)[††]	48.5	(±7.0)[††]	74.5	(±6.0)[††]
California	91.4	(±3.5)	83.5	(±4.8)	53.0	(±6.7)	53.4	(±6.7)	58.9	(±6.7)[††]	71.0	(±6.0)
Los Angeles County	93.0	(±3.1)	89.0	(±4.3)[††]	52.3	(±7.3)	52.6	(±7.2)	65.1	(±7.0)[††]	78.1	(±5.8)
Rest of state	90.8	(±4.6)	81.5	(±6.4)	53.2	(±8.8)	53.7	(±8.7)	56.6	(±8.8)[††]	68.4	(±7.9)
Colorado	89.3	(±3.7)	81.6	(±5.4)	57.6	(±7.0)	42.0	(±6.7)	55.0	(±7.3)	68.3	(±6.4)
Connecticut	97.8	(±1.5)[††]	91.1	(±4.4)	60.0	(±7.7)[††]	48.5	(±7.7)	61.8	(±7.8)[††]	79.4	(±6.1)
Delaware	94.0	(±3.0)	87.9	(±4.3)	69.3	(±5.7)	62.0	(±6.0)[††]	82.1	(±4.8)[††]	71.9	(±5.7)
District of Columbia	94.7	(±3.7)	88.0	(±5.4)[††]	63.5	(±7.9)	55.8	(±8.1)	52.7	(±8.3)[††]	78.8	(±6.5)[††]
Florida	94.1	(±3.0)	88.1	(±4.9)[††]	52.3	(±7.9)	49.6	(±7.9)	59.7	(±7.8)[††]	80.5	(±5.8)[††]
Georgia	91.5	(±4.0)	86.3	(±5.5)	74.9	(±5.8)	64.4	(±6.7)	59.0	(±6.8)[††]	74.7	(±6.3)
Hawaii	93.2	(±3.3)[††]	83.0	(±5.3)	71.5	(±6.0)	44.9	(±6.4)	52.1	(±6.5)[††]	76.0	(±5.8)
Idaho	87.2	(±5.0)	79.7	(±5.5)	65.2	(±6.4)	44.2	(±6.8)	50.4	(±6.9)[††]	66.3	(±6.4)
Illinois	90.5	(±3.2)	87.1	(±4.0)	66.1	(±5.2)	45.2	(±5.5)	60.3	(±5.5)[††]	75.1	(±4.9)
City of Chicago	88.8	(±3.8)	88.9	(±3.8)	74.6	(±5.6)	44.1	(±6.6)	61.8	(±6.5)[††]	75.1	(±5.4)
Rest of state	91.1	(±4.2)	86.5	(±5.2)	63.1	(±6.7)	45.6	(±7.1)[††]	59.8	(±7.0)[††]	75.1	(±6.3)
Indiana	92.3	(±3.5)	80.2	(±5.3)	77.9	(±5.1)	46.9	(±6.5)	54.3	(±6.3)	71.6	(±5.8)
Iowa	93.8	(±3.7)	87.6	(±5.4)	52.3	(±7.2)	55.8	(±7.2)	66.1	(±6.9)[††]	77.8	(±6.3)
Kansas	90.0	(±4.6)	85.3	(±5.1)	80.1	(±5.5)	49.7	(±7.4)	58.9	(±7.4)[††]	78.6	(±6.0)
Kentucky	89.5	(±4.1)	77.7	(±6.0)	83.3	(±4.9)	45.6	(±6.4)	57.5	(±6.7)[††]	68.9	(±6.4)
Louisiana	89.7	(±4.5)	84.3	(±6.0)	61.6	(±7.8)	51.4	(±7.7)	57.9	(±7.9)	70.9	(±7.2)
Maine	90.9	(±4.5)	81.6	(±6.3)	72.0	(±6.5)	27.2	(±6.6)	42.1	(±7.7)[††]	72.7	(±7.3)
Maryland	90.5	(±4.8)	75.6	(±7.0)	69.0	(±7.0)	46.0	(±7.4)	53.4	(±7.5)	65.9	(±7.4)[§§]
Massachusetts	92.3	(±4.3)	90.4	(±4.2)	67.3	(±6.5)	51.1	(±7.3)	70.9	(±6.4)[††]	78.1	(±6.1)
Michigan	91.1	(±3.8)	88.1	(±4.9)	80.3	(±5.6)	45.0	(±7.2)	54.3	(±7.2)	81.3	(±5.5)
Minnesota	92.7	(±4.0)	88.7	(±4.9)	46.8	(±7.4)[††]	49.3	(±7.4)	67.4	(±7.2)[††]	75.7	(±6.4)
Mississippi	93.8	(±2.7)	84.3	(±4.5)	69.1	(±6.0)	40.7	(±6.3)	56.9	(±6.3)[††]	77.9	(±5.1)
Missouri	90.4	(±3.9)	76.2	(±5.6)	64.8	(±6.5)	44.4	(±6.5)[††]	59.3	(±6.4)[††]	67.9	(±6.0)[††]
Montana	85.1	(±5.6)	72.6	(±6.5)	67.8	(±6.4)	35.5	(±6.6)	54.9	(±6.9)[††]	64.9	(±6.8)
Nebraska	94.2	(±3.3)	90.4	(±4.2)[††]	66.7	(±6.9)[††]	60.3	(±7.1)	73.2	(±6.6)[††]	79.9	(±5.8)[††]
Nevada	87.0	(±5.2)	70.8	(±6.8)	66.6	(±6.9)	54.8	(±7.3)	49.4	(±7.2)[††]	61.3	(±7.2)
New Hampshire	95.8	(±3.0)	93.2	(±4.0)[††]	62.8	(±7.8)	59.7	(±8.2)	73.1	(±7.3)[††]	81.0	(±6.5)
New Jersey	86.1	(±5.7)	82.4	(±6.2)	37.2	(±6.7)	40.8	(±6.9)	53.9	(±7.1)[††]	62.6	(±7.0)
New Mexico	88.8	(±3.8)	78.2	(±5.5)	60.0	(±6.3)	51.1	(±6.6)[††]	53.9	(±6.6)[††]	68.3	(±6.1)
New York	89.3	(±3.6)	72.8	(±5.2)[§§]	50.5	(±5.5)	37.7	(±5.4)	48.5	(±5.5)[††]	64.1	(±5.4)
City of New York	89.3	(±5.2)	67.6	(±7.7)	45.5	(±7.8)	34.8	(±7.6)	40.7	(±7.6)	59.4	(±7.8)
Rest of state	89.4	(±5.1)	77.7	(±6.9)	55.3	(±7.7)	40.6	(±7.7)	56.0	(±7.8)[††]	68.7	(±7.5)
North Carolina	94.5	(±2.9)	87.5	(±4.3)	75.0	(±5.8)	48.1	(±6.5)	69.6	(±6.2)[††]	77.1	(±5.4)
North Dakota	92.6	(±3.5)	89.4	(±4.2)	79.5	(±5.6)	61.1	(±6.5)	73.4	(±6.1)[††]	79.8	(±5.4)
Ohio	93.6	(±3.5)	81.8	(±6.3)	73.5	(±7.1)	46.2	(±8.1)	57.2	(±8.3)	76.2	(±6.6)
Oklahoma	91.0	(±5.0)	74.5	(±6.4)	66.4	(±6.0)	56.6	(±6.8)	44.4	(±6.6)[††]	62.9	(±6.5)
Oregon	92.8	(±3.3)	87.7	(±4.4)	61.7	(±6.4)	55.6	(±6.8)	52.8	(±6.9)[††]	73.4	(±5.9)
Pennsylvania	92.3	(±2.9)	87.2	(±3.5)	71.5	(±5.4)	54.8	(±5.6)	66.1	(±5.6)	77.1	(±4.6)[††]
Philadelphia County	93.5	(±3.2)	83.5	(±5.2)	72.9	(±6.2)	54.6	(±7.3)	66.5	(±6.9)[††]	71.2	(±6.4)
Rest of state	92.1	(±3.4)	87.9	(±4.0)	71.2	(±6.3)	54.8	(±6.5)	66.0	(±6.6)	78.2	(±5.3)
Rhode Island	95.8	(±2.7)[††]	82.3	(±6.9)	69.7	(±7.5)	54.2	(±8.1)	76.7	(±7.3)	74.1	(±7.4)
South Carolina	91.7	(±3.3)	88.1	(±4.1)[††]	67.4	(±6.3)	47.4	(±6.6)	62.9	(±6.5)[††]	76.9	(±5.4)
South Dakota	92.1	(±3.6)	76.4	(±6.1)	62.4	(±6.8)	33.1	(±6.6)[§§]	46.8	(±6.9)	67.0	(±6.7)
Tennessee	93.9	(±3.3)	84.3	(±5.2)	55.3	(±6.8)	59.9	(±6.7)[††]	65.9	(±6.7)[††]	77.8	(±5.7)
Texas	91.8	(±2.4)	83.0	(±3.3)	69.6	(±4.2)	54.9	(±4.4)	61.9	(±4.4)[††]	70.9	(±4.1)
Bexar County	94.6	(±2.8)[††]	79.5	(±6.0)	63.2	(±6.8)	53.5	(±7.0)	62.0	(±7.1)[††]	73.7	(±6.5)
City of Houston	93.8	(±3.8)[††]	83.6	(±5.4)	63.6	(±6.8)	60.0	(±6.7)	64.4	(±6.1)[††]	73.2	(±6.1)
Dallas County	91.1	(±4.0)	78.2	(±6.1)	66.9	(±6.6)	51.2	(±7.2)	59.2	(±7.2)[††]	69.3	(±6.8)
El Paso County	87.0	(±5.4)	77.4	(±6.6)	78.7	(±6.3)	61.2	(±7.4)	66.3	(±7.5)[††]	67.0	(±7.2)
Rest of state	91.6	(±3.4)	84.3	(±4.7)	71.3	(±5.9)	54.3	(±6.3)	61.7	(±6.3)[††]	70.6	(±5.8)

See table footnotes on page 1161.

TABLE 3. (*Continued*) Estimated vaccination coverage for vaccination series (modified)* and selected individual vaccines among children aged 19–35 months, by state and local area — National Immunization Survey, United States, 2010†

	MMR (≥1 dose)		PCV (≥4 doses)		HepB (birth)§		HepA (≥2 doses)¶		Rotavirus**		Vaccine series (modified)*	
State/Area	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Utah	85.5	(±5.1)	78.7	(±5.9)	79.8	(±5.6)	49.6	(±7.0)	65.6	(±6.7)††	69.5	(±6.4)
Vermont	92.7	(±3.3)	84.2	(±5.6)	21.4	(±5.9)	38.0	(±6.8)	51.8	(±7.1)††	69.7	(±6.6)††
Virginia	92.3	(±3.5)	84.9	(±4.8)	58.3	(±6.7)	50.0	(±6.8)††	66.9	(±6.2)††	72.8	(±6.0)
Washington	89.8	(±3.6)	82.9	(±4.4)	77.3	(±4.9)	44.9	(±6.0)	50.4	(±5.9)††	71.2	(±5.5)
Eastern counties	89.2	(±4.7)	83.6	(±5.8)	76.0	(±6.5)	50.2	(±7.7)	49.5	(±7.7)	73.7	(±6.7)
Western counties	90.0	(±4.5)	82.7	(±5.5)	77.7	(±6.1)	43.3	(±7.5)	50.7	(±7.4)	70.4	(±6.9)
West Virginia	92.0	(±3.4)	74.3	(±5.9)	66.7	(±5.9)††	54.0	(±6.5)	51.0	(±6.5)	64.1	(±6.3)
Wisconsin	93.2	(±3.3)	88.4	(±4.9)	61.4	(±6.9)	52.1	(±7.0)	64.7	(±6.9)††	82.7	(±5.2)
Wyoming	92.5	(±3.6)	79.6	(±6.2)	58.4	(±7.3)	33.5	(±6.8)	53.5	(±7.5)††	64.7	(±7.3)
U.S. Virgin Islands	72.6	(±7.8)	57.0	(±8.2)	77.7	(±7.2)	14.0	(±6.1)	19.8	(±7.5)††	45.6	(±8.2)

Abbreviations: MMR = measles, mumps, and rubella vaccine; PCV = pneumococcal conjugate vaccine; HepB = hepatitis B vaccine; HepA = hepatitis A vaccine; CI = confidence interval.

* Includes ≥4 doses DTP/DT/DTaP vaccine (diphtheria, tetanus toxoids, and pertussis vaccine; diphtheria and tetanus toxoids vaccine; and diphtheria, tetanus toxoids, and acellular pertussis vaccine), ≥3 doses of poliovirus vaccine, ≥1 dose of any measles-containing vaccine, ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV. *Haemophilus influenzae* type b vaccine is excluded.

† Children in the 2010 National Immunization Survey were born during January 2007–July 2009.

§ ≥1 dose of HepB administered between birth and age 3 days.

¶ ≥2 doses HepA and measured among children aged 19–35 months.

** ≥2 or ≥3 doses of rotavirus vaccine, depending on product type received (≥2 doses for Rotarix [RV1] and ≥3 doses for RotaTeq [RV5]).

†† Statistically significant increase in coverage compared with 2009 (p<0.05).

§§ Statistically significant decrease in coverage compared with 2009 (p<0.05).

42.1% in Maine to 82.1% in Delaware. Coverage with ≥2 doses HepA significantly increased in six states compared with 2009, and ranged from 27.2% in Maine to 64.4% in Georgia. Coverage with the birth dose of HepB significantly increased in five states compared with 2009, and ranged from 21.4% in Vermont to 83.3% in Kentucky. Coverage with MMR was greater than 85% in all states. Coverage for the modified vaccine series (4:3:1:3:3:1:4 series excluding Hib) varied by state, from 61.3% in Nevada to 82.7% in Wisconsin.

Reported by

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Editorial note

The results of the 2010 NIS indicate that vaccination coverage among children aged 19–35 months remained stable or increased compared with 2009. Coverage levels for poliovirus vaccine, MMR, HepB, and varicella vaccine continue to be at or above 90%, the national health objective target for these vaccines. The record high number of measles cases reported in the United States so far in 2011 (*4*) underscores the importance of maintaining high MMR coverage to protect from measles importations and transmission in the United States. Nevertheless, room for improvement exists. Nearly one in 10 children has not received MMR by age 19–35 months.

Among the more recently recommended vaccines, coverage continued to increase for ≥4 doses PCV, the birth dose of HepB, and HepA. Coverage with rotavirus vaccine increased 15.3 percentage points, from 43.9% in 2009 to 59.2% in 2010. Although some children in the 2009 NIS sample were born before the 2006 introduction of live rotavirus vaccine and thus were not affected by the recommendation to be vaccinated, the large increase in coverage observed in the 2010 NIS and the trend in increased coverage among successive birth cohorts within the 2010 sample indicate that the recommendation for rotavirus vaccination was successfully implemented in more recent birth cohorts, and coverage likely will continue to increase.

Coverage with the primary series of Hib vaccine remained stable at 92.2%, indicating that during the shortage of Hib vaccine that occurred during December 2007–June 2009, vaccination providers were able to comply with the interim recommendations to defer the booster dose but continue to vaccinate children with the primary series (*2*). Children in both the 2009 and 2010 NIS samples were affected by the temporary recommendation to suspend the booster dose of Hib vaccine. Coverage with the full series of Hib vaccine increased by 12 percentage points in 2010 compared with 2009, suggesting that children received the booster dose as Hib vaccine supplies became adequate starting in July 2009 (*3*).

In the 2009 NIS, disparities in coverage between white children and children of other racial/ethnic groups were reported for several of the recommended vaccines (e.g., HepA, PCV, and DTaP) (*5*). Because of increases in coverage among

What is already known on this topic?

To monitor efforts to reduce the burden and prevent a resurgence of vaccine-preventable diseases, the National Immunization Survey (NIS) estimates vaccination coverage among U.S. children aged 19–35 months.

What is added by this report?

Childhood vaccination coverage with the longer-standing recommended vaccines remains at or above national health objective target levels, and coverage with the newly recommended vaccines continues to increase; however, coverage levels vary by state, and disparities in coverage by poverty level still exist.

What are the implications for public health practice?

Continued partnerships among national, state, local, private, and public entities help parents and primary-care givers ensure that children are vaccinated to sustain current coverage levels and ensure that coverage levels for the more recently recommended vaccines continue to increase to reduce the burden of vaccine-preventable diseases and prevent a resurgence of these diseases in the United States.

minority children, the 2010 coverage levels for most vaccines among other racial/ethnic groups were similar to or higher than coverage levels among white children; however, racial/ethnic disparities independent of poverty still remained for rotavirus. Disparities in coverage by poverty level remained for many vaccines. Although the Vaccines for Children Program,[§§§] a federal entitlement program that provides vaccine at no cost for eligible children, has been effective in reducing potential gaps in coverage levels resulting from poverty status, the remaining disparities in coverage by poverty status reflect barriers to vaccination that must be addressed.

Vaccination coverage continues to vary across states, especially for the more recently recommended vaccines. Differences by state in factors such as population characteristics, state policies (e.g., child-care vaccination requirements), vaccine financing policies that affect the availability of publicly purchased vaccine, and immunization program activities (e.g., the presence of outreach activities) likely contribute to variations in vaccination coverage (*6,7*). Further work is needed to understand factors that most strongly influence vaccination coverage and identify best practices among states.

The findings in this report are subject to at least three limitations. First, NIS is a landline-based telephone survey, and statistical adjustments might not fully compensate for nonresponse and households without landline telephones. Previous studies have shown that vaccination coverage estimates that include nonlandline households might be lower than NIS estimates (*8*). During the fourth quarter, the 2010 NIS sampled telephone numbers from a cellular telephone sampling frame.[¶¶¶] Differences between national landline and dual-frame (including households interviewed by landline plus those from the cellular telephone sampling frame) coverage estimates for specific vaccines and series ranged from -1.2 to 2.2 percentage points. Second, underestimates of vaccination coverage might have resulted from the exclusive use of provider-reported vaccination histories because completeness of these records is unknown. Finally, although national coverage estimates are precise, estimates for state and local areas should be interpreted with caution because of smaller sample sizes and wider confidence intervals.

A recent economic analysis of the United States immunization policy indicated that vaccination of each U.S. birth cohort with the current childhood immunization schedule prevents approximately 42,000 deaths and 20 million cases of disease, with net savings of nearly $14 billion in direct costs and $69 billion in total societal costs (*1*). Although coverage levels for more recently recommended vaccines have continued to increase, the careful monitoring of coverage levels overall and in subpopulations (e.g., by race/ethnicity and geographic area) will be important to ensure that all children are adequately protected. The results of the 2010 NIS indicate that parents and primary-care givers continued to ensure that children were vaccinated, despite temporary suspension of the booster dose of Hib vaccine during 2007–2009 because of a national vaccine shortage (*4*), heightened public concerns regarding vaccine safety (*9*), and budget challenges experienced by states (*10*). The *Guide to Community Preventive Services* recognizes the effectiveness of continued partnerships among national, state, local, private, and public entities in sustaining vaccination coverage levels and ensuring that coverage levels for the more recently recommended vaccines continue to increase.[****]

§§§ Additional information is available at http://www.cdc.gov/vaccines/programs/vfc/default.htm.

¶¶¶ Participants were eligible for interview from the cellular-telephone sampling frame if their household was cellular-telephone-only (household with access to a cellular telephone but not a landline telephone) or cellular-telephone-mainly (household containing both a cellular telephone and a landline telephone, but reporting they are not at all likely or are somewhat unlikely to answer the landline telephone if it rang).

**** Additional information available at http://www.thecommunityguide.org/vaccines/universally/index.html.

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Human Rabies — Wisconsin, 2010

In late December 2010, a male resident of Wisconsin, aged 70 years, sought treatment for progressive right shoulder pain, tremors, abnormal behavior, and dysphagia at an emergency department (ED). He was admitted for observation and treated with benzodiazepines and haloperidol, a neuroleptic, for presumed alcohol withdrawal syndrome. The next day, he had rhabdomyolysis, fever, and rigidity, and neuroleptic malignant syndrome was diagnosed. The neuroleptic was discontinued, but the patient's clinical status worsened, with encephalopathy, respiratory failure, acute renal failure requiring hemodialysis, and episodes of cardiac arrest. With continued clinical deterioration, additional causes were considered, including rabies. On hospital day 12, rabies virus antigens and nucleic acid were detected in the nuchal skin biopsy and rabies virus nucleic acid in saliva specimens sent to CDC. A rabies virus variant associated with silver-haired bats (*Lasionycteris noctivagans*) was identified. The patient died on hospital day 13. His spouse reported that they had been selling firewood, and bats had been present in the woodpile; however, the man had not reported a bat bite. Two relatives and five health-care workers potentially exposed to the man's saliva received postexposure prophylaxis. This case highlights the variable presentations of rabies and the ease with which a diagnosis of rabies can be missed in a clinically challenging patient with comorbidities. Clinicians should consider rabies in the differential diagnosis for patients with progressive encephalitis or neurologic illness of unknown etiology and caregivers should take precautions to avoid exposure to body fluids. Continued public education regarding risks for rabies virus exposure during interactions with wildlife, particularly bats, is important.

Case Report

During December 2010, a male Wisconsin resident aged 70 years experienced right shoulder pain after mixing cookie dough. Two days later, he became tremulous and had difficulty swallowing. Although coherent and alert, his family reported he appeared fatigued and exhibited abnormal behavior, including a prolonged staring spell. The following day, the patient complained of ongoing right shoulder pain and became increasingly tremulous and diaphoretic, without reported fever. His swallowing difficulties persisted, and he could eat only small pieces of food. Four days after symptom onset, after an evening of insomnia, he requested evaluation at hospital A's ED.

At the ED, the patient was agitated, restless, and complained of weakness, right shoulder pain, and difficulty swallowing. He was alert and afebrile, with a blood pressure of 208/121 mmHg and a respiratory rate of 16 breaths per minute. Physical examination was remarkable only for diaphoresis and tremors. The initial differential diagnosis included cerebral vascular injury, transient ischemic attack, acute coronary syndrome, and alcohol withdrawal syndrome. Laboratory tests included a complete blood count, complete metabolic panel, urinalysis, serum alcohol, urine drug screen, liver function, and cardiac enzymes. Abnormal test results included a white blood cell (WBC) count of 13.7×10^3 cells/μL (normal: 4.2–11.07 × 10^3 cells/μL) with 81% neutrophils, asparate aminotransferase (AST) of 87 IU/L (normal: <38 IU/L), B-type natriuretic peptide of 133 pg/mL (normal: <100 pg/mL), creatine kinase-MB of 49.9 ng/mL (normal: <5.1 ng/mL), myoglobin >500 ng/mL (normal: <170 ng/mL), creatine phosphokinase (CPK) of 5,589 IU/L (normal: 39–308 IU/L), and blood glucose of 103 mg/dL (normal: 65–99 mg/dL). An electrocardiogram (ECG) demonstrated sinus tachycardia (ST) with no ST segment changes. A computerized tomography scan of the patient's head and chest radiograph were unremarkable. The Clinical Institute Withdrawal Assessment (CIWA-Ar) protocol was followed for presumed alcohol withdrawal syndrome (*1*). The patient received thiamine, lorazepam, and folic acid, but his agitation and restlessness worsened, and he became confused and eventually nonverbal. He began to have muscle spasms, twitches, and abnormal body movements. A consulting neurologist determined the patient's signs and symptoms were more consistent with alcohol withdrawal syndrome than seizures. The patient was admitted to the intensive-care unit for management of severe alcohol withdrawal syndrome and possible rhabdomyolysis.

During hospital day 2, the patient's agitation, confusion, and tremors continued; twitching was noted in his arms and legs, and his muscle strength was diminished in all extremities. Based on CIWA-Ar protocol, he was given both diazepam and haloperidol for severe alcohol withdrawal symptom control. During evaluation of his swallowing difficulties, the patient coughed immediately; with consumption of thin liquids, he was unable to consistently swallow on command. Abnormal laboratory test results included WBC of 13.8×10^3 cells/μL, serum ammonia of 55 μmol/L (normal: 9–33 μmol/L), alanine aminotransferase of 112 IU/L (normal: <66 IU/L), AST of 460 IU/L, CPK of 26,780 IU/L, and blood urea nitrogen of 21 mg/dL (normal: 10–20 mg/dL). The patient's temperature was 102°F (38.9°C) and he had onset of generalized rigidity. Antibiotic therapy was initiated because of fever and leukocytosis. A diagnosis of neuroleptic malignant syndrome related to haloperidol (day 2; cumulative dose: 10 mg) was considered because of the patient's rigidity, fever, and rhabdomyolysis. Neuroleptic medications were discontinued, and aggressive intravenous hydration was started.

Early on day 3, the patient became unresponsive with respiratory failure and required intubation and mechanical ventilation. A chest radiograph revealed a focus of atelectasis or infiltrate in the lower lobe of the right lung, and antibiotic therapy was continued. The patient experienced acute renal failure secondary to rhabdomyolysis and his cardiac enzyme levels increased. An ECG revealed a normal ejection fraction with diastolic dysfunction but no regional wall motion abnormalities. The ECG demonstrated no evidence of ischemia; non-ST elevation myocardial infarction was diagnosed and anticoagulation therapy administered.

During day 5, the patient's urinary output decreased. Despite sedation, he spontaneously opened his eyes and intermittently had 2-second, full body tonic contractions during physical examinations. A chest radiograph revealed worsened bibasilar areas of the atelectasis or infiltrates. On day 6, the patient was transferred by ambulance to hospital B for hemodialysis because of acute renal failure.

During days 7–10, the patient had hypotensive episodes that required vasopressor support. These included full-body tonic contractions that increased in duration to 20–30 seconds and rhabdomyolysis that continued despite cessation of neuroleptic medications. On two occasions, minor tactile stimulation or body manipulation was followed by cardiac arrest. An electroencephalogram showed diffuse nonspecific cortical dysfunction without seizure activity consistent with a toxic metabolic or hypoxemic encephalopathy. Other diagnoses associated with encephalopathy and rhabdomyolysis were considered, including tetanus, Lyme disease, West Nile virus (WNV) infection, syphilis, and rabies. The glutamic acid decarboxylase antibody test for stiff-person syndrome was negative, as were serologic tests for Lyme disease, WNV, and syphilis. The patient's tetanus antibody level was considered protective.

On day 11, a nuchal skin biopsy, serum, and saliva were sent to CDC for rabies diagnostic evaluation. Because of the patient's clinical instability, cerebrospinal fluid was unobtainable. The next day, CDC detected rabies virus antigens in the nuchal skin biopsy. Infection with a silver-haired bat rabies virus variant was confirmed in a saliva sample and the nuchal biopsy tissue by using nucleic acid amplification and sequencing. No rabies virus antibodies were detected in the serum. The patient died soon after rabies was confirmed. Analysis of postmortem brain tissue confirmed the diagnosis by detection of rabies virus antigens. Antigenic typing with monoclonal antibodies was consistent with a rabies virus variant associated with silver-haired and tricolored (*Perimyotis subflavus*) bats.

What is already known on this topic?

Unless prevented by administration of postexposure prophylaxis before symptom development, rabies virus causes acute progressive viral encephalitis and death.

What is added by this report?

In January 2011, a diagnosis of rabies was considered in a Wisconsin man with encephalopathy who was hospitalized for treatment of alcohol withdrawal syndrome. He died nearly 2 weeks later of rabies.

What are the implications for public health practice?

Because of its different clinical presentations, prompt laboratory diagnostic testing should be conducted to confirm a diagnosis of suspected rabies in any patient with unexplained progressive encephalitis of unknown etiology, and exposure to patient body fluids should be avoided.

Public Health Investigation

On hospital day 9, hospital B infection control staff notified the Wisconsin Division of Public Health (DPH) of a suspected case of rabies and inquired about the process for antemortem testing. During a follow-up interview of the patient's family about possible sources of rabies exposure, the patient's wife stated that they had been selling firewood and her husband mentioned the presence of bats in the woodpile. When the rabies diagnosis was confirmed, infection control staff members at both hospitals and DPH staff members initiated contact investigation interviews with the patient's family, friends, and health-care providers to determine the extent of exposure and need for postexposure prophylaxis (PEP) consistent with the Advisory Committee on Immunization Practices (ACIP) recommendations (*2*). To assist with the health-care providers' evaluation, DPH provided assessment material and an information sheet on rabies virus exposure in a health-care setting to both hospitals. No animal bites were reported by the patient or his wife, and no other family members or friends had any likely exposures to bats or other potentially rabid animals.

Among 176 health-care workers assessed at both hospitals, five (2.8%) were advised to receive postexposure prophylaxis because they were exposed to the patient's saliva during intubation, cardiopulmonary resuscitation, or teeth brushing, or were exposed to aerosols emitted from a dislodged ventilator tube while not using appropriate personal protective equipment. Among friends and family members, the patient's wife and a grandchild were exposed to the patient's saliva and received postexposure prophylaxis. Among the persons who had had contact with the patient, none have experienced rabies to date.

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Editorial Note

Human rabies is a vaccine-preventable disease that is almost universally fatal in unimmunized persons (*3,4*). Prompt and thorough wound cleaning, administration of human rabies immune globulin, and vaccination using a 4-dose schedule of a cell culture rabies vaccine as soon as possible after rabies virus exposure can eliminate the risk for rabies in nearly all cases (*2,5,6*). This case underscores the importance of seeking timely medical intervention after suspected rabies virus exposure. Administration of postexposure prophylaxis might have been recommended in this case if rabies virus exposure had been suspected, although little is known about the patient's interactions with animals, including any bats or others animals associated with the woodpile. Additionally, persons might not seek timely medical care if a bat bite appears insignificant or a minor wound is not thought to be linked to an animal exposure.

Although human rabies occurs rarely in the United States, this is the third case reported in Wisconsin since 2000, all of which involved known or inferred interaction with bats before illness onset; only one of the three patients survived (*2,7*). During 1995–2010, among 30 previously reported patients with human rabies whose rabies virus exposures occurred in the United States and were not associated with transplanted organs or tissues, 29 (96.6%) had infections associated with a bat rabies virus variant and only one with the raccoon rabies virus variant (*8,9*).

This case highlights the varied clinical presentations of human rabies and the need to consider a diagnosis of rabies for any patient with unexplained progressive encephalitis of unknown etiology. Obtaining information regarding exposure to animals in the United States and during foreign travel is a crucial component of the medical history. Continued public education regarding the risk for rabies after exposures to wildlife, particularly to bats, is needed. Health-care providers are reminded to use personal protective equipment when the possibility of exposure to infectious body fluids exists. The use of guidelines specific to the risks for rabies virus transmission within health-care facilities might reduce unnecessary postexposure prophylaxis in such settings.*

* Additional information and resources prepared by DPH are available at http://www.dhs.wisconsin.gov/communicable/rabies/resources.htm.

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Trends in In-Hospital Newborn Male Circumcision — United States, 1999–2010

The publication of three recent studies showing that circumcision of adult, African, heterosexual men reduces their risk for acquiring human immunodeficiency virus infection and other sexually transmitted infections (*1–4*) has stimulated interest in the practice of routine newborn male circumcision (NMC) and the benefits it might confer for HIV prevention. In the United States, rates of in-hospital NMC increased from 48.3% during 1988–1991 to 61.1% during 1997–2000 (*5*). To monitor trends in in-hospital NMC during 1999–2010, CDC used three independent data sources (the National Hospital Discharge Survey [NHDS] from the National Center for Health Statistics, the Nationwide Inpatient Sample [NIS] from the Agency for Healthcare Research and Quality, and the Charge Data Master [CDM] from SDIHealth) to estimate rates of NMC.* Each system collects discharge data on inpatient hospitalization.

NHDS uses an 8% sample of short-stay hospitals (hospitals with an average length of stay for patients of less than 30 days) or those whose specialty is general medical or surgical (including children's hospitals) regardless of length of stay, through a three-stage stratified, clustered design from 50 states to generate weighted national inpatient hospitalization estimates. NHDS collects a random sample of discharge records from hospitals sampled based on strata formed by geographic region, primary sampling unit, and service status and specialty group, then on annual discharge volume within strata. NHDS data are cross-sectional, recorded in *International Classification of Disease, Ninth Revision* (ICD-9) codes, and available for public use with a 2-year lag.†

NIS uses a sample that approximates 20% of U.S. community hospitals, defined by the American Hospital Association to be all nonfederal, short-term, general, and other specialty hospitals, excluding hospital units of institutions, through a five-stage stratified design currently from 42 states to generate weighted national inpatient hospitalization estimates. NIS collects 100% of discharge records from hospitals sampled based on geographic region, ownership, location, teaching status, and bed-size category. NIS data are cross-sectional, recorded in ICD-9 codes, and available with a 2-year lag.§

CDM is a convenience sample of health-care reimbursement claims from a 20% sample of U.S. short-stay, acute-care, and nonfederal hospitals from 48 states and the District of Columbia. CDM data are recorded in ICD-9 and Current Procedural Terminology codes and are available with a 2-month lag.¶

All three data sources underestimate the actual rate of NMC because none of the datasets include NMC performed in the community. Rates of NMC through the first 28 days of life were calculated for the most recent 10 years of available data from each data source (i.e., 1999–2008 data from NHDS and NIS, and 2001–2010 data from CDM), and a Poisson regression model was used to calculate the average annual percentage change (AAPC). The changes in incidence estimated from the three data sources were compared using the trends homogeneity test.

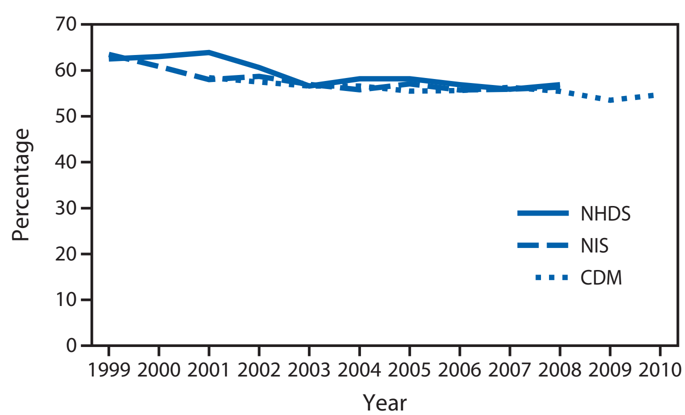
For the period 1999–2010, the weighted analysis yielded 11,789,000 (59.1%; 95% confidence interval [CI] = 59.1%–59.2%) of 19,933,000 and 12,347,096 (57.8%; CI = 57.8%–57.8%) of 21,359,690 newborn males circumcised in the United States from NHDS and NIS, respectively. Of 2,339,760 newborn males recorded in CDM, 1,306,466 (55.8%; CI = 55.7%–55.9%) were circumcised.

Incidence of NMC decreased from 62.5% in 1999 to 56.9% in 2008 in NHDS (AAPC = -1.4%; $p<0.001$), from 63.5% in 1999 to 56.3% in 2008 in NIS (AAPC = -1.2%; $p<0.001$), and from 58.4% in 2001 to 54.7% in 2010 in CDM (AAPC = -0.75%; $p<0.001$) (Figure).

When compared using the trends homogeneity test, the decreases in incidence were statistically different ($p<0.01$) for the 8 years of commonly available data (2001–2008); however, the maximum difference in absolute incidence did not exceed 5.9 percentage points for any given year.

¶ Additional information available at http://www.sdihealth.com/data_warehousing/expertds.aspx.

FIGURE. Incidence of in-hospital newborn male circumcision, by data source — United States, 1999–2010



Abbreviations: NHDS = National Hospital Discharge Survey; NIS = Nationwide Inpatient Sample; CDM = Charge Data Master.

* The NMC rate is the number of newborn males circumcised within 28 days of birth in a hospital divided by the number of newborn males discharged from a hospital.

† Additional information available at http://www.cdc.gov/nchs/nhds.htm.

§ Additional information available at http://www.hcup-us.ahrq.gov/nisoverview.jsp.

Many factors likely influence rates of NMC. A recent study found that, after controlling for other factors, hospitals in states in which Medicaid covers routine male circumcision had circumcision rates that were 24 percentage points higher than hospitals in states without such coverage (*6*). As of 2009, Medicaid provided coverage for NMC in 33 states. The procedure was not covered by Medicaid in 15 states, and two states had variable coverage dependent on the enrollment plan (Sarah Clark, MPH, University of Michigan, personal communication, 2011).

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Notes from the Field

Measles Outbreak — Indiana, June–July 2011

On June 20, 2011, an emergency department (ED) physician reported five epidemiologically linked measles cases to the Indiana State Department of Health. The subsequent investigation identified a total of 14 confirmed cases in northeast Indiana. Of these, 10 were laboratory-confirmed, and four were among household contacts of persons with laboratory-confirmed measles. Of the 14 patients, 13 were unvaccinated persons in the same extended family. The nonfamily member was a child aged 23 months who had received 1 dose of measles, mumps, and rubella vaccine 4 months before illness onset. Four of the 14 patients were males; median age was 11.5 years (range: 15 months–27 years). One patient was a woman in week 32 of pregnancy who was hospitalized for acute pneumonitis.

The index patient was an unvaccinated U.S. resident aged 24 years who noted a rash on June 3 during a return flight from Indonesia, where measles is endemic. The patient was admitted to an Indiana hospital during June 7–9 and treated for presumed dengue fever. Measles was not considered, and the patient was not isolated. The outbreak was unrecognized until June 20, when five family members visited an ED after experiencing onset of measles symptoms at various times over the previous few days. Subsequently, measles genotype D9, a strain endemic in Indonesia (*1*), was isolated from nasopharyngeal swabs from two of these patients.

A contact investigation involving approximately 780 persons included follow-up of exposures at a church (approximately 150 persons), a factory (approximately 300 persons), and in a bus ridden by school-aged children who had traveled out of state. Infectious persons attended parties, family gatherings, sports events, and meetings, and sought health care. Health-care facility exposures included two general-practice offices, one obstetric office, two EDs, one urgent-care facility, and two hospitals. Outbreak control measures were instituted, including media releases that informed the local public of the outbreak and steps to take. Messages were sent statewide to health-care providers through the Indiana Health Alert Network with recommendations on how to evaluate patients with fever and rash without exposing others and instructions on testing and reporting procedures.

For exposed persons without evidence of immunity to measles, the Indiana State Department of Health recommended vaccination of eligible persons within 3 days of exposure or immunoglobulin administration within 6 days of exposure for patients at high risk for measles complications; in addition, vaccination was recommended for all eligible persons regardless of their exposure history. Recommendations were made to health-care facilities where exposures might have occurred to exclude potentially exposed health-care personnel from patient-care responsiblities until measles immunity was documented and to exclude personnel without evidence of immunity for 21 days after their last exposure. Community testing and vaccination clinics were conducted. Preliminary estimates of the impact of the measles outbreak on the state health department are as follows: 660 personnel hours, 1,510 miles logged, and $6,243 in testing costs.

As of August 26, 198 cases and 15 outbreaks of measles had been confirmed in the United States, the highest number since 1996 (CDC, unpublished data, 2011). Of the 198 cases, 179 (90%) were associated with U.S. residents traveling internationally. Of the 15 outbreaks, the outbreak in Indiana is the second largest. With ongoing importation and suboptimal vaccination rates among specific populations, measles outbreaks might continue to occur (*2*). In addition to providing accurate information on the risks and benefits of vaccines and making vaccination accessible, state and local health departments should continue to investigate contacts of suspected measles patients to institute control measures to prevent measles transmission in the community. Parents should be reminded, as children return to school, to check their children's vaccination status for measles, mumps, and rubella vaccine and all other recommended vaccines.

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2. CDC. Notes from the field: measles outbreak—Hennepin County, Minnesota, February–March 2011. MMWR 2011;60:421.

Announcement

Prostate and Gynecologic Cancer Awareness Month — September 2011

September is National Prostate Cancer Awareness Month and Gynecologic Cancer Awareness Month. Both observances are aimed at increasing public understanding of these cancers.

Prostate cancer is the most common cancer (excluding skin cancer) among men in the United States. In 2007 (the most recent year for which data are available), 223,307 new cases were diagnosed, and 29,093 men died of the disease in the United States (*1*). In the absence of scientific consensus on the effectiveness of screening, CDC supports research to build the science base for prostate cancer control and is developing educational materials about the benefits and risks of prostate cancer screening, so that each man can discuss it with his health-care provider and make his own informed decision.

In 2007, a total of 80,976 women in the United States were diagnosed with some form of gynecologic cancer, and 27,739 women died from the disease (*1*). To raise awareness about the five main gynecologic cancers (cervical, ovarian, uterine, vaginal, and vulvar), CDC, in collaboration with the U.S. Department of Health and Human Services Office on Women's Health, established the Inside Knowledge: Get the Facts about Gynecologic Cancer campaign. The campaign educates women and health-care providers about the signs, symptoms, risk factors, and prevention strategies associated with gynecologic cancers. Inside Knowledge encourages women to pay attention to their bodies and know what is normal for them, so they can recognize possible symptoms of gynecologic cancers early, leading to earlier diagnosis and more timely treatment.

Additional information is available at http://www.cdc.gov/cancer/prostate and http://www.cdc.gov/cancer/gynecologic.

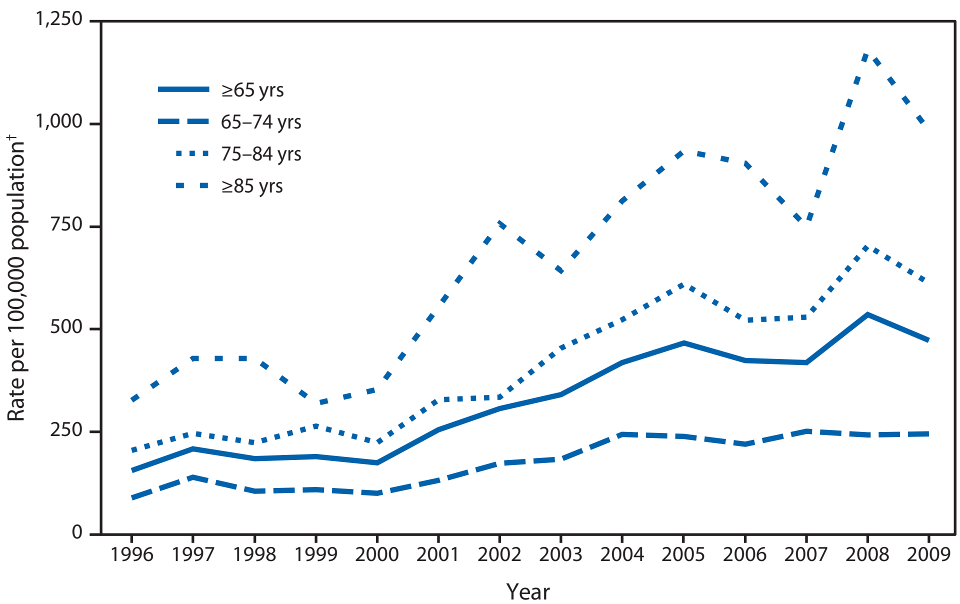
Reference

1. US Cancer Statistics Working Group. United States Cancer Statistics: 1999–2007 incidence and mortality web-based report. Atlanta, GA: US Department of Health and Human Services, CDC, National Cancer Institute; 2010. Available at http://www.cdc.gov/uscs. Accessed August 23, 2011.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Rates of *Clostridium difficile* Infection Among Hospitalized Patients Aged ≥65 Years,* by Age Group — National Hospital Discharge Survey, United States, 1996–2009



* Includes patients aged ≥65 years who were either hospitalized with *Clostridium difficile* infections or who acquired *C. difficile* during the hospital stay. All of these patients had a discharge diagnosis coded 008.45, based on the *International Classification of Diseases, Ninth Revision, Clinical Modification*, either as a first-listed diagnosis or as one of up to six secondary diagnosis codes collected in the survey.

† Rates for 1996–1999 were based on U.S. Census Bureau civilian population estimates adjusted for the net underenumeration in the 1990 census. Rates for 2000–2009 were calculated using U.S. Census Bureau 2000-based postcensal civilian population estimates.

Clostridium difficile infections can lead to diarrhea, sepsis, and even death. The majority of infections with *C. difficile* occur among persons aged ≥65 years and among patients in health-care facilities, such as hospitals and nursing homes. From 1996 to 2009, *C. difficile* rates for hospitalized persons aged ≥65 years increased 200%, with increases of 175% for those aged 65–74 years, 198% for those aged 75–84 years, and 201% for those aged ≥85 years. *C. difficile* rates among patients aged ≥85 years were notably higher than those for the other age groups.

SOURCE: National Hospital Discharge Survey, Annual Files, 1996–2009. Available at http://www.cdc.gov/nchs/nhds.htm.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 27, 2011 (34th week)*

Disease	Current week	Cum 2011	5-year weekly average†	Total cases reported for previous years 2010	2009	2008	2007	2006	States reporting cases during current week (No.)
Anthrax	—	—	0	—	1	—	1	1	
Arboviral diseases§,¶:									
California serogroup virus disease	—	23	4	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	1	0	10	4	4	4	8	
Powassan virus disease	—	10	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	1	1	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	43	360	1	NN	NN	NN	NN	NN	RI (4), NY (37), PA (1), MD (1)
Botulism, total	—	62	3	112	118	145	144	165	
foodborne	—	6	1	7	10	17	32	20	
infant	—	49	2	80	83	109	85	97	
other (wound and unspecified)	—	7	1	25	25	19	27	48	
Brucellosis	1	51	3	115	115	80	131	121	FL (1)
Chancroid	—	11	0	24	28	25	23	33	
Cholera	—	21	0	13	10	5	7	9	
Cyclosporiasis§	2	121	3	179	141	139	93	137	NY (1), GA (1)
Diphtheria	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	5	0	23	35	30	22	29	
nonserotype b	1	76	2	200	236	244	199	175	AR (1)
unknown serotype	3	162	2	223	178	163	180	179	NY (1), NE (1), FL (1)
Hansen disease§	4	32	2	98	103	80	101	66	FL (1), HI (3)
Hantavirus pulmonary syndrome§	—	17	0	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal§	1	95	8	266	242	330	292	288	MT (1)
Influenza-associated pediatric mortality§,††	—	110	1	61	358	90	77	43	
Listeriosis	10	334	23	821	851	759	808	884	NY (3), PA (2), NE (1), NC (1), FL (1), CA (2)
Measles§§	1	177	1	63	71	140	43	55	CA (1)
Meningococcal disease, invasive¶¶:									
A, C, Y, and W-135	—	128	3	280	301	330	325	318	
serogroup B	—	66	2	135	174	188	167	193	
other serogroup	—	7	0	12	23	38	35	32	
unknown serogroup	2	277	7	406	482	616	550	651	FL (1), CA (1)
Novel influenza A virus infections***	2	4	0	4	43,774	2	4	NN	PA (1), IN (1)
Plague	—	1	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic§	—	—	—	—	—	—	—	NN	
Psittacosis§	—	1	0	4	9	8	12	21	
Q fever, total§	2	64	3	131	113	120	171	169	
acute	1	47	2	106	93	106	—	—	MN (1)
chronic	1	17	0	25	20	14	—	—	NY (1)
Rabies, human	—	1	—	2	4	2	1	3	
Rubella†††	—	4	0	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV§	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	2	83	2	142	161	157	132	125	NY (2)
Syphilis, congenital (age <1 yr)§§§	—	125	9	377	423	431	430	349	
Tetanus	—	5	1	26	18	19	28	41	
Toxic-shock syndrome (staphylococcal)§	—	56	2	82	74	71	92	101	
Trichinellosis	—	7	0	7	13	39	5	15	
Tularemia	—	73	3	124	93	123	137	95	
Typhoid fever	3	229	13	467	397	449	434	353	NY (1), WA (2)
Vancomycin-intermediate *Staphylococcus aureus*§	2	40	1	91	78	63	37	6	NY (2)
Vancomycin-resistant *Staphylococcus aureus*§	—	—	0	2	1	—	2	1	
Vibriosis (noncholera *Vibrio* species infections)§	17	389	24	846	789	588	549	NN	MD (3), VA (3), FL (3), TX (1), AZ (1), WA (4), CA (2)
Viral hemorrhagic fever¶¶¶	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 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 August 27, 2011 (34th week)*

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

* Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/osels/ph_surveillance/nndss/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 arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.

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

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

†† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 114 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.

§§ The one measles case reported for the current week was imported.

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

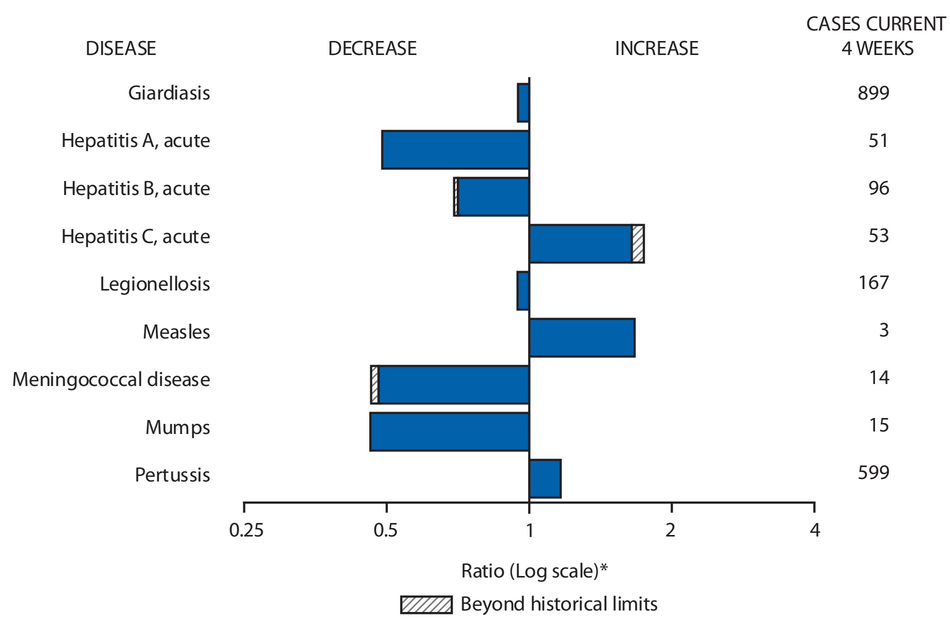
*** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the four cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts are provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).

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

§§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

¶¶¶ There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 27, 2011, with historical data



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

Notifiable Disease Data Team and 122 Cities Mortality Data Team

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)*

Reporting area	*Chlamydia trachomatis* infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	13,958	25,899	31,142	839,485	840,528	59	273	567	11,225	NN	195	133	416	4,811	5,720
New England	638	847	2,043	28,128	26,500	—	0	1	1	NN	—	5	55	240	370
Connecticut	—	219	1,557	6,080	6,892	—	0	0	—	NN	—	0	49	49	77
Maine†	—	58	100	2,014	1,643	—	0	0	—	NN	—	1	5	33	74
Massachusetts	535	406	860	14,632	13,457	—	0	0	—	NN	—	3	9	89	113
New Hampshire	4	53	81	1,771	1,522	—	0	1	1	NN	—	1	5	39	43
Rhode Island†	76	73	154	2,684	2,164	—	0	0	—	NN	—	0	1	1	14
Vermont†	23	26	84	947	822	—	0	0	—	NN	—	1	4	29	49
Mid. Atlantic	1,871	3,358	5,069	103,690	109,896	—	0	1	3	NN	17	17	38	571	547
New Jersey	155	526	908	17,533	17,033	—	0	0	—	NN	—	1	4	20	26
New York (Upstate)	776	715	2,099	23,369	21,655	—	0	0	—	NN	10	4	13	129	128
New York City	250	1,125	2,612	29,549	40,565	—	0	0	—	NN	—	1	6	40	54
Pennsylvania	690	961	1,240	33,239	30,643	—	0	1	3	NN	7	9	26	382	339
E.N. Central	968	3,984	7,039	126,926	133,530	—	0	5	36	NN	70	32	116	1,262	1,630
Illinois	34	1,082	1,320	31,907	39,384	—	0	0	—	NN	—	3	23	120	224
Indiana	309	463	3,376	17,320	12,822	—	0	0	—	NN	—	4	14	153	197
Michigan	442	923	1,405	30,854	32,686	—	0	3	21	NN	3	5	14	196	237
Ohio	183	1,002	1,134	32,725	33,471	—	0	3	15	NN	67	9	67	532	294
Wisconsin	—	451	559	14,120	15,167	—	0	0	—	NN	—	8	65	261	678
W.N. Central	502	1,457	1,668	46,815	47,047	—	0	2	6	NN	43	19	132	787	1,210
Iowa	22	211	255	6,858	6,837	—	0	0	—	NN	—	7	29	249	265
Kansas	40	194	288	6,590	6,363	—	0	0	—	NN	1	0	5	9	79
Minnesota	—	285	368	7,698	10,170	—	0	0	—	NN	—	0	21	—	287
Missouri	416	528	759	18,292	16,854	—	0	0	—	NN	38	4	57	262	352
Nebraska†	—	104	218	3,893	3,308	—	0	2	6	NN	4	4	26	138	128
North Dakota	2	43	90	1,334	1,476	—	0	0	—	NN	—	0	9	16	16
South Dakota	22	63	93	2,150	2,039	—	0	0	—	NN	—	2	13	113	83
S. Atlantic	3,956	5,141	6,581	176,922	169,148	—	0	2	3	NN	26	21	57	762	680
Delaware	74	83	220	2,769	2,747	—	0	0	—	NN	1	0	1	7	5
District of Columbia	—	104	180	2,844	3,447	—	0	0	—	NN	—	0	1	5	2
Florida	684	1,489	1,706	49,548	49,384	—	0	0	—	NN	12	8	23	303	250
Georgia	727	979	2,384	33,993	28,831	—	0	0	—	NN	8	5	11	187	186
Maryland†	200	448	1,125	14,336	15,669	—	0	2	3	NN	3	1	6	45	28
North Carolina	1,072	786	1,477	30,679	29,431	—	0	0	—	NN	—	0	17	36	47
South Carolina†	502	523	946	18,432	17,001	—	0	0	—	NN	—	2	8	79	73
Virginia†	650	659	965	21,636	20,232	—	0	0	—	NN	2	2	8	84	77
West Virginia	47	79	121	2,685	2,406	—	0	0	—	NN	—	0	5	16	12
E.S. Central	1,007	1,794	3,314	61,373	60,231	—	0	0	—	NN	4	7	24	192	189
Alabama†	—	532	1,564	17,914	17,101	—	0	0	—	NN	—	3	15	84	86
Kentucky	436	264	2,352	10,363	10,286	—	0	0	—	NN	—	1	4	27	54
Mississippi	235	398	614	13,479	14,292	—	0	0	—	NN	—	0	2	17	11
Tennessee†	336	593	795	19,617	18,552	—	0	0	—	NN	4	1	6	64	38
W.S. Central	2,637	3,327	4,338	113,771	116,045	—	0	1	1	NN	13	7	62	259	262
Arkansas†	320	311	440	10,769	10,208	—	0	0	—	NN	—	0	3	11	22
Louisiana	482	526	1,052	13,981	16,702	—	0	1	1	NN	1	0	9	35	40
Oklahoma	48	226	850	6,947	9,593	—	0	0	—	NN	2	2	34	60	55
Texas†	1,787	2,390	3,107	82,074	79,542	—	0	0	—	NN	10	4	28	153	145
Mountain	1,152	1,668	2,155	56,829	54,453	51	204	432	8,926	NN	9	12	30	402	401
Arizona	211	514	698	17,295	17,803	48	202	427	8,817	NN	1	1	4	26	26
Colorado	591	412	848	15,504	12,667	—	0	0	—	NN	5	3	12	114	90
Idaho†	28	78	235	2,619	2,672	—	0	0	—	NN	2	2	9	80	68
Montana†	—	61	83	2,088	1,980	—	0	2	3	NN	—	1	6	51	34
Nevada†	195	199	380	7,063	6,674	3	1	5	64	NN	—	0	7	3	23
New Mexico†	46	199	1,183	6,705	7,037	—	0	4	31	NN	1	2	12	81	88
Utah	75	131	175	4,339	4,274	—	0	2	8	NN	—	1	5	27	53
Wyoming†	6	39	90	1,216	1,346	—	0	2	3	NN	—	0	5	20	19
Pacific	1,227	3,872	6,559	125,031	123,678	8	50	142	2,249	NN	13	11	29	336	431
Alaska	—	108	157	3,539	4,081	—	0	0	—	NN	—	0	3	7	2
California	650	2,938	5,763	96,040	94,468	8	49	142	2,244	NN	5	7	19	201	230
Hawaii	—	108	138	3,230	4,027	—	0	0	—	NN	—	0	0	—	1
Oregon	287	264	524	8,949	7,346	—	0	1	5	NN	2	2	11	78	137
Washington	290	428	522	13,273	13,756	—	0	0	—	NN	6	1	9	50	61
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	NN	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	6	81	189	615	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	—	102	349	3,516	4,128	—	0	0	—	NN	N	0	0	N	N
U.S. Virgin Islands	—	14	27	359	380	—	0	0	—	NN	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)*

	Dengue Virus Infection†									
	Dengue Fever§					Dengue Hemorrhagic Fever¶				
		Previous 52 weeks					Previous 52 weeks			
Reporting area	Current week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010
United States	—	3	41	72	491	—	0	2	—	6
New England	—	0	3	1	5	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island**	—	0	1	—	—	—	0	0	—	—
Vermont**	—	0	1	1	2	—	0	0	—	—
Mid. Atlantic	—	1	14	19	166	—	0	1	—	3
New Jersey	—	0	3	—	21	—	0	0	—	—
New York (Upstate)	—	0	3	—	26	—	0	1	—	1
New York City	—	0	10	10	102	—	0	1	—	2
Pennsylvania	—	0	2	9	17	—	0	0	—	—
E.N. Central	—	0	7	6	44	—	0	0	—	1
Illinois	—	0	2	1	11	—	0	0	—	—
Indiana	—	0	2	1	11	—	0	0	—	—
Michigan	—	0	2	2	6	—	0	0	—	—
Ohio	—	0	2	—	13	—	0	0	—	—
Wisconsin	—	0	2	2	3	—	0	0	—	1
W.N. Central	—	0	6	3	21	—	0	1	—	—
Iowa	—	0	1	2	1	—	0	0	—	—
Kansas	—	0	1	1	3	—	0	0	—	—
Minnesota	—	0	1	—	12	—	0	0	—	—
Missouri	—	0	1	—	4	—	0	0	—	—
Nebraska**	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	14	23	178	—	0	1	—	1
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	11	19	138	—	0	1	—	1
Georgia	—	0	2	3	9	—	0	0	—	—
Maryland**	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	1	1	5	—	0	0	—	—
South Carolina**	—	0	1	—	12	—	0	0	—	—
Virginia**	—	0	2	—	12	—	0	0	—	—
West Virginia	—	0	0	—	2	—	0	0	—	—
E.S. Central	—	0	1	—	5	—	0	0	—	—
Alabama**	—	0	1	—	2	—	0	0	—	—
Kentucky	—	0	0	—	2	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	0	—	1	—	0	0	—	—
W.S. Central	—	0	2	5	23	—	0	0	—	1
Arkansas**	—	0	0	—	—	—	0	0	—	1
Louisiana	—	0	1	2	4	—	0	0	—	—
Oklahoma	—	0	1	—	4	—	0	0	—	—
Texas**	—	0	2	3	15	—	0	0	—	—
Mountain	—	0	2	3	15	—	0	0	—	—
Arizona	—	0	2	2	6	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	1	—	0	0	—	—
Montana**	—	0	1	—	3	—	0	0	—	—
Nevada**	—	0	1	—	4	—	0	0	—	—
New Mexico**	—	0	0	—	1	—	0	0	—	—
Utah	—	0	1	1	—	—	0	0	—	—
Wyoming**	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	7	12	34	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	5	2	23	—	0	0	—	—
Hawaii	—	0	4	5	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	5	10	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	25	453	473	7,286	—	0	14	5	168
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB 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).
§ Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.
¶ DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.
** Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)*

	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum	Cum	Current week	Previous 52 weeks		Cum	Cum	Current week	Previous 52 weeks		Cum	Cum
Reporting area		Med	Max	2011	2010		Med	Max	2011	2010		Med	Max	2011	2010
United States	15	7	109	501	499	18	16	42	356	1,342	1	1	13	63	72
New England	—	0	2	3	3	9	2	15	103	65	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	6	—	25	—	0	0	—	—
Maine§	—	0	1	1	2	—	0	2	11	13	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	10	49	—	—	0	0	—	—
New Hampshire	—	0	1	1	1	—	0	4	10	10	—	0	1	1	2
Rhode Island§	—	0	1	1	—	9	0	10	30	16	—	0	0	—	—
Vermont§	—	0	0	—	—	—	0	1	3	1	—	0	0	—	—
Mid. Atlantic	—	1	7	41	69	7	4	27	174	178	—	0	2	7	8
New Jersey	—	0	1	—	45	—	0	3	—	55	—	0	0	—	1
New York (Upstate)	—	0	7	37	18	7	3	25	153	113	—	0	2	7	5
New York City	—	0	1	4	5	—	0	5	19	10	—	0	0	—	—
Pennsylvania	—	0	1	—	1	—	0	1	2	—	—	0	1	—	2
E.N. Central	—	0	3	19	34	—	1	9	9	420	—	0	4	26	39
Illinois	—	0	2	9	11	—	0	1	2	4	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	20	14
Michigan	—	0	2	4	2	—	0	1	—	2	—	0	1	2	—
Ohio	—	0	1	6	5	—	0	1	4	2	—	0	1	1	—
Wisconsin	—	0	1	—	16	—	0	9	3	412	—	0	1	1	22
W.N. Central	—	1	17	128	110	—	1	20	23	613	—	0	11	15	8
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	1	2	6	—	0	0	—	1	—	0	0	—	—
Minnesota	—	0	12	—	—	—	0	20	1	602	—	0	11	—	—
Missouri	—	0	17	125	103	—	0	6	21	10	—	0	7	14	8
Nebraska§	—	0	1	—	1	—	0	0	—	—	—	0	1	1	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	1	1	—	—	0	1	1	—	—	0	0	—	—
S. Atlantic	3	3	33	175	188	2	1	8	37	46	1	0	1	5	4
Delaware	—	0	2	14	16	—	0	1	1	4	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	—	0	3	13	7	1	0	1	4	2	—	0	0	—	—
Georgia	—	0	3	16	19	—	0	2	7	1	—	0	1	1	1
Maryland§	—	0	3	19	18	—	0	2	3	12	—	0	0	—	2
North Carolina	2	0	17	47	62	1	0	6	17	19	—	0	0	—	—
South Carolina§	—	0	1	—	4	—	0	1	—	—	—	0	0	—	—
Virginia§	1	1	13	66	60	—	0	2	5	8	1	0	1	3	1
West Virginia	—	0	1	—	2	—	0	0	—	—	—	0	1	1	—
E.S. Central	—	0	7	54	75	—	0	2	9	18	—	0	1	6	8
Alabama§	—	0	1	—	10	—	0	1	3	7	N	0	0	N	N
Kentucky	—	0	2	9	12	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	3	3	—	0	0	—	2	—	0	0	—	1
Tennessee§	—	0	5	42	50	—	0	1	6	9	—	0	1	6	6
W.S. Central	12	0	87	81	19	—	0	9	—	2	—	0	0	—	1
Arkansas§	—	0	11	35	4	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	12	0	82	45	11	—	0	7	—	2	—	0	0	—	—
Texas§	—	0	1	1	3	—	0	1	—	—	—	0	0	—	1
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	3	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	3	—
Colorado	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Idaho§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Montana§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Nevada§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
New Mexico§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	1	1	—	—	0	0	—	2
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	1	—	1	—	0	0	—	—	—	0	0	—	2
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	1	1	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Cumulative total *E. ewingii* cases reported for year 2010 = 10, and 11 cases reported for 2011.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)*

	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
Reporting area		Med	Max				Med	Max				Med	Max		
United States	240	289	549	8,926	12,477	3,192	5,810	7,484	188,729	197,119	19	64	141	2,125	2,038
New England	6	25	50	767	1,085	66	101	206	3,356	3,455	—	4	12	138	120
Connecticut	1	4	12	131	194	—	43	150	1,403	1,552	—	1	6	37	25
Maine§	1	3	11	99	129	—	3	17	137	120	—	0	2	15	9
Massachusetts	—	12	23	343	463	50	48	80	1,487	1,472	—	2	6	62	62
New Hampshire	—	2	5	64	123	2	2	7	83	98	—	0	2	10	8
Rhode Island§	—	1	10	39	47	11	7	16	214	167	—	0	2	9	10
Vermont§	4	2	8	91	129	3	0	8	32	46	—	0	3	5	6
Mid. Atlantic	39	57	106	1,734	2,066	394	722	1,121	23,052	22,496	8	12	32	461	390
New Jersey	—	6	20	132	302	43	125	205	4,482	3,631	—	2	7	71	69
New York (Upstate)	29	21	72	635	687	131	114	271	3,672	3,427	5	3	18	128	103
New York City	—	17	28	508	589	43	235	497	6,336	7,681	—	3	6	92	65
Pennsylvania	10	16	27	459	488	177	263	364	8,562	7,757	3	4	11	170	153
E.N. Central	22	47	99	1,407	2,157	247	1,025	2,091	33,092	36,514	1	11	22	372	329
Illinois	—	9	22	244	503	9	268	369	7,946	10,032	—	3	10	111	114
Indiana	—	6	14	158	268	66	112	1,018	4,176	3,600	—	2	7	68	65
Michigan	3	10	25	289	446	118	235	490	7,801	9,103	—	1	4	43	24
Ohio	19	16	29	512	540	54	319	389	10,317	10,610	1	2	7	104	79
Wisconsin	—	8	35	204	400	—	93	127	2,852	3,169	—	1	5	46	47
W.N. Central	18	25	73	684	1,344	139	302	363	9,756	9,400	1	4	10	105	148
Iowa	3	5	13	168	194	5	39	57	1,236	1,127	—	0	0	—	1
Kansas	—	2	7	57	158	11	41	57	1,318	1,350	—	0	2	15	16
Minnesota	—	0	33	—	519	—	38	62	1,063	1,390	—	0	5	—	52
Missouri	10	8	26	265	245	122	147	182	4,913	4,398	—	1	5	56	58
Nebraska§	5	4	11	129	148	—	23	49	757	753	1	1	3	24	13
North Dakota	—	0	12	21	15	—	4	9	125	132	—	0	6	9	8
South Dakota	—	1	5	44	65	1	11	20	344	250	—	0	1	1	—
S. Atlantic	60	56	127	1,728	2,508	1,116	1,464	1,862	47,270	50,216	4	15	30	517	521
Delaware	—	0	2	18	22	19	17	48	541	638	—	0	2	3	5
District of Columbia	2	1	3	26	40	—	37	70	1,048	1,359	—	0	1	—	3
Florida	45	24	75	771	1,344	233	377	486	12,611	13,292	3	5	12	167	122
Georgia	—	13	51	498	502	231	315	874	10,284	9,953	—	3	7	100	118
Maryland§	11	4	11	162	189	29	119	246	3,473	4,522	—	2	5	58	44
North Carolina	N	0	0	N	N	338	267	468	9,957	9,846	—	2	8	53	90
South Carolina§	—	2	9	67	93	143	148	257	5,166	5,192	1	1	5	50	64
Virginia§	2	7	32	164	296	111	111	185	3,655	5,090	—	2	8	72	59
West Virginia	—	0	8	22	22	12	15	29	535	324	—	0	9	14	16
E.S. Central	—	4	11	105	122	343	495	1,007	16,637	16,333	1	3	11	135	122
Alabama§	—	4	11	105	122	—	161	410	5,416	5,001	—	1	4	40	21
Kentucky	N	0	0	N	N	136	69	712	2,821	2,672	1	0	4	21	24
Mississippi	N	0	0	N	N	97	118	197	3,681	3,990	—	0	3	12	10
Tennessee§	N	0	0	N	N	110	142	186	4,719	4,670	—	2	5	62	67
W.S. Central	3	6	17	158	253	631	906	1,319	29,137	31,711	2	3	26	95	96
Arkansas§	—	3	9	79	73	81	100	138	3,236	3,098	2	0	3	23	14
Louisiana	3	3	12	79	118	21	143	372	3,793	5,155	—	0	4	33	20
Oklahoma	—	0	0	—	62	5	62	254	1,982	2,800	—	1	19	38	55
Texas§	N	0	0	N	N	524	592	867	20,126	20,658	—	0	4	1	7
Mountain	23	26	58	798	1,146	122	191	253	6,655	6,274	1	5	12	183	221
Arizona	—	3	8	79	101	39	69	110	2,536	2,115	—	2	6	72	81
Colorado	13	12	23	380	466	40	45	89	1,436	1,776	1	1	5	44	65
Idaho§	7	3	9	96	138	—	2	14	82	72	—	0	2	14	12
Montana§	1	2	4	44	73	—	1	4	45	75	—	0	1	2	2
Nevada§	1	1	11	35	59	40	33	103	1,326	1,222	—	0	2	12	5
New Mexico§	1	1	6	51	69	2	27	98	1,051	762	—	1	4	26	26
Utah	—	3	13	96	209	1	4	9	156	227	—	0	3	12	25
Wyoming§	—	0	5	17	31	—	0	3	23	25	—	0	1	1	5
Pacific	69	48	128	1,545	1,796	134	617	791	19,774	20,720	1	3	10	119	91
Alaska	—	2	7	55	67	—	20	34	622	873	—	0	2	16	16
California	34	32	67	1,050	1,098	85	503	695	16,257	16,937	1	0	6	27	15
Hawaii	—	0	4	23	39	—	13	26	417	470	—	0	3	17	15
Oregon	6	7	20	198	314	15	23	40	848	664	—	2	6	56	40
Washington	29	8	57	219	278	34	54	86	1,630	1,776	—	0	2	3	5
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	2	—	0	17	6	55	—	0	0	—	—
Puerto Rico	—	1	7	25	58	—	6	14	209	192	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	5	52	97	—	0	0	—	—

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† 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 August 27, 2011, and August 28, 2010 (34th week)***

	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
Reporting area		Med	Max				Med	Max				Med	Max		
United States	24	22	74	693	1,028	43	50	167	1,494	2,123	17	17	39	620	527
New England	—	1	4	36	75	—	1	8	45	39	—	1	4	40	36
Connecticut	—	0	3	9	17	—	0	4	10	13	—	1	3	25	22
Maine†	—	0	1	3	7	—	0	2	5	11	—	0	2	6	2
Massachusetts	—	0	2	16	42	—	0	6	29	8	—	0	2	5	12
New Hampshire	—	0	1	—	—	—	0	1	1	5	N	0	0	N	N
Rhode Island†	—	0	1	3	9	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	2	5	—	—	0	0	—	2	—	0	1	4	—
Mid. Atlantic	5	4	12	128	170	3	5	12	169	202	—	1	6	52	73
New Jersey	—	1	4	18	49	—	1	4	32	53	—	0	4	1	16
New York (Upstate)	3	1	4	31	36	2	1	9	31	34	—	0	4	28	35
New York City	—	1	6	40	50	—	1	5	49	62	—	0	1	—	3
Pennsylvania	2	1	3	39	35	1	2	4	57	53	—	0	3	23	19
E.N. Central	2	4	9	118	128	4	5	36	213	344	—	3	12	118	61
Illinois	—	1	3	23	34	—	2	6	46	90	—	0	1	5	—
Indiana	—	0	3	11	11	—	1	3	28	50	—	0	5	43	22
Michigan	—	2	6	51	45	1	1	6	57	89	—	1	7	65	27
Ohio	2	1	5	28	24	3	1	30	67	80	—	0	1	4	7
Wisconsin	—	0	2	5	14	—	0	3	15	35	—	0	1	1	5
W.N. Central	7	1	25	30	50	7	2	16	90	76	3	0	6	6	11
Iowa	—	0	3	4	6	—	0	1	7	11	—	0	0	—	—
Kansas	—	0	2	3	10	—	0	2	8	5	—	0	1	2	—
Minnesota	7	0	22	9	13	7	0	15	9	6	2	0	6	2	6
Missouri	—	0	1	9	14	—	2	5	54	44	—	0	1	—	3
Nebraska†	—	0	4	3	6	—	0	3	11	9	1	0	1	2	2
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	1	—	0	1	1	1	—	0	0	—	—
S. Atlantic	3	5	13	144	228	16	12	33	390	587	5	4	11	153	118
Delaware	—	0	1	2	6	—	0	1	—	19	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	2	1	6	44	87	8	4	11	134	193	2	1	5	35	34
Georgia	—	1	4	31	25	2	2	8	60	117	1	1	3	26	15
Maryland†	—	0	4	19	14	1	1	4	37	43	2	1	2	27	17
North Carolina	—	0	3	15	38	5	2	12	76	68	—	1	7	39	28
South Carolina†	—	0	2	9	22	—	1	4	22	40	—	0	1	1	—
Virginia†	—	1	4	16	33	—	1	7	42	63	—	0	2	9	8
West Virginia	1	0	5	8	2	—	0	18	19	41	—	0	6	16	14
E.S. Central	1	0	6	32	28	6	9	14	273	231	4	3	8	107	95
Alabama†	—	0	2	1	5	—	2	4	63	45	—	0	1	7	4
Kentucky	—	0	6	8	12	1	2	6	76	78	1	1	6	44	65
Mississippi	—	0	1	6	2	—	1	3	30	22	U	0	0	U	U
Tennessee†	1	0	5	17	9	5	3	7	104	86	3	1	5	56	26
W.S. Central	4	3	15	67	81	5	7	67	180	350	2	2	11	59	45
Arkansas†	—	0	1	—	—	—	1	4	27	42	—	0	0	—	1
Louisiana	—	0	1	2	5	—	1	4	22	41	—	0	2	5	1
Oklahoma	—	0	4	3	1	1	1	16	43	61	1	1	10	33	15
Texas†	4	2	11	62	75	4	4	45	88	206	1	0	3	21	28
Mountain	—	2	5	49	111	1	2	5	53	95	1	1	4	38	44
Arizona	—	0	2	13	48	—	0	3	12	16	U	0	0	U	U
Colorado	—	0	2	17	29	—	0	3	15	31	1	0	3	13	9
Idaho†	—	0	1	6	6	—	0	1	2	6	—	0	2	7	8
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	3	2
Nevada†	—	0	3	5	11	1	0	3	16	31	—	0	1	5	4
New Mexico†	—	0	1	3	3	—	0	2	5	3	—	0	1	7	11
Utah	—	0	2	1	7	—	0	1	3	7	—	0	2	1	10
Wyoming†	—	0	1	2	3	—	0	1	—	1	—	0	1	2	—
Pacific	2	3	15	89	157	1	3	25	81	199	2	1	12	47	44
Alaska	—	0	1	2	1	—	0	1	4	2	U	0	1	U	U
California	—	2	15	61	123	—	2	22	33	134	—	0	4	19	19
Hawaii	1	0	2	7	5	—	0	1	5	3	U	0	0	U	U
Oregon	—	0	2	4	14	—	0	4	23	32	—	0	3	11	10
Washington	1	0	4	15	14	1	0	4	16	28	2	0	5	17	15
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	4	—	0	8	28	56	—	0	8	10	44
Puerto Rico	—	0	2	4	11	—	0	3	6	15	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) **Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)***

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	50	51	128	1,663	2,026	425	361	1,542	18,218	22,561	20	27	114	795	1,067
New England	1	4	16	111	150	15	84	276	3,089	6,792	—	2	20	50	74
Connecticut	1	1	6	25	24	—	34	169	1,424	2,332	—	0	20	6	2
Maine†	—	0	3	6	7	—	11	62	316	412	—	0	1	2	5
Massachusetts	—	2	9	58	82	—	17	71	494	2,696	—	1	5	33	57
New Hampshire	—	0	5	7	10	1	12	54	427	990	—	0	2	2	2
Rhode Island†	—	0	4	9	20	8	1	35	108	106	—	0	4	2	6
Vermont†	—	0	1	6	7	6	4	54	320	256	—	0	1	5	2
Mid. Atlantic	22	13	53	431	495	349	150	1,133	11,870	7,944	2	8	22	161	320
New Jersey	—	2	18	48	76	90	51	547	4,807	2,827	—	0	6	8	73
New York (Upstate)	15	5	19	159	154	142	35	214	2,207	1,735	1	1	6	26	48
New York City	—	2	17	66	87	—	1	26	32	521	—	3	13	89	160
Pennsylvania	7	5	19	158	178	117	62	462	4,824	2,861	1	1	4	38	39
E.N. Central	14	10	49	411	465	1	22	81	865	3,205	1	3	6	92	114
Illinois	—	1	6	42	115	—	1	18	80	115	—	1	5	35	46
Indiana	1	1	5	57	39	—	0	14	64	73	—	0	2	6	9
Michigan	2	2	13	91	118	1	1	9	56	79	1	0	4	16	20
Ohio	11	4	34	220	150	—	1	9	35	22	—	1	4	30	31
Wisconsin	—	0	5	1	43	—	18	63	630	2,916	—	0	2	5	8
W.N. Central	—	2	9	51	80	1	3	39	72	1,796	—	1	45	19	46
Iowa	—	0	2	7	13	—	0	10	56	73	—	0	3	13	10
Kansas	—	0	2	4	7	—	0	2	7	10	—	0	2	4	8
Minnesota	—	0	8	—	23	—	0	35	—	1,693	—	0	45	—	3
Missouri	—	1	5	35	23	—	0	1	—	3	—	0	2	—	11
Nebraska†	—	0	1	2	7	1	0	2	7	8	—	0	1	2	12
North Dakota	—	0	1	1	3	—	0	10	—	8	—	0	1	—	—
South Dakota	—	0	2	2	4	—	0	1	2	1	—	0	1	—	2
S. Atlantic	11	9	22	270	343	55	57	160	2,125	2,572	11	8	20	274	284
Delaware	—	0	1	6	12	4	10	43	564	503	—	0	1	3	2
District of Columbia	1	0	3	9	13	—	0	5	11	26	—	0	1	5	10
Florida	7	3	6	96	108	7	2	8	76	51	5	2	7	69	86
Georgia	—	1	4	24	41	—	0	2	13	9	—	1	7	55	46
Maryland†	1	1	6	42	76	23	17	103	699	1,117	2	1	8	62	57
North Carolina	1	1	7	44	36	8	0	7	46	58	3	0	6	30	32
South Carolina†	—	0	2	9	8	—	0	3	16	27	—	0	1	1	3
Virginia†	—	1	9	34	40	12	19	76	652	704	1	1	8	49	47
West Virginia	1	0	2	6	9	1	0	14	48	77	—	0	1	—	1
E.S. Central	—	2	10	92	96	1	0	3	29	35	—	0	2	17	22
Alabama†	—	0	2	10	11	—	0	2	7	1	—	0	1	3	5
Kentucky	—	0	3	21	19	—	0	1	—	4	—	0	1	6	5
Mississippi	—	0	3	10	11	—	0	1	1	—	—	0	1	1	2
Tennessee†	—	1	8	51	55	1	0	3	21	30	—	0	2	7	10
W.S. Central	—	3	13	73	104	—	1	29	24	68	—	1	18	24	63
Arkansas†	—	0	2	6	14	—	0	0	—	—	—	0	1	3	4
Louisiana	—	0	3	13	5	—	0	0	—	3	—	0	1	1	2
Oklahoma	—	0	3	7	10	—	0	0	—	—	—	0	1	3	4
Texas†	—	2	11	47	75	—	1	29	24	65	—	1	17	17	53
Mountain	—	2	5	58	123	—	0	4	19	21	—	1	4	44	43
Arizona	—	1	3	20	42	—	0	2	6	2	—	0	4	17	20
Colorado	—	0	2	4	23	—	0	1	1	2	—	0	3	16	13
Idaho†	—	0	1	4	3	—	0	2	2	8	—	0	1	2	1
Montana†	—	0	1	—	4	—	0	2	4	1	—	0	1	—	2
Nevada†	—	0	2	11	18	—	0	1	3	—	—	0	2	6	3
New Mexico†	—	0	1	5	6	—	0	1	1	5	—	0	1	2	1
Utah	—	0	2	12	20	—	0	1	1	3	—	0	1	1	3
Wyoming†	—	0	1	2	7	—	0	1	1	—	—	0	0	—	—
Pacific	2	5	21	166	170	3	3	11	125	128	6	4	10	114	101
Alaska	—	0	0	—	2	—	0	2	5	5	—	0	2	4	3
California	1	4	15	147	144	3	3	9	104	78	4	2	10	80	67
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	5	2
Oregon	—	0	2	6	9	—	0	2	10	38	—	0	4	11	8
Washington	1	0	6	12	14	—	0	4	6	7	2	0	5	14	21
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	1	1	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	1	—	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
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† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	2	14	53	478	547	5	7	47	183	2,340	103	309	2,925	8,462	13,036
New England	—	0	3	23	14	—	0	1	5	23	1	9	24	277	312
Connecticut	—	0	1	3	2	—	0	0	—	11	—	1	8	30	67
Maine§	—	0	1	3	3	—	0	1	—	1	—	2	8	82	33
Massachusetts	—	0	2	11	4	—	0	1	3	8	—	4	13	99	172
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	7	41	9
Rhode Island§	—	0	1	—	—	—	0	1	1	—	1	0	4	16	23
Vermont§	—	0	3	5	5	—	0	1	1	—	—	0	4	9	8
Mid. Atlantic	—	1	6	53	56	—	1	23	23	2,034	35	36	125	949	821
New Jersey	—	0	1	3	17	—	0	2	8	333	—	3	10	76	104
New York (Upstate)	—	0	4	18	9	—	0	3	5	653	30	12	81	393	295
New York City	—	0	3	19	14	—	0	22	9	1,029	—	0	19	38	45
Pennsylvania	—	0	2	13	16	—	0	16	1	19	5	15	70	442	377
E.N. Central	—	2	7	63	92	2	1	7	48	43	10	70	198	1,738	2,976
Illinois	—	0	3	20	19	—	1	3	29	14	—	16	50	433	523
Indiana	—	0	2	8	21	—	0	1	—	3	—	5	26	120	425
Michigan	—	0	4	6	15	—	0	1	6	16	2	23	57	459	843
Ohio	—	1	2	20	21	2	0	5	11	9	8	19	80	511	945
Wisconsin	—	0	2	9	16	—	0	1	2	1	—	9	26	215	240
W.N. Central	—	1	4	32	39	1	0	4	26	79	11	25	501	766	1,201
Iowa	—	0	1	7	8	—	0	1	4	37	—	6	36	125	344
Kansas	—	0	1	2	6	—	0	1	4	4	—	2	10	68	114
Minnesota	—	0	2	—	3	—	0	4	1	4	3	0	469	295	309
Missouri	—	0	2	12	16	1	0	3	9	9	2	6	43	194	265
Nebraska§	—	0	2	8	5	—	0	1	4	23	—	1	13	38	112
North Dakota	—	0	1	1	1	—	0	3	4	—	6	0	10	36	30
South Dakota	—	0	1	2	—	—	0	0	—	2	—	0	3	10	27
S. Atlantic	1	2	8	96	97	1	0	4	17	45	14	32	106	882	1,101
Delaware	—	0	1	1	—	—	0	0	—	—	—	0	5	21	9
District of Columbia	—	0	1	1	—	—	0	0	—	3	—	0	2	3	4
Florida	1	1	5	37	44	—	0	2	5	8	6	6	17	211	205
Georgia	—	0	1	11	8	—	0	2	4	2	1	3	13	117	168
Maryland§	—	0	1	9	5	—	0	1	1	9	—	2	6	47	84
North Carolina	—	0	3	13	12	1	0	2	5	7	5	3	35	119	214
South Carolina§	—	0	1	9	9	—	0	1	—	4	1	3	25	94	251
Virginia§	—	0	2	10	17	—	0	2	2	10	1	7	41	218	133
West Virginia	—	0	3	5	2	—	0	0	—	2	—	0	41	52	33
E.S. Central	—	0	3	20	27	—	0	1	3	9	2	9	28	231	520
Alabama§	—	0	2	9	5	—	0	1	1	6	—	3	11	89	149
Kentucky	—	0	2	2	11	—	0	0	—	1	2	2	16	53	170
Mississippi	—	0	1	2	3	—	0	1	2	—	—	1	10	19	52
Tennessee§	—	0	2	7	8	—	0	1	—	2	—	2	10	70	149
W.S. Central	—	1	12	39	59	—	1	15	45	59	6	24	297	598	1,944
Arkansas§	—	0	1	8	5	—	0	1	1	5	—	1	16	36	156
Louisiana	—	0	2	8	12	—	0	2	—	5	—	0	3	15	28
Oklahoma	—	0	2	7	14	—	0	1	1	—	—	0	92	23	28
Texas§	—	0	10	16	28	—	1	14	43	49	6	20	187	524	1,732
Mountain	—	1	4	34	44	1	0	4	6	14	8	43	100	1,199	889
Arizona	—	0	1	10	11	—	0	0	—	5	—	14	29	487	278
Colorado	—	0	1	8	15	—	0	1	3	7	7	9	63	281	133
Idaho§	—	0	1	4	5	1	0	1	1	—	1	2	15	94	114
Montana§	—	0	2	3	1	—	0	0	—	—	—	2	16	70	34
Nevada§	—	0	1	1	8	—	0	1	—	—	—	0	5	18	19
New Mexico§	—	0	1	1	3	—	0	2	2	—	—	3	10	80	77
Utah	—	0	2	7	1	—	0	1	—	2	—	6	16	164	227
Wyoming§	—	0	1	—	—	—	0	1	—	—	—	0	2	5	7
Pacific	1	3	26	118	119	—	0	3	10	34	16	72	1,710	1,822	3,272
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	6	19	25
California	1	2	17	85	76	—	0	3	3	22	—	57	1,569	1,306	2,780
Hawaii	—	0	1	4	1	—	0	1	2	3	1	1	9	64	55
Oregon	—	0	3	15	24	—	0	1	4	2	—	5	11	175	208
Washington	—	0	8	12	17	—	0	1	—	6	15	9	131	258	204
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	3	9	12	429	—	0	14	31	2
Puerto Rico	—	0	1	—	1	—	0	1	1	1	—	0	1	2	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† 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 August 27, 2011, and August 28, 2010 (34th week)*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	53	53	119	1,624	3,003	861	929	1,812	26,472	31,865	86	98	264	2,888	3,287
New England	1	4	13	115	208	2	29	351	1,245	1,767	—	2	36	129	157
Connecticut	—	0	9	28	96	—	0	330	330	491	—	0	36	36	60
Maine§	1	1	3	41	42	1	2	8	85	77	—	0	3	20	11
Massachusetts	—	0	0	—	—	—	17	41	554	886	—	1	10	44	57
New Hampshire	—	0	3	15	14	—	3	8	108	131	—	0	3	17	18
Rhode Island§	—	0	4	15	21	—	1	62	128	135	—	0	2	4	2
Vermont§	—	1	3	16	35	1	1	5	40	47	—	0	3	8	9
Mid. Atlantic	20	13	29	416	748	79	90	201	2,940	3,848	8	9	21	335	367
New Jersey	—	0	0	—	—	—	13	40	322	799	—	1	6	36	83
New York (Upstate)	20	7	20	240	358	47	25	66	858	908	7	4	12	132	123
New York City	—	0	4	7	133	—	19	46	625	863	—	1	6	51	47
Pennsylvania	—	6	17	169	257	32	32	73	1,135	1,278	1	3	15	116	114
E.N. Central	7	2	12	102	189	48	89	184	2,695	4,064	9	12	36	420	586
Illinois	3	1	7	33	96	—	28	57	916	1,384	—	2	7	75	114
Indiana	1	0	3	7	—	—	9	23	252	533	—	2	5	57	97
Michigan	1	1	5	34	54	7	14	49	477	619	1	2	12	101	110
Ohio	2	0	3	28	39	41	21	47	781	903	8	2	10	113	103
Wisconsin	N	0	0	N	N	—	10	50	269	625	—	2	13	74	162
W.N. Central	2	2	40	51	194	33	47	121	1,431	1,979	14	13	40	459	610
Iowa	—	0	2	—	20	—	9	22	291	367	—	2	15	122	124
Kansas	—	1	4	21	47	4	7	21	246	287	1	1	8	60	50
Minnesota	—	0	34	—	23	—	0	25	—	521	—	0	11	—	201
Missouri	—	0	2	—	54	24	16	42	602	518	8	4	14	165	164
Nebraska§	2	0	3	22	40	5	4	13	156	160	4	1	7	75	47
North Dakota	—	0	6	8	10	—	0	15	22	24	—	0	10	6	5
South Dakota	—	0	0	—	—	—	3	17	114	102	1	1	4	31	19
S. Atlantic	16	17	74	694	787	358	278	697	7,946	8,280	17	14	29	419	437
Delaware	—	0	0	—	—	3	3	11	105	106	—	0	2	11	4
District of Columbia	—	0	0	—	—	2	1	4	38	73	—	0	1	3	8
Florida	—	0	65	65	121	183	107	226	3,168	3,381	4	3	15	90	131
Georgia	—	0	0	—	—	50	42	142	1,427	1,636	1	2	8	76	68
Maryland§	—	6	14	163	246	33	18	51	572	679	2	1	8	29	60
North Carolina	—	0	0	—	—	63	33	250	1,157	815	6	2	11	79	43
South Carolina§	N	0	0	N	N	—	30	99	781	815	—	0	4	12	17
Virginia§	16	11	27	411	368	18	21	68	656	651	4	3	9	116	92
West Virginia	—	0	30	55	52	6	0	14	42	124	—	0	4	3	14
E.S. Central	—	2	7	75	133	31	60	169	2,056	2,184	6	5	22	191	168
Alabama§	—	1	7	51	56	—	16	57	555	565	—	1	15	65	36
Kentucky	—	0	2	10	14	—	9	32	244	342	—	1	5	28	39
Mississippi	—	0	1	1	—	2	21	61	679	667	—	0	12	17	11
Tennessee§	—	0	4	13	63	29	17	53	578	610	6	2	11	81	82
W.S. Central	—	3	31	53	575	175	133	515	3,456	3,816	3	8	151	212	183
Arkansas§	—	0	10	41	22	42	14	43	461	398	—	1	3	28	37
Louisiana	—	0	0	—	—	3	15	52	479	815	—	0	2	6	13
Oklahoma	—	0	20	12	38	27	11	95	376	354	2	1	55	36	14
Texas§	—	0	30	—	515	103	87	381	2,140	2,249	1	6	95	142	119
Mountain	3	0	5	18	43	26	48	90	1,523	1,878	9	11	30	353	412
Arizona	N	0	0	N	N	3	14	40	458	614	—	2	14	60	42
Colorado	—	0	0	—	—	15	10	23	365	396	2	3	14	82	158
Idaho§	1	0	2	2	6	6	3	8	105	107	4	3	6	66	47
Montana§	N	0	0	N	N	—	2	10	89	68	3	0	5	28	28
Nevada§	2	0	2	4	4	2	3	12	93	210	—	0	7	26	22
New Mexico§	—	0	1	6	9	—	6	19	173	208	—	1	6	26	32
Utah	—	0	2	6	7	—	6	15	198	233	—	1	7	53	65
Wyoming§	—	0	4	—	17	—	1	8	42	42	—	0	3	12	18
Pacific	4	3	15	100	126	109	104	288	3,180	4,049	20	13	46	370	367
Alaska	—	0	2	9	11	—	1	6	38	59	—	0	1	1	1
California	3	3	10	84	102	73	75	232	2,435	2,928	10	8	36	241	155
Hawaii	—	0	0	—	—	5	6	14	220	228	—	0	2	5	26
Oregon	1	0	2	7	13	1	6	14	149	380	—	1	11	47	62
Washington	—	0	14	—	—	30	12	42	338	454	10	2	16	76	123
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	8	—	0	0	—	—
Puerto Rico	—	0	6	23	33	—	6	25	106	377	—	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. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 August 27, 2011, and August 28, 2010 (34th week)*

	Shigellosis					Spotted Fever Rickettsiosis (including RMSF)† Confirmed					Spotted Fever Rickettsiosis (including RMSF)† Probable				
Reporting area	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	155	232	742	6,663	9,057	2	2	13	108	101	56	24	245	1,043	1,041
New England	—	3	29	131	262	—	0	0	—	—	—	0	1	3	2
Connecticut	—	0	28	28	69	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	4	19	5	—	0	0	—	—	—	0	1	—	1
Massachusetts	—	2	13	76	168	—	0	0	—	—	—	0	1	1	—
New Hampshire	—	0	2	1	8	—	0	0	—	—	—	0	1	1	1
Rhode Island§	—	0	4	4	11	—	0	0	—	—	—	0	1	1	—
Vermont§	—	0	1	3	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	4	13	74	406	1,205	—	0	2	10	2	—	1	5	21	72
New Jersey	—	2	10	51	282	—	0	0	—	1	—	0	3	—	43
New York (Upstate)	4	3	18	146	141	—	0	1	2	1	—	0	2	5	9
New York City	—	4	14	137	211	—	0	0	—	—	—	0	2	7	9
Pennsylvania	—	3	56	72	571	—	0	2	8	—	—	0	3	9	11
E.N. Central	9	16	37	468	1,202	—	0	2	4	2	1	1	5	51	65
Illinois	—	5	13	108	703	—	0	1	—	1	—	0	2	20	28
Indiana§	—	1	4	33	44	—	0	0	—	1	—	0	4	22	18
Michigan	1	3	9	107	176	—	0	1	1	—	—	0	1	—	1
Ohio	8	5	27	220	223	—	0	2	3	—	1	0	2	9	12
Wisconsin	—	0	4	—	56	—	0	0	—	—	—	0	1	—	6
W.N. Central	1	10	38	213	1,677	—	0	6	19	10	8	4	30	247	197
Iowa	—	0	4	12	38	—	0	0	—	—	—	0	2	4	5
Kansas§	—	2	12	37	191	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	4	—	36	—	0	0	—	—	—	0	2	—	—
Missouri	—	6	18	152	1,381	—	0	3	14	7	7	4	30	240	189
Nebraska§	1	0	10	8	25	—	0	3	4	3	1	0	1	3	2
North Dakota	—	0	0	—	—	—	0	1	1	—	—	0	0	—	1
South Dakota	—	0	2	4	6	—	0	0	—	—	—	0	0	—	—
S. Atlantic	66	68	133	2,415	1,502	—	1	6	59	65	21	6	50	275	316
Delaware§	—	0	1	3	35	—	0	1	1	1	—	0	4	15	16
District of Columbia	—	0	2	10	24	—	0	1	1	—	1	0	0	1	—
Florida§	48	39	98	1,740	638	—	0	1	3	2	—	0	2	6	7
Georgia	9	12	26	354	481	—	0	5	36	46	—	0	0	—	—
Maryland§	5	2	5	60	88	—	0	1	2	—	1	0	3	17	33
North Carolina	2	4	36	147	104	—	0	4	9	12	17	1	41	140	159
South Carolina§	1	1	4	35	47	—	0	1	4	1	—	0	2	11	10
Virginia§	1	2	8	62	84	—	0	1	3	3	2	2	8	82	91
West Virginia	—	0	66	4	1	—	0	0	—	—	—	0	1	3	—
E.S. Central	—	13	29	360	485	1	0	3	4	15	13	5	18	223	299
Alabama§	—	4	15	116	104	—	0	1	—	4	—	0	5	28	57
Kentucky	—	1	6	34	184	—	0	0	—	6	—	0	0	—	—
Mississippi	—	2	9	95	32	—	0	0	—	1	—	0	4	9	17
Tennessee§	—	4	14	115	165	1	0	2	4	4	13	4	18	186	225
W.S. Central	46	61	503	1,610	1,600	1	0	8	2	1	13	2	235	194	81
Arkansas§	2	2	7	48	35	—	0	2	1	—	1	0	37	168	48
Louisiana	—	5	14	145	173	—	0	0	—	—	—	0	1	2	2
Oklahoma	4	2	161	64	186	1	0	5	1	—	12	0	202	21	16
Texas§	40	50	338	1,353	1,206	—	0	1	—	1	—	0	5	3	15
Mountain	12	16	32	457	478	—	0	5	10	2	—	0	6	29	8
Arizona	7	6	19	155	256	—	0	4	10	—	—	0	6	18	—
Colorado§	4	2	7	58	59	—	0	1	—	—	—	0	1	2	—
Idaho§	—	0	3	13	18	—	0	0	—	—	—	0	1	1	3
Montana§	—	1	15	114	6	—	0	0	—	2	—	0	1	1	1
Nevada§	1	0	6	14	22	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	3	9	70	87	—	0	0	—	—	—	0	1	1	1
Utah	—	1	4	31	30	—	0	0	—	—	—	0	1	1	3
Wyoming§	—	0	1	2	—	—	0	0	—	—	—	0	1	5	—
Pacific	17	21	63	603	646	—	0	2	—	4	—	0	0	—	1
Alaska	—	0	2	3	1	N	0	0	N	N	N	0	0	N	N
California	11	16	59	484	507	—	0	2	—	4	—	0	0	—	—
Hawaii	1	1	3	37	34	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	26	39	—	0	0	—	—	—	0	0	—	1
Washington	5	1	8	53	65	—	0	1	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	1	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	5	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	4	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
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† Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by Rickettsia rickettsii, is the most common and well-known spotted fever.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)*

	Streptococcus pneumoniae,† invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010
United States	65	298	937	9,548	10,502	5	23	101	695	1,291	93	253	363	7,881	8,814
New England	3	17	79	537	592	—	1	5	28	76	5	8	18	240	308
Connecticut	—	6	49	235	246	—	0	3	6	22	—	1	8	34	58
Maine§	—	2	13	92	83	—	0	1	3	6	—	0	3	11	16
Massachusetts	—	0	3	21	53	—	0	3	8	37	1	5	11	145	194
New Hampshire	—	2	8	71	78	—	0	1	5	4	—	0	3	13	13
Rhode Island§	3	2	8	67	73	—	0	1	1	4	4	0	7	32	25
Vermont§	—	1	6	51	59	—	0	2	5	3	—	0	2	5	2
Mid. Atlantic	1	33	81	950	1,087	1	3	27	84	165	9	30	46	920	1,125
New Jersey	—	13	35	452	485	—	1	4	28	41	—	5	12	134	156
New York (Upstate)	1	2	10	60	107	1	1	9	34	81	4	3	20	121	92
New York City	—	14	42	438	495	—	0	14	22	43	1	15	31	440	633
Pennsylvania	N	0	0	N	N	N	0	0	N	N	4	7	13	225	244
E.N. Central	9	66	113	2,074	2,131	1	4	10	116	191	8	30	53	956	1,294
Illinois	N	0	0	N	N	N	0	0	N	N	7	13	23	381	616
Indiana	—	15	32	454	477	—	0	4	20	38	—	3	8	107	125
Michigan	1	15	29	462	487	—	1	4	25	58	—	5	10	158	177
Ohio	8	26	45	857	830	1	2	7	59	68	1	9	21	278	342
Wisconsin	—	9	24	301	337	—	0	3	12	27	—	1	4	32	34
W.N. Central	—	4	35	96	556	—	0	5	7	76	—	7	18	193	203
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	2	12	15
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	15	11
Minnesota	—	0	24	—	418	—	0	5	—	61	—	3	10	80	76
Missouri	N	0	0	N	N	N	0	0	N	N	—	2	9	80	94
Nebraska§	—	2	9	78	93	—	0	2	7	13	—	0	2	5	5
North Dakota	—	0	18	18	45	—	0	1	—	2	—	0	1	1	—
South Dakota	N	0	0	N	N	N	0	0	N	N	—	0	1	—	2
S. Atlantic	23	72	170	2,656	2,839	1	7	22	197	359	32	63	178	2,047	1,993
Delaware	—	1	6	35	25	—	0	1	—	—	—	0	4	13	4
District of Columbia	—	1	3	28	53	—	0	1	4	7	—	3	8	106	95
Florida	7	23	68	955	1,054	—	3	13	87	145	2	23	37	736	722
Georgia	10	22	54	699	896	1	2	7	47	108	6	12	130	389	417
Maryland§	2	10	32	386	364	—	1	4	26	42	2	8	17	281	191
North Carolina	N	0	0	N	N	N	0	0	N	N	11	7	19	239	282
South Carolina§	—	8	25	324	358	—	0	3	20	41	2	4	10	138	91
Virginia§	N	0	0	N	N	N	0	0	N	N	9	4	16	143	187
West Virginia	4	0	48	229	89	—	0	6	13	16	—	0	2	2	4
E.S. Central	7	19	36	631	713	1	1	4	39	68	12	15	34	461	578
Alabama§	N	0	0	N	N	N	0	0	N	N	—	4	11	118	164
Kentucky	N	0	0	N	N	N	0	0	N	N	1	2	16	74	86
Mississippi	N	0	0	N	N	N	0	0	N	N	11	3	16	113	146
Tennessee§	7	19	36	631	713	1	1	4	39	68	—	5	11	156	182
W.S. Central	11	31	368	1,269	1,291	1	4	30	121	172	16	34	59	1,076	1,367
Arkansas§	1	3	26	157	120	—	0	3	12	12	2	3	10	126	152
Louisiana	—	3	11	113	71	—	0	2	10	17	—	6	27	208	333
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	6	34	61
Texas§	10	26	333	999	1,100	1	3	27	99	143	14	22	33	708	821
Mountain	11	32	72	1,226	1,219	—	3	8	93	168	2	12	23	367	382
Arizona	7	12	45	589	590	—	1	5	44	77	1	4	8	150	147
Colorado	4	11	23	375	363	—	1	4	26	49	—	2	8	72	82
Idaho§	N	0	0	N	N	N	0	0	N	N	—	0	2	6	2
Montana§	N	0	0	N	N	N	0	0	N	N	—	0	1	4	3
Nevada§	N	0	0	N	N	N	0	0	N	N	1	3	9	88	69
New Mexico§	—	3	13	169	114	—	0	2	11	14	—	1	4	41	30
Utah	—	3	8	74	141	—	0	3	12	25	—	0	4	6	49
Wyoming§	—	0	15	19	11	—	0	1	—	3	—	0	0	—	—
Pacific	—	3	11	109	74	—	0	2	10	16	9	49	66	1,621	1,564
Alaska	—	2	11	107	74	—	0	2	9	16	—	0	1	1	3
California	N	0	0	N	N	N	0	0	N	N	6	41	57	1,324	1,332
Hawaii	—	0	3	2	—	—	0	1	1	—	—	0	5	8	27
Oregon	N	0	0	N	N	N	0	0	N	N	—	2	9	101	44
Washington	N	0	0	N	N	N	0	0	N	N	3	5	13	187	158
Territories															
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	—	—	—	4	13	142	150
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Includes drug resistant and susceptible cases of invasive Streptococcus pneumoniae disease among children <5 years and among all ages. Case definition: Isolation of S. pneumoniae from a normally sterile body site (e.g., blood or cerebrospinal fluid).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending August 27, 2011, and August 28, 2010 (34th week)*

	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
		Previous 52 weeks					Previous 52 weeks					Previous 52 weeks			
Reporting area	Current week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010
United States	100	273	367	7,948	10,257	—	1	71	65	311	—	0	49	39	265
New England	3	22	46	666	718	—	0	3	—	7	—	0	1	—	4
Connecticut	3	5	16	169	217	—	0	2	—	4	—	0	1	—	3
Maine¶	—	5	16	135	129	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	6	18	260	192	—	0	1	—	2	—	0	1	—	1
New Hampshire	—	0	9	9	88	—	0	1	—	1	—	0	0	—	—
Rhode Island¶	—	1	6	28	22	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	2	10	65	70	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	32	35	71	1,391	1,132	—	0	19	1	75	—	0	13	2	43
New Jersey	25	12	54	783	406	—	0	3	—	9	—	0	6	1	3
New York (Upstate)	N	0	0	N	N	—	0	7	1	39	—	0	5	1	27
New York City	—	0	0	—	—	—	0	7	—	19	—	0	2	—	8
Pennsylvania	7	19	41	608	726	—	0	3	—	8	—	0	3	—	5
E.N. Central	18	68	118	1,836	3,337	—	0	15	6	23	—	0	7	2	10
Illinois	—	17	31	467	852	—	0	10	4	10	—	0	4	—	3
Indiana¶	6	4	18	152	248	—	0	2	—	2	—	0	1	—	4
Michigan	4	20	38	607	997	—	0	6	1	10	—	0	1	—	1
Ohio	8	20	58	609	884	—	0	1	1	1	—	0	2	2	1
Wisconsin	—	0	22	1	356	—	0	0	—	—	—	0	1	—	1
W.N. Central	1	10	42	238	571	—	0	4	3	21	—	0	11	5	56
Iowa	N	0	0	N	N	—	0	1	—	1	—	0	2	—	3
Kansas¶	—	4	15	77	241	—	0	1	—	2	—	0	2	—	11
Minnesota	—	0	0	—	—	—	0	1	—	3	—	0	3	—	3
Missouri	—	5	24	104	273	—	0	1	—	2	—	0	1	1	—
Nebraska¶	—	0	5	3	7	—	0	1	2	7	—	0	7	2	17
North Dakota	1	0	10	31	29	—	0	0	—	2	—	0	1	2	7
South Dakota	—	1	7	23	21	—	0	2	1	4	—	0	2	—	15
S. Atlantic	8	36	64	1,187	1,493	—	0	6	10	17	—	0	4	4	13
Delaware¶	—	0	3	6	24	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	12	16	—	0	1	—	1	—	0	1	—	1
Florida¶	8	15	38	598	716	—	0	4	8	3	—	0	1	1	1
Georgia	N	0	0	N	N	—	0	1	—	3	—	0	3	2	8
Maryland¶	N	0	0	N	N	—	0	3	1	8	—	0	2	1	2
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina¶	—	0	9	12	75	—	0	1	—	—	—	0	0	—	—
Virginia¶	—	8	25	280	366	—	0	1	1	2	—	0	1	—	1
West Virginia	—	8	32	279	296	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	5	15	173	202	—	0	3	11	3	—	0	3	7	8
Alabama¶	—	5	14	163	195	—	0	0	—	1	—	0	0	—	2
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	1
Mississippi	—	0	3	10	7	—	0	3	11	2	—	0	2	7	3
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	2
W.S. Central	38	43	258	1,587	1,984	—	0	13	8	50	—	0	2	5	13
Arkansas¶	—	3	17	131	141	—	0	2	—	3	—	0	1	—	—
Louisiana	—	2	6	52	52	—	0	3	2	10	—	0	1	2	6
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas¶	38	38	247	1,404	1,791	—	0	11	6	37	—	0	2	3	7
Mountain	—	19	65	794	742	—	0	18	13	78	—	0	12	8	87
Arizona	—	3	50	374	—	—	0	13	12	57	—	0	5	4	40
Colorado¶	—	4	31	155	272	—	0	5	—	14	—	0	6	2	38
Idaho¶	N	0	0	N	N	—	0	0	—	—	—	0	0	—	1
Montana¶	—	2	28	104	154	—	0	0	—	—	—	0	0	—	—
Nevada¶	N	0	0	N	N	—	0	1	1	—	—	0	1	1	2
New Mexico¶	—	1	8	25	82	—	0	6	—	6	—	0	2	—	3
Utah	—	4	26	128	221	—	0	1	—	—	—	0	1	—	—
Wyoming¶	—	0	3	8	13	—	0	1	—	1	—	0	1	1	3
Pacific	—	2	6	76	78	—	0	7	13	37	—	0	4	6	31
Alaska	—	1	4	36	30	—	0	0	—	—	—	0	0	—	—
California	—	0	3	7	25	—	0	7	13	37	—	0	3	6	31
Hawaii	—	1	4	33	23	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	19	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	5	21	102	423	—	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. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB 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/osels/ph_surveillance/nndss/phs/infdis.htm.

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

TABLE III. Deaths in 122 U.S. cities,* week ending August 27, 2011 (34th week)

Reporting area	All causes, by age (years) All Ages	≥65	45–64	25–44	1–24	<1	P&I† Total
New England	463	319	100	26	8	10	45
Boston, MA	122	77	29	8	4	4	10
Bridgeport, CT	28	22	4	2	—	—	4
Cambridge, MA	13	8	5	—	—	—	1
Fall River, MA	18	16	1	1	—	—	1
Hartford, CT	40	30	10	—	—	—	6
Lowell, MA	12	6	5	—	—	1	1
Lynn, MA	14	9	4	—	1	—	1
New Bedford, MA	17	12	4	1	—	—	2
New Haven, CT	33	21	9	2	—	1	3
Providence, RI	65	44	10	6	2	3	2
Somerville, MA	U	U	U	U	U	U	U
Springfield, MA	36	25	8	2	—	1	6
Waterbury, CT	15	11	2	2	—	—	1
Worcester, MA	50	38	9	2	1	—	7
Mid. Atlantic	1,629	1,106	377	95	32	16	81
Albany, NY	37	25	5	5	—	2	1
Allentown, PA	19	14	4	1	—	—	—
Buffalo, NY	79	51	20	5	3	—	8
Camden, NJ	18	8	6	1	3	—	—
Elizabeth, NJ	10	4	4	2	—	—	2
Erie, PA	49	34	13	1	1	—	2
Jersey City, NJ	17	11	4	2	—	—	2
New York City, NY	976	683	219	50	13	8	41
Newark, NJ	19	6	6	5	2	—	3
Paterson, NJ	19	10	5	3	—	1	—
Philadelphia, PA	116	62	39	8	5	2	3
Pittsburgh, PA§	46	34	11	1	—	—	3
Reading, PA	30	23	3	2	1	1	3
Rochester, NY	70	46	18	3	2	1	4
Schenectady, NY	19	14	5	—	—	—	—
Scranton, PA	17	12	3	1	1	—	2
Syracuse, NY	45	39	3	2	—	1	6
Trenton, NJ	13	9	3	—	1	—	—
Utica, NY	13	11	1	1	—	—	1
Yonkers, NY	17	10	5	2	—	—	—
E.N. Central	1,846	1,197	450	110	37	52	82
Akron, OH	44	31	8	1	2	2	2
Canton, OH	39	28	9	1	1	—	3
Chicago, IL	200	128	52	14	3	3	10
Cincinnati, OH	84	54	15	4	3	8	3
Cleveland, OH	258	171	71	7	3	6	10
Columbus, OH	203	115	51	26	5	6	4
Dayton, OH	122	87	24	6	1	4	7
Detroit, MI	152	68	54	17	5	8	5
Evansville, IN	49	32	12	4	—	1	2
Fort Wayne, IN	67	52	13	2	—	—	3
Gary, IN	9	4	4	1	—	—	—
Grand Rapids, MI	46	36	6	1	2	1	2
Indianapolis, IN	172	107	38	10	7	10	12
Lansing, MI	58	46	12	—	—	—	3
Milwaukee, WI	93	57	28	7	1	—	6
Peoria, IL	U	U	U	U	U	U	U
Rockford, IL	56	38	15	1	2	—	4
South Bend, IN	47	38	5	3	—	1	3
Toledo, OH	94	65	23	4	1	1	2
Youngstown, OH	53	40	10	1	1	1	1
W.N. Central	652	423	159	38	15	16	39
Des Moines, IA	92	68	17	4	2	1	8
Duluth, MN	21	17	4	—	—	—	2
Kansas City, KS	28	17	8	1	—	2	2
Kansas City, MO	73	49	19	3	1	1	1
Lincoln, NE	42	35	5	1	—	1	4
Minneapolis, MN	62	31	22	4	2	3	6
Omaha, NE	100	72	19	3	3	3	5
St. Louis, MO	93	37	35	12	5	3	6
St. Paul, MN	54	38	11	3	1	1	2
Wichita, KS	87	59	19	7	1	1	3
Reporting area (*Continued*)							
S. Atlantic	1,117	690	292	87	24	23	74
Atlanta, GA	157	92	41	15	6	3	10
Baltimore, MD	106	72	24	6	2	1	12
Charlotte, NC	113	75	30	7	1	—	7
Jacksonville, FL	131	87	31	7	4	2	5
Miami, FL	112	77	27	6	1	1	9
Norfolk, VA	35	19	6	7	1	2	3
Richmond, VA	63	32	16	10	2	3	2
Savannah, GA	49	29	15	4	1	—	5
St. Petersburg, FL	41	27	11	1	—	2	1
Tampa, FL	194	121	46	15	4	8	10
Washington, D.C.	110	54	44	9	2	1	9
Wilmington, DE	6	5	1	—	—	—	1
E.S. Central	868	526	261	57	19	5	75
Birmingham, AL	187	108	63	12	3	1	16
Chattanooga, TN	99	70	26	3	—	—	6
Knoxville, TN	97	67	25	5	—	—	8
Lexington, KY	78	46	19	9	3	1	7
Memphis, TN	159	91	50	14	2	2	28
Mobile, AL	78	47	23	5	3	—	1
Montgomery, AL	29	17	11	1	—	—	4
Nashville, TN	141	80	44	8	8	1	5
W.S. Central	1,284	792	316	106	37	32	40
Austin, TX	97	61	23	12	—	1	6
Baton Rouge, LA	69	51	13	5	—	—	—
Corpus Christi, TX	76	45	16	10	2	3	1
Dallas, TX	210	102	71	22	8	6	7
El Paso, TX	109	73	24	6	1	5	5
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	211	121	37	29	16	8	6
Little Rock, AR	80	48	23	5	3	1	1
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	257	186	60	6	4	1	10
Shreveport, LA	71	42	20	2	1	6	—
Tulsa, OK	104	63	29	9	2	1	4
Mountain	1,145	746	274	73	31	17	69
Albuquerque, NM	127	79	35	6	3	4	14
Boise, ID	56	44	8	2	1	1	5
Colorado Springs, CO	88	55	21	5	4	3	3
Denver, CO	83	44	31	6	1	1	5
Las Vegas, NV	281	186	61	25	5	4	12
Ogden, UT	27	19	6	1	1	—	1
Phoenix, AZ	174	101	50	13	6	2	11
Pueblo, CO	20	14	5	1	—	—	—
Salt Lake City, UT	137	87	33	10	5	2	8
Tucson, AZ	152	117	24	4	5	—	10
Pacific	1,598	1,082	368	87	27	34	114
Berkeley, CA	18	11	4	2	—	1	1
Fresno, CA	119	76	27	8	4	4	7
Glendale, CA	25	19	5	1	—	—	4
Honolulu, HI	74	48	20	3	1	2	7
Long Beach, CA	56	38	13	2	1	2	8
Los Angeles, CA	228	148	56	17	5	2	20
Pasadena, CA	26	20	5	1	—	—	2
Portland, OR	129	81	33	10	4	1	9
Sacramento, CA	210	148	47	9	3	3	14
San Diego, CA	162	112	35	8	1	6	6
San Francisco, CA	92	58	24	6	1	3	10
San Jose, CA	187	140	37	4	3	3	13
Santa Cruz, CA	29	21	6	1	1	—	1
Seattle, WA	102	63	22	10	3	4	3
Spokane, WA	60	43	13	2	—	2	6
Tacoma, WA	81	56	21	3	—	1	3
Total¶	**10,602**	**6,881**	**2,597**	**679**	**230**	**205**	**619**

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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