Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation — United States, 2007–2009

Arthritis is a large and growing public health problem in the United States (*1*), resulting in costs of $128 billion annually, and continues to be the most common cause of disability (*2*). With the aging of the U.S. population, even assuming that the prevalence of obesity and other risk factors remain unchanged, the prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation (AAAL) is expected to increase significantly by 2030 (*1*). To update previous U.S. estimates of doctor-diagnosed arthritis and AAAL, CDC analyzed National Health Interview Survey (NHIS) data from 2007–2009. This report summarizes the results of that analysis, which found that 22.2% (49.9 million) of adults aged ≥18 years had self-reported doctor-diagnosed arthritis, and 9.4% (21.1 million or 42.4% of those with arthritis) had AAAL. Among persons who are obese, an age-adjusted 33.8% of women and 25.2% of men reported doctor-diagnosed arthritis. Arthritis and AAAL represent a major public health problem in the United States that can be addressed, at least in part, by implementing proven obesity prevention strategies and increasing availability of effective physical activity programs and self-management education courses in local communities.

NHIS is an annual, in-person interview survey of the health status and behaviors of the noninstitutionalized U.S. population of all ages. The analysis described in this report used the sample adult component, which is limited to persons aged ≥18 years. One adult per selected household was chosen randomly to participate. Because NHIS oversamples blacks, Hispanics, and Asians, persons in these populations aged ≥65 years have twice the probability of being selected, compared with other adults. For this analysis, NHIS data from 2007, 2008, and 2009 were combined, and annualized prevalence estimates were calculated and stratified by selected characteristics (i.e., sex, age group, race/ethnicity, education level, body mass index (BMI) category,*

* BMI = weight (kg) / height (m^2). Categorized as follows: underweight/normal weight (<25.0), overweight (25.0 to <30.0), obese (≥30.0), obese class I (30.0 to <35.0), obese class II (35.0 to <40.0), obese class III (≥40.0).

physical activity level,[†] and smoking status). Unweighted sample sizes were 23,393 in 2007; 21,781 in 2008; and 27,731 in 2009. Response rates for the sample adult component were 67.8% in 2007, 62.6% in 2008, and 65.4% in 2009.[§] Respondents were defined as having doctor-diagnosed arthritis if they answered "yes" to "Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?" Those who responded "yes" to having doctor-diagnosed arthritis were asked "Are you limited in any way in any of your usual activities because of arthritis or joint symptoms?" Those responding "yes" to both questions were categorized as having AAAL.

Statistical software was used to account for complex multistage sampling design and produce weighted estimates and 95% confidence intervals. Unadjusted prevalence was estimated to describe the actual population burden; age-adjusted

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[†] Determined from responses to six questions regarding frequency and duration of participation in leisure-time activities of moderate or vigorous intensity and categorized according to the U.S. Department of Health and Human Services *2008 Physical Activity Guidelines for Americans*. Total minutes (moderate plus 2 × vigorous) of physical activity per week were categorized as follows: meeting recommendations (≥150 min per week), insufficient activity (10–149 min), and inactive (<10 min).

[§] Information available at http://www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm.

prevalence, standardized to the 2000 U.S. standard population, was estimated to facilitate comparisons among demographic subgroups. For all comparisons, statistical significance was determined using a two-sided t-test; differences were considered statistically significant at p<0.05.

During 2007–2009, an estimated 22.2% (49.9 million) of U.S. adults reported doctor-diagnosed arthritis. Arthritis prevalence increased significantly with age. After adjustment for age, arthritis prevalence was significantly higher among women (24.3%) than among men (18.2%); those with less than a high school diploma (21.9%), compared with those with at least some college (20.5%); persons who are obese (29.6%), compared with normal/underweight (16.9%) and overweight (19.8%); physically inactive persons (23.5%) versus those meeting physical activity recommendations (18.7%); and current (23.7%) or former (25.4%) smokers, compared with never smokers (19.0%) (Table). For all these comparisons, p values were <0.001.

During 2007–2009, an estimated 9.4% (21.1 million) of U.S. adults reported AAAL. After adjustment for age, patterns of prevalence of AAAL were similar to those for doctor-diagnosed arthritis (Table).

Among adults reporting doctor-diagnosed arthritis, the unadjusted prevalence of AAAL was 42.4%. After adjustment for age, the greatest prevalences were among persons categorized as obese class III (52.9%), those with less than a high school diploma (52.0%), physically inactive persons (51.2%), current smokers (47.6%), those categorized as obese class II (46.7%), and non-Hispanic blacks (45.5%) (Table).

Among both men and women, age-adjusted arthritis prevalence increased significantly with increasing BMI (p<0.001 for trend). The age-adjusted prevalence among persons who are obese (25.2% for men, 33.8% for women) was approximately double that for persons who are underweight/normal weight (13.8% for men, 18.9% for women) (Figure). Among those with arthritis, the age-adjusted prevalence of AAAL also increased significantly with increasing BMI, from 34.7% for those who are underweight/normal weight to 44.8% for those who are obese (Table).

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TABLE. Unadjusted and age-adjusted* prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation (AAAL)[†] in the adult population, and prevalence of AAAL among those with doctor-diagnosed arthritis, by selected characteristics — National Health Interview Survey, United States, 2007–2009

	Prevalence in the adult population								Prevalence of AAAL among those with doctor-diagnosed arthritis			
	Doctor-diagnosed arthritis				AAAL							
	Unadjusted		Age adjusted		Unadjusted		Age adjusted		Unadjusted		Age adjusted	
Characteristic	%	(95% CI[§])	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Overall	22.2[¶]	(21.7–22.7)	21.4	(21.1–21.8)	9.4**	(9.1–9.7)	9.1	(8.8–9.3)	42.4	(41.4–43.4)	39.1	(37.7–40.5)
Sex												
Men	18.3	(17.7–18.9)	18.2	(17.7–18.7)	7.3	(6.9–7.7)	7.3	(6.9–7.6)	40.0	(38.3–41.6)	36.9	(34.7–39.2)
Women	25.9	(25.2–26.5)	24.3	(23.8–24.8)	11.4	(11.0–11.8)	10.6	(10.3–11.0)	44.0	(42.8–45.1)	40.6	(39.0–42.2)
Age group (yrs)												
18–44	7.6	(7.2–8.0)	—	—	2.7	(2.4–2.9)	—	—	35.1	(32.8–37.6)	—	—
45–64	29.8	(29.0–30.5)	—	—	12.7	(12.1–13.2)	—	—	42.6	(41.1–44.1)	—	—
≥65	50.0	(48.9–51.2)	—	—	22.7	(21.8–23.6)	—	—	45.4	(43.9–46.9)	—	—
Race/Ethnicity												
White, non-Hispanic	25.4	(24.8–26.0)	23.0	(22.5–23.5)	10.4	(10.0–10.8)	9.3	(9.0–9.7)	41.0	(39.8–42.1)	38.1	(36.4–39.8)
Black, non-Hispanic	20.2	(19.2–21.2)	21.7	(20.8–22.7)	9.8	(9.1–10.6)	10.6	(9.9–11.4)	48.8	(46.3–51.2)	45.5	(42.1–49.0)
Hispanic	11.9	(11.2–12.7)	16.1	(15.3–17.0)	5.6	(5.2–6.1)	8.0	(7.4–8.7)	47.2	(43.8–50.6)	41.4	(37.6–45.2)
Other, non-Hispanic	13.6	(12.5–14.9)	15.0	(13.9–16.1)	6.1	(5.3–7.0)	6.7	(5.9–7.6)	44.7	(40.2–49.2)	38.2	(32.9–43.8)
Education level												
Less than high school diploma	25.5	(24.3–26.6)	21.9	(21.1–22.8)	14.0	(13.1–14.9)	12.0	(11.3–12.8)	55.0	(52.9–57.1)	52.0	(47.9–56.1)
High school diploma	25.2	(24.4–26.1)	22.9	(22.2–23.7)	10.9	(10.3–11.5)	9.8	(9.3–10.4)	43.1	(41.3–45.0)	41.3	(38.6–43.9)
At least some college	19.8	(19.2–20.3)	20.5	(19.9–21.0)	7.4	(7.0–7.7)	7.7	(7.3–8.0)	37.3	(35.9–38.6)	34.3	(32.6–36.1)
Body mass index (BMI) category[††]												
Underweight/Normal weight	16.4	(15.8–17.1)	16.9	(16.4–17.5)	6.1	(5.7–6.5)	6.3	(5.9–6.7)	37.3	(35.4–39.2)	34.7	(32.1–37.4)
Overweight	21.4	(20.7–22.1)	19.8	(19.2–20.3)	8.2	(7.7–8.6)	7.5	(7.1–7.9)	38.3	(36.7–40.0)	35.0	(32.8–37.2)
Obese	31.1	(30.2–32.0)	29.6	(28.8–30.4)	15.1	(14.5–15.9)	14.4	(13.8–15.1)	48.7	(47.1–50.4)	44.8	(42.5–47.1)
Class I	28.3	(27.2–29.4)	26.6	(25.7–27.6)	12.6	(11.8–13.4)	11.8	(11.2–12.5)	44.5	(42.4–46.6)	41.2	(38.3–44.2)
Class II	33.7	(31.9–35.7)	32.2	(30.5–33.9)	17.4	(15.9–18.9)	16.7	(15.3–18.2)	51.6	(48.0–55.1)	46.7	(41.9–51.5)
Class III	38.5	(36.2–40.8)	38.1	(36.1–40.2)	22.2	(20.3–24.2)	22.4	(20.6–24.3)	57.6	(53.9–61.2)	52.9	(48.1–57.6)
Physical activity level[§§]												
Meeting recommendations	17.2	(16.6–17.9)	18.7	(18.2–19.3)	4.9	(4.6–5.2)	5.3	(5.0–5.7)	28.4	(26.9–29.9)	27.3	(25.3–29.3)
Insufficient activity	23.8	(22.9–24.7)	22.9	(22.1–23.7)	9.2	(8.7–9.9)	8.9	(8.4–9.4)	38.9	(37.0–41.0)	37.2	(34.5–40.0)
Inactive	27.2	(26.4–28.1)	23.5	(22.8–24.1)	14.8	(14.2–15.5)	12.7	(12.1–13.2)	54.5	(52.9–56.1)	51.2	(48.8–53.6)
Smoking status												
Current	21.8	(21.0–22.7)	23.7	(22.9–24.6)	10.7	(10.0–11.4)	11.6	(10.9–12.3)	48.9	(46.6–51.2)	47.6	(44.9–50.4)
Former	33.6	(32.6–34.6)	25.4	(24.6–26.3)	14.1	(13.4–14.8)	10.2	(9.7–10.8)	42.0	(40.5–43.6)	36.5	(33.7–39.5)
Never	18.1	(17.6–18.6)	19.0	(18.6–19.5)	7.2	(6.9–7.5)	7.7	(7.4–8.0)	39.9	(38.6–41.2)	35.0	(33.4–36.7)

* Age adjusted to the 2000 U.S. projected adult population, using three age groups: 18–44 years, 45–64 years, and ≥65 years.

[†] Doctor-diagnosed arthritis was defined as those answering "yes" to the question, "Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?" Those who answered "yes" were asked, "Are you limited in any way in any of your usual activities because of arthritis or joint symptoms?" Persons responding "yes" to both questions were defined as having an AAAL.

[§] Confidence interval.

[¶] 49.9 million adults.

** 21.1 million adults.

[††] BMI = weight (kg) / height (m²). Categorized as follows: underweight/normal weight (<25.0), overweight (25.0 to <30.0), obese (≥30.0), obese class I (30.0 to <35.0), obese class II (35.0 to <40.0), and obese class III (≥40.0).

[§§] Determined from responses to six questions regarding frequency and duration of participation in leisure-time activities of moderate or vigorous intensity and categorized according to the U.S. Department of Health and Human Services *2008 Physical Activity Guidelines for Americans*. Total minutes (moderate plus 2 x vigorous) of physical activity per week were categorized as follows: meeting recommendations (≥150 min per week), insufficient activity (10–149 min), and inactive (<10 min).

Editorial Note

Approximately one in five (49.9 million) adults in the United States reported doctor-diagnosed arthritis during 2007–2009, and 21.1 million adults reported AAAL. The prevalence of arthritis and AAAL is particularly high among persons who are obese. With the aging population and continued high prevalence of obesity (*3*) in the United States, the prevalence of arthritis is expected to increase significantly over the next 2 decades.

Compared with previous estimates, the number of adults with arthritis increased, but not significantly (p=0.07), from 46.4 million during 2003–2005 to 49.9 million during 2007–2009, an increase of approximately 1 million adults per year (*4*). During the same period, the prevalence of AAAL increased

FIGURE. Age-adjusted* prevalence of doctor-diagnosed arthritis among adults, by sex and body mass index (BMI) category[†] — National Health Interview Survey, United States, 2007–2009
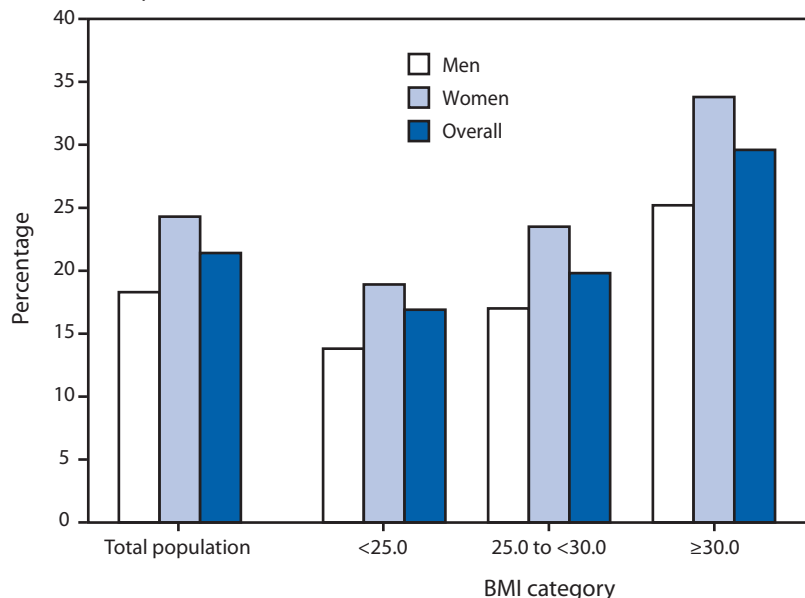
* Age adjusted to the 2000 U.S. projected adult population, using three age groups: 18–44 years, 45–64 years, and ≥65 years.
[†] BMI = weight (kg) / height (m^2). Categorized as follows: underweight/normal weight (<25.0), overweight (25.0 to <30.0), and obese (≥30.0).

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

Arthritis is a large and growing public health problem in the United States, resulting in costs of $128 billion annually, and continues to be the most common cause of disability.

What does this report add?

During 2007–2009, 22.2% of adults aged ≥18 years (49.9 million) had self-reported doctor-diagnosed arthritis, and 9.4% (21.1 million or 42.4% of those with arthritis) had self-reported arthritis-attributable activity limitation (AAAL). Among persons who are obese, an age-adjusted 33.8% of women and 25.2% of men reported doctor-diagnosed arthritis.

What are the implications for public health?

Arthritis and AAAL represent a major public health problem in the United States that can be addressed, at least in part, by implementing proven obesity prevention strategies and increasing availability of effective physical activity programs and self-management education courses in local communities.

significantly (p=0.005), from 8.8% (18.9 million persons) to 9.4% (21.1 million). The data on arthritis prevalence appear consistent with a previous analysis that estimated 51.9 million adults would have arthritis by 2010 and 67 million by 2030 (1). That analysis also estimated that 19.1 million adults would have AAAL by 2010 and 25 million by 2030; however, the findings in this report indicate that 21.1 million persons already had AAAL during 2007–2009 (1).

Obesity is associated with onset of knee osteoarthritis (the most common type of arthritis), disease progression, disability, total knee joint replacement, and poor clinical outcomes after knee joint replacement, and likely has a critical role in the increasing impact of arthritis on disability, health-related quality of life, and health-care costs (5). Lifetime risk for symptomatic knee osteoarthritis alone is 60.5% among persons who are obese, double the risk for those of normal/underweight (6). Because even small amounts of weight loss (approximately 11 lbs [5 kg]) can reduce the risk for incident knee osteoarthritis among women by 50% (7) and might also reduce mortality risk in osteoarthritis patients by half (8), large-scale clinical and community efforts to prevent and treat obesity as

recommended by the National Institutes of Health[¶] might reduce the obesity-related burden and impact of arthritis in the population.

The findings in this report are subject to at least four limitations. First, doctor-diagnosed arthritis was self-reported and not confirmed by a health-care professional; however, self-reports are sufficiently sensitive for public health surveillance (9). Second, osteoarthritis, rheumatoid arthritis, gout, lupus, and fibromyalgia have different etiologies and risk factors; however, the public health recommendations for these different types of arthritis are the same (e.g., weight loss and increased physical activity), regardless of differences in etiology or medical management. Third, because NHIS is a cross-sectional survey, a cause-effect relationship between risk factors (e.g., obesity) and arthritis and AAAL could not be determined; certain risk factors, such as obesity, could develop after onset of arthritis. However, prospective studies consistently have identified excess body weight as a risk factor for incident arthritis, particularly lower extremity osteoarthritis (5,7). Finally, because all NHIS information is self-reported, underreporting of weight and overreporting of leisure-time physical activity might have occurred because of social desirability bias.

[¶] Available at http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm.

Both clinical treatment guidelines (*10*) and public health recommendations for osteoarthritis** call for proven community-based intervention strategies (e.g., self-management education, increased physical activity, and weight management) to reduce pain and improve physical function and health-related quality-of-life for persons with osteoarthritis. Health-care providers and public health organizations should work together to increase the availability of these interventions for persons with all types of arthritis.

** Available at http://www.cdc.gov/arthritis/docs/oaagenda.pdf.

References

1. Hootman JM, Helmick CG. Projections of US prevalence of arthritis and associated activity limitations. Arthritis Rheum 2006;54:226–9.
2. CDC. National and state medical expenditures and lost earnings attributable to arthritis and other rheumatic conditions—United States, 2003. MMWR 2007;56:4–7.
3. Flegal KM, Carroll MD, Ogden CI, Curtin LR. Prevalence and trends in obesity among US adults, 1999–2008. JAMA 2010;303:235–41.
4. CDC. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2003–2005. MMWR 2006;55:1089–92.
5. Anandacoomarasamy A, Caterson I, Sambrook P, Fransen M, March L. The impact of obesity on the musculoskeletal system. Int J Obes 2008;32:211–22.
6. Murphy L, Schwartz TA, Helmick CG, et al. Lifetime risk of symptomatic knee osteoarthritis. Arthritis Rheum 2008;59:1207–13.
7. Felson DT, Zhang Y. An update on the epidemiology of knee and hip osteoarthritis with a view to prevention. Arthritis Rheum 1998;41:1343–55.
8. Shea MK, Houston DK, Nicklas BJ, et al. The effect of randomization to weight loss on total mortality in older overweight and obese adults: the ADAPT Study. J Gerontol A Biol Sci Med Sci 2010;65:519–25.
9. Sacks JJ, Harrold LR, Helmick CG, Gurwitz JH, Emani S, Yood RA. Validation of a surveillance case definition for arthritis. J Rheumatol 2005;32:340–7.
10. Zhang W, Nuki G, Moskowitz RW, et al. OARSI recommendations for the management of hip and knee osteoarthritis. Part III: changes in evidence following systematic cumulative update of research published through January 2009. Osteoarthritis Cartilage 2010;18:476–99.

Seasonal Influenza Vaccination Coverage Among Children Aged 6 Months–18 Years — Eight Immunization Information System Sentinel Sites, United States, 2009–10 Influenza Season

Annual influenza vaccination was first recommended for children aged 6–23 months and 2–4 years by the Advisory Committee on Immunization Practices (ACIP) in 2004 and 2006, respectively (1,2). In August 2008, ACIP expanded its seasonal influenza vaccination recommendations to also include all children aged 5–18 years no later than the 2009–10 season (3,4). To update previous estimates (5) of seasonal influenza vaccination coverage among children aged 6 months–18 years, CDC analyzed data from the eight immunization information system (IIS) sentinel sites for the 2009–10 influenza season. Vaccination coverage with influenza A (H1N1) 2009 monovalent vaccine is not included in this report. Average (unweighted) vaccination coverage with ≥1 seasonal influenza vaccine doses was 26.3%, a 5.5 percentage point increase from the 2008–09 season (20.8%). Increases varied by age group, ranging from almost no increase among children aged 6–23 months (55.2% during the 2008–09 season to 55.7% during the 2009–10 season) to notable increases among children aged 2–4 years (from 33.0% to 38.4%), 5–12 years (19.0% to 27.1%), and 13–18 years (10.9% to 15.3%). Full vaccination coverage was low during the 2009–10 season, ranging from 34.7% among children aged 6–23 months to 15.3% among children aged 13–18 years. These findings highlight the need to identify varied strategies and venues for delivering influenza vaccine to different age groups of children to increase vaccination coverage.

An IIS is a confidential, computerized information system that collects and consolidates vaccination data from multiple health-care providers, generates reminder and recall notifications, and assesses vaccination coverage within a defined geographic area. For the 2008–2012 IIS sentinel site project period, CDC awarded supplemental funds to eight IIS sites to enhance data quality at the sites and to analyze data routinely to monitor immunization practices and vaccination coverage among children aged <19 years in the sentinel site geographic regions. The eight sites meet the following data quality criteria: 1) >85% of child vaccine provider sites were enrolled in IIS, 2) >85% of children aged <19 years who resided in the sentinel site region had ≥2 vaccine doses of any type recorded in IIS, and 3) >70% of administered doses were reported to IIS within 30 days of vaccination. IIS sentinel site results are not intended to be representative of and generalizable to vaccination practices in the United States; however, sentinel site data are complementary to other sources of influenza vaccination coverage (e.g., National Immunization Survey [NIS] and National H1N1 Flu Survey [NHFS]) because data 1) are provider-verified, 2) can track vaccination patterns throughout the entire influenza vaccination season, 3) can assess fully vaccinated status of children, and 4) can monitor vaccination among children and adolescents longitudinally. The six sentinel site areas in Arizona, Colorado, Michigan, Minnesota, Oregon, and Wisconsin consist of subsets of the entire state; the other two sentinel sites consist of the entire state of North Dakota and all of New York City.

To reflect ACIP recommendations for the 2009–10 influenza season (4), full vaccination with seasonal influenza vaccine for children aged 6 months–8 years was defined as 1) receipt of 2 valid vaccine doses (i.e., separated by at least 4 weeks) in the current season among previously unvaccinated children, 2) receipt of 2 valid doses among children who received only 1 dose for the first time during August 1, 2008–March 31, 2009, or 3) receipt of 1 vaccine dose in the current season among all other children. Children aged 9–18 years were considered fully vaccinated with receipt of 1 vaccine dose. Vaccination coverage was calculated for children aged 6–23 months, 2–4 years, 5–12 years, and 13–18 years who resided in a sentinel site area during the 2009–10 influenza season. Analyses included only children who were in the specified age groups during the entire influenza season to ensure that all children evaluated had the same opportunity for vaccination; children who aged into or out of an age group during the season were excluded because they would have had less time within the period to be vaccinated as part of the specified age group. As of March 31, 2010, a total of 5,361,835 children aged 6 months–18 years had been evaluated for this investigation (range: 37,061 in Colorado to 2,518,553 in New York City). Vaccination coverage at each sentinel site

was calculated by dividing the number of children vaccinated by the total number of children in each specified age group during the entire influenza season, based on U.S. Census counts for the specific surveillance counties.* Vaccination coverage for the 2008–09 influenza season, which previously was published using IIS-based denominators (5), was recalculated in this report using U.S. Census denominators to provide comparable groups. The unweighted average for the eight sites (i.e., average site-specific coverage) was calculated by summing the percentages of children vaccinated at each site and dividing by the total number of sites (eight).

During the 2009–10 influenza season, average coverage with ≥1 influenza vaccine doses among all children aged 6 months–18 years was 26.3%, a 5.5 percentage point increase from the 2008–09 season (20.8%). Coverage in the 2009–10 season and increases in coverage from the 2008–09 season to the 2009–10 season varied by age group. Coverage among children aged 6–23 months was similar during the 2009–10 influenza season (55.7%) compared with the 2008–09 influenza season (55.2%). Coverage among children aged 2–4 years was 38.4% during the 2009–10 season, a 5.4 percentage point increase from the 2008–09 season (33.0%). The largest increase in coverage, from 19.0% to 27.1%, was observed among children aged 5–12 years. Coverage increased from 10.9% to 15.3% among children aged 13–18 years (Table 1).

Average full vaccination coverage among all children aged 6 months–18 years was 22.5%, a 5.9 percentage point increase from the 2008–09 season (16.6%). As with ≥1 dose coverage, full vaccination coverage was similar during the 2009–10 influenza season (34.7%) compared with the 2008–09 influenza season (33.4%) among children aged 6–23 months. A 5.0 percentage point increase from the 2008–09 season (26.0%) to the 2009–10 season (31.0%) was observed among children aged 2–4 years. Full vaccination coverage increased 7.6 percentage points, from 16.2% to 23.8%, among children aged 5–12 years (Table 2).

Reported by

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* Available at http://www.census.gov/popest/datasets.html.

Editorial Note

The data in this report underscore the minimal increase in vaccination coverage among children aged 6–23 months from the 2008–09 season to the 2009–10 season, the continued low coverage among older children despite larger increases observed in these age groups, and the low full vaccination coverage among young children, leaving many unprotected against influenza. Several factors likely affected seasonal influenza vaccination coverage in the 2009–10 season, including new ACIP recommendations for vaccination of children aged 5–18 years, the presence of two separate influenza vaccines (for seasonal influenza and for 2009 influenza A (H1N1) and vaccination recommendations for each, and increased demand for seasonal influenza vaccine early in the season that strained vaccine supplies. However, the individual effect of each of these contributing factors on seasonal influenza vaccination coverage during the 2009–10 season is unknown.

Seasonal influenza vaccination recommendations have been in place for children aged 6–23 months for six seasons and for children aged 2–4 years for four seasons. For the first seasons, ACIP recommendations were issued for routine influenza vaccination of children aged 6–23 months and 2–4 years; coverage with ≥1 doses in these age groups reached approximately 30% (6,7) and 20% (8), respectively. Although vaccine providers were encouraged to implement the ACIP recommendation to vaccinate routinely children aged 5–18 years during the 2008–09 season, 2009–10 was the first season the ACIP recommendation was expected to be implemented fully, and coverage with ≥1 doses was similar to early coverage among younger children (3,4).

The increase in coverage from the 2008–09 season to the 2009–10 season among older children and adolescents could reflect the usually observed increase in vaccination coverage with newly recommended vaccines, increased awareness of influenza vaccination because of the 2009 H1N1 pandemic, or other reasons. In a national survey, at least 35% of vaccinated school-aged children were reported to have received influenza A (H1N1) 2009 monovalent vaccine at school-located vaccination (SLV) sites, but less than 10% were reported to have received seasonal influenza vaccine at an SLV site (CDC, unpublished data, 2010). Thus, SLV sites likely had limited effect on seasonal influenza vaccination coverage in the sentinel sites during the 2009–10 season. Among the eight IIS sites, three (Arizona, Colorado, and Michigan) reported that some SLV sites included

TABLE 1. Percentage of children aged 6 months–18 years who received ≥1 seasonal influenza vaccine doses, by age group and influenza season — immunization information system sentinel sites, United States, 2008–09 and 2009–10 influenza seasons

Sentinel site	6–23 mos		2–4 yrs		5–12 yrs		13–18 yrs		6 mos–18 yrs	
	2008–09	2009–10	2008–09	2009–10	2008–09	2009–10	2008–09	2009–10	2008–09	2009–10
Arizona	49.9	46.6	27.0	32.0	19.7	28.6	12.5	17.5	20.0	26.2
Colorado	43.1	38.9	22.0	26.1	10.3	15.1	4.7	6.0	12.1	14.3
Michigan	48.9	49.4	28.9	32.9	15.0	20.2	8.3	10.4	16.8	19.8
Minnesota	70.0	70.0	42.4	49.2	26.0	36.5	16.1	23.0	28.8	36.1
North Dakota	62.3	63.3	39.4	44.1	21.0	30.7	11.0	15.9	23.1	29.4
New York City	52.4	56.9	33.0	39.8	21.0	29.1	13.0	18.5	22.5	29.0
Oregon	54.7	56.2	30.8	35.1	15.6	24.0	9.3	14.3	19.0	24.8
Wisconsin	60.5	64.5	40.1	48.0	23.4	32.5	12.6	16.4	24.4	30.5
Unweighted average	**55.2**	**55.7**	**33.0**	**38.4**	**19.0**	**27.1**	**10.9**	**15.3**	**20.8**	**26.3**

seasonal influenza vaccine during the 2009–10 season. The low vaccination coverage among children aged 13–18 years, which might reflect fewer visits to primary-care providers in this age group, might be improved by SLV programs for these children.

Data from the NHFS and the Behavioral Risk Factor Surveillance System (BRFSS) were combined to report national and state-specific seasonal influenza vaccination coverage for the 2009–10 season among children aged 6 months–17 years (9). State-specific coverage was approximately 14 percentage points higher in the NHFS/BRFSS data compared with sentinel site data. Differences in coverage might reflect differences in geographic assessment areas in six of the eight sites, overreporting in the surveys, underreporting in IIS, or a combination of these factors. NHFS and BRFSS rely on self-report of vaccination and have been found to overestimate the number of seasonal influenza vaccine doses administered in the United States and to overestimate coverage by 10%–15% (9), likely because of nonresponse bias and recall bias. In contrast, IIS might underestimate

coverage because of a lack of information from unenrolled providers (although IIS sentinel sites have >85% vaccine provider site participation), failure of enrolled providers to submit all vaccination data to IIS, and failure to include vaccinations administered at nontraditional locations, such as schools. During the 2008–09 influenza season, IIS-based coverage estimates were consistent with provider-verified coverage calculated by NIS for children aged 6–23 months (5),[†] suggesting that IIS likely captured complete data for children in that age group during 2008–09. Comparable data from NIS are not yet available for the 2009–10 influenza season.

The data in this report demonstrate the increase in seasonal influenza vaccination coverage among children in the eight sentinel sites during the 2009–10 influenza season. The lack of increased vaccination coverage among children aged 6–23 months, low full vaccination coverage among children aged <5 years who are at greatest risk for influenza-associated complications,

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[†] Available at http://www.cdc.gov/flu/professionals/vaccination/coverage_6-23months.htm.

TABLE 2. Percentage of children aged 6 months–18 years who were fully vaccinated* with seasonal influenza vaccine, by age group and influenza season — immunization information system sentinel sites, United States, 2008–09 and 2009–10 influenza seasons

Sentinel site	6–23 mos		2–4 yrs		5–12 yrs		13–18 yrs		6 mos–18 yrs	
	2008–09	2009–10	2008–09	2009–10	2008–09	2009–10	2008–09	2009–10	2008–09	2009–10
Arizona	24.8	26.0	23.2	19.2	18.4	27.8	12.5	17.5	17.1	22.8
Colorado	24.9	22.6	16.0	21.4	8.2	13.2	4.7	6.0	8.9	12.3
Michigan	28.1	29.5	19.6	31.0	11.3	19.6	8.3	10.4	11.9	18.3
Minnesota	44.9	47.7	35.9	37.4	23.5	27.7	16.1	23.0	24.5	28.9
North Dakota	38.3	35.9	32.7	37.0	17.3	27.1	11.0	15.9	18.2	25.2
New York City	31.5	35.0	27.6	33.3	18.0	25.7	13.0	18.5	18.3	25.1
Oregon	31.9	34.4	17.9	28.4	11.8	19.8	9.3	14.3	12.8	20.4
Wisconsin	42.9	46.3	35.1	40.6	21.2	29.4	12.6	16.4	21.2	27.1
Unweighted average	**33.4**	**34.7**	**26.0**	**31.0**	**16.2**	**23.8**	**10.9**	**15.3**	**16.6**	**22.5**

* Full vaccination for children aged 6 months–8 years = 1) receipt of 2 valid influenza vaccine doses in the current season among influenza vaccine–naïve children and children who received 1 dose for the first time from August 1, 2008, to March 31, 2009; 2) receipt of 1 vaccine dose in the current season among children who had received 2 valid doses in any previous influenza season; or 3) receipt of 1 vaccine dose in the current season among children who received 1 valid dose in a season before September 1, 2008, and received 1 or 0 doses from August 1, 2008 to March 31, 2009. Full vaccination for children aged 9–18 years = receipt of at least 1 influenza vaccine dose in the current season.

What is already known on this topic?

During the 2009–10 influenza season, opportunities and challenges to seasonal influenza vaccination included expanded Advisory Committee on Immunization Practices seasonal influenza vaccination recommendations to include all children aged 5–18 years by the end of the 2009–10 season, the emergence of 2009 pandemic influenza A (H1N1) virus, and the 2009 H1N1 monovalent influenza vaccination recommendations for all children aged 6 months–18 years.

What is added by this report?

Almost no increase in seasonal influenza vaccination coverage with ≥1 doses (0.5 percentage points) and full vaccination coverage (1.3 percentage points) was observed among children aged 6–23 months from the 2008–09 season to the 2009–10 season, and coverage continued to be low (15.3%–38.4%) among older children, despite increases in coverage, leaving many children unprotected against influenza because of nonvaccination and lack of full vaccination.

What are the implications for public health practice?

The development of new strategies and the continued implementation of proven existing strategies to improve seasonal vaccination coverage are needed, including vaccinating later in the season (January–March), standing orders, reminder/recall notifications, parental education about vaccination, and use of school-located vaccination programs. Influenza vaccinations administered in all settings should be reported to facilitate timely monitoring of vaccination coverage among children.

and low coverage among older children and adolescents suggest that continued implementation of existing strategies and the development of new strategies to improve seasonal vaccination coverage are needed. Existing strategies include vaccinating later in the season (January–March) and use of standing orders, reminder/recall notifications, parental education, and SLV programs (*4,10*). The reporting of influenza vaccinations that are administered to children in all traditional and complementary settings (e.g., SLV) to IIS is an important means of providing rapid assessment of influenza vaccination coverage among children of varying age groups. Data can be used by state and local IIS sites to provide interim assessments of influenza vaccination coverage during the season.

References

1. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2004;53(No. RR-6).
2. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-10).
3. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP), 2008. MMWR 2008;57(No. RR-7).
4. CDC. Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP), 2009. MMWR 2009;58(No. RR-8).
5. CDC. Influenza vaccination coverage among children aged 6 months–18 years—eight immunization information system sentinel sites, United States, 2008–09 influenza season. MMWR 2009;58:1059–62.
6. CDC. Childhood influenza vaccination coverage—United States, 2004–05 influenza season. MMWR 2006;55:1062–5.
7. Zimmerman LA, Bartlett DL, Enger KS, Gosney K, Williams WG. Influenza vaccination coverage: findings from immunization information systems. BMC Pediatr 2007;7:28.
8. CDC. Influenza vaccination coverage among children aged 6–59 months—six immunization information system sentinel sites, United States, 2006–07 influenza season. MMWR 2007;56:963–5.
9. CDC. Interim results: state-specific seasonal influenza vaccination coverage—United States, August 2009–January 2010. MMWR 2010;59:477–84.
10. Task Force on Community Preventive Services. Recommendations regarding interventions to improve vaccination coverage in children, adolescents, and adults. Am J Prev Med 2000;18:92–6.

Influenza Activity — United States and Worldwide, June 13–September 25, 2010

From June 13 to September 25, 2010, the United States experienced low levels of influenza activity. During this period, typical seasonal patterns of influenza activity occurred in the Southern Hemisphere; in addition, influenza activity was observed in the tropical regions, with a mix of 2009 influenza A (H1N1), influenza A (H3N2), and influenza B viruses cocirculating. This report summarizes influenza activity in the United States and worldwide since the update published on July 30, 2010 (*1*).

United States

In the United States, CDC collaborates with federal, state, and local partners to collect influenza information via multiple surveillance systems. During the summer period of June 13–September 25, 2010, influenza surveillance systems that were in operation included: 1) World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, which conduct viral surveillance; 2) the U.S. Outpatient Influenza-Like Illness Surveillance Network (ILINet), which reports outpatient visits for influenza-like illness (ILI)*; 3) the BioSense Program, which contains chief complaint and discharge diagnosis data on emergency department visits due to ILI; 4) pneumonia and influenza deaths from the 122 Cities Mortality Reporting System; 5) influenza-associated pediatric deaths from the Influenza-Associated Pediatric Mortality Reporting System; and 6) reports of novel influenza A virus cases from the National Notifiable Disease Surveillance System (NNDSS).

During June 13–September 25, WHO and NREVSS collaborating laboratories analyzed a total of 25,833 respiratory specimens from the United States. Of these specimens, 326 (1.3%) tested positive for influenza; 261 (80%) were influenza A viruses, and 65 (20%) were influenza B viruses. Of the influenza A viruses, 185 (71%) were subtyped; 130 (70%) were H3, and 55 (30%) were 2009 influenza A (H1N1). The percentage of specimens positive for influenza varied slightly over time, with <1% of tested specimens positive each week until late July and 1.0%–2.6% of tested specimens positive from late July through late September. The largest proportion of positive samples came from the southeastern United States (U.S. Department of Health and Human Services Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee) (40%), followed by western states (Region 9: Arizona, California, Hawaii, and Nevada) (14%), and the Midwestern states (Region 5: Illinois, Indiana, Missouri, Minnesota, Ohio, and Wisconsin) (10%).

The weekly percentage of outpatient visits to ILINet providers for ILI during June 13–September 25 ranged from 0.7% to 1%, which is below the national baseline[†] of 2.3%. This was consistent with data provided by the BioSense Program, which indicated a low level of ILI visits in emergency departments (0.7%–1.7%). Mortality attributed to pneumonia and influenza, as reported by the 122 Cities Mortality Reporting System, was below the epidemic threshold[§] throughout the period covered by this report except for 3 nonconsecutive weeks. No influenza-associated pediatric deaths were reported to the Influenza-Associated Pediatric Mortality Reporting System, and no human cases of novel influenza A were reported to NNDSS for the period June 13–September 25.

In early July, two outbreaks of influenza A (H3) were reported in Iowa. The first outbreak caused ILI in four of 13 members of a college sports team; three of these four were found to be positive for influenza A by rapid test, and two of three were later confirmed to have influenza A (H3) infection by polymerase chain reaction (PCR). The second outbreak involved nine of 12 children and one parent with ILI in a child care setting; two children were rapid-test positive for

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* Defined as a temperature of ≥100.0°F (≥37.8°C), oral or equivalent, and cough and/or sore throat, in the absence of a known cause other than influenza.

[†] The national baseline was calculated as the mean percentage of patient visits for ILI during noninfluenza weeks for the preceding three influenza seasons, plus 2 standard deviations. Noninfluenza weeks are those in which <10% of laboratory specimens are positive for influenza. Wide variety in regional data precludes calculating region-specific baselines; therefore, applying the national baseline to regional data is inappropriate. National and regional percentages of patient visits for ILI are weighted on the basis of state population.

[§] The epidemic threshold is 1.645 standard deviations above the seasonal baseline. The seasonal baseline is projected using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from pneumonia and influenza during the preceding 5 years.

influenza A, and one was PCR-positive for influenza A (H3) infection. None of these patients had a direct history of recent travel, and no epidemiologic links were identified between the two Iowa outbreaks. The Maryland Department of Health and Mental Hygiene reported an outbreak of influenza B during the first half of August, which involved children visiting the United States as part of an international exchange program. Approximately 35 of 400 children had ILI, and six sought health care at a local hospital. Influenza B was identified in eight cases.

Worldwide

From June 13 to September 25, influenza A (H3), 2009 influenza A (H1N1), and influenza B were identified worldwide. Seasonal influenza A (H1) viruses were reported only rarely. Reports by the WHO Global Influenza Surveillance Network (*2*) showed that influenza B was the viral type most commonly identified until early July, when 2009 influenza A (H1N1) became the predominant strain. Since late August, influenza A (H3) has been the viral subtype most commonly identified. The WHO Global Surveillance Network reported that the predominant viral type or subtype identified from Asia (44% of analyzed specimens) was H3, followed by 2009 influenza A (H1N1) (32% of specimens) and influenza B (13%), but this varied by country. In Africa, influenza B (44%) viruses were the most common, followed by influenza A (H3) (31%). In South America, 2009 influenza A (H1N1) (32% of specimens) and influenza B (32%) predominated. In North America, 69% of isolates were identified as influenza A (H3) viruses. The 2009 influenza A (H1N1) virus predominated in Oceania (63% of specimens). In Europe a small number of cases were reported, and most specimens (59%) were influenza B, followed by 2009 influenza A (H1N1) (19%).

Antigenic Characterization of Influenza Virus Isolates

Virus isolates from around the world are received and analyzed at the WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza, located at CDC. Seventy-nine 2009 influenza A (H1N1) viruses were collected and analyzed from June 13 to September 25 (16 from the United States, 33 from South America, 13 from Asia, 15 from Africa, and two from Oceania); all but one (99%) were antigenically similar to A/California/7/2009 (2009 influenza A H1N1), which is the H1N1 component of the 2010–11 Northern Hemisphere vaccine recommended by WHO. Of the 101 influenza A (H3) viruses characterized (24 from the United States, one from North America, 42 from South America, seven from Asia, and 27 from Africa), 97 (96%) were antigenically similar to A/Perth/16/2009, the H3N2 component of the 2010–11 Northern Hemisphere vaccine, and four (4%) showed reduced titers with antisera produced against A/Perth/16/2009. Finally, of 45 influenza B isolates characterized at CDC during this period, 34 (76%) belong to the B/Victoria lineage (12 from North America [including nine from the United States], 16 from South America, and six from Asia), and 30 of 34 (88%) were antigenically similar to B/Brisbane/60/2008, which is the influenza B component of the 2010–11 Northern Hemisphere vaccine (B/Victoria lineage). The remaining 11 influenza B viruses (three from the United States, three from South America, and five from Asia) belong to the B/Yamagata lineage.

Resistance Profiles of Influenza Virus Isolates

The WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza at CDC tested isolates collected during June 13–September 25, 2010, for resistance to antiviral medications. Of 232 isolates tested for neuraminidase inhibitor resistance, 178 were received from 18 foreign countries (52 were 2009 influenza A [H1N1], 85 were H3N2, and 41 were influenza B), and 54 were collected from the United States (17 were 2009 influenza A [H1N1], 25 were H3N2, and 12 were influenza B). None of the 232 tested viruses were found to be resistant to either oseltamivir or zanamivir. Of 180 isolates tested for adamantane resistance (139 foreign isolates and 41 isolates from the United States), 100% were found to be resistant to adamantanes.

Human Infection with Avian Influenza A (H5N1) Virus Isolates

During June 13–September 25, six cases of human infection with avian influenza A (H5N1) were reported to WHO from Egypt and Indonesia; five of these cases were fatal (*3*). Since December 2003, a total of 505 human cases (resulting in 300 fatalities) have been reported from 15 countries in Asia and

Africa. No human cases of avian influenza (H5N1) infection have been identified from North America or South America.

Reported by

WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza. M Jhung, MD, L Brammer, MPH, S Epperson, MPH, L Blanton, MPH, R Dhara, MPH, L Finelli, DrPH, L Gubareva, PhD, A Klimov, PhD, T Wallis, MS, M Okomo-Adhiambo, PhD, J Bresee, MD, N Cox, PhD, National Center for Immunization and Respiratory Diseases; A Storms, MD, EIS Officer, CDC.

Editorial Note

During June 13–September 25, 2010, influenza A (H3), 2009 influenza A (H1N1), and influenza B were present worldwide and also were detected in the United States. Despite the overall low levels of influenza virus circulation throughout the summer in the United States, there have been clusters of H3N2 disease, as well as sporadic cases of infection with 2009 influenza A (H1N1) and influenza B viruses. These outbreaks are typical of sporadic outbreaks of influenza during the summer months.

Although it is difficult to predict which influenza virus strains will predominate during the upcoming influenza season, antigenic characterization of viral isolates submitted during the summer demonstrated that the majority are antigenically similar to the influenza vaccine candidates included in the 2010–11 Northern Hemisphere vaccine. Vaccination continues to be the best method for preventing influenza and its associated complications. Vaccine manufacturers project ample supplies of influenza vaccine in the United States for the 2010–11 influenza season. Guidelines for influenza vaccination, published in July 2010, were revised this year by the Advisory Committee on Immunization Practices (ACIP) and call for annual vaccination of all persons aged ≥6 months (*4*). Because children aged <6 months are too young for influenza vaccination but are one of the groups at highest risk for influenza-related hospitalization, vaccination of household contacts and caregivers of young children is recommended to reduce their risk for influenza illness (*4*). Vaccination of pregnant women might also provide protection to infants aged <6 months in addition to protecting women during pregnancy and the postpartum period (*5,6*).

On August 5, 2010, ACIP recommended that trivalent inactivated influenza vaccine (brand name Afluria) manufactured by CSL Biotherapies, not be administered to children aged 6 months–8 years (*7*). This recommendation was based on findings of an increased risk for fever in children aged <9 years and febrile seizures among children aged <5 years in Australia and New Zealand associated with receipt of CSL Southern Hemisphere trivalent inactivated vaccine (TIV). If no other age-appropriate, licensed seasonal influenza vaccine is available for a child aged 5–8 years who has a medical condition that increases their risk for influenza complications, Afluria may be given, and providers should discuss the benefits and risks of influenza vaccination with the parents or caregivers before administering Afluria (*7*). No cause has been identified to date to explain these adverse reactions in children who received CSL TIV. Safety of seasonal influenza vaccine will continue to be monitored through the season.

Antiviral medications for treatment and prevention of influenza continue to be an important adjunct to vaccination as part of efforts to reduce serious morbidity and mortality related to influenza (*8*). Because all H3N2 and 2009 influenza A (H1N1) viruses submitted for testing are resistant to adamantanes (amantadine and rimantidine), adamantane use is not recommended. However, influenza B, influenza A (H3N2), and 2009 influenza A (H1N1) viruses remain susceptible to neuraminidase inhibitors (oseltamivir and zanamivir), and these drugs are recommended agents for influenza prophylaxis and treatment when indicated.

Additional information on influenza testing, use of antiviral medications, influenza infection control guidelines, and vaccination recommendations are available online from CDC at http://www.cdc.gov/flu. Beginning October 15, 2010, weekly influenza surveillance reports also will be available online at http://www.cdc.gov/flu/weekly.

Acknowledgments

and Research on Influenza, Parkville, Australia; and M Tashiro, MD, T Odagiri, PhD, WHO Collaborating Center for Reference and Research on Influenza, National Institute of Infectious Diseases, Tokyo, Japan.

References

1. CDC. Update: influenza activity—United States, 2009–10 season. MMWR 2010;59:901–8.
2. World Health Organization. Global Influenza Surveillance Network. FluNet. Available at http://gamapserver.who.int/globalatlas/home.asp. Accessed October 1, 2010.
3. World Health Organization. Confirmed human cases of avian influenza A (H5N1). Geneva, Switzerland: World Health Organization; 2010. Available at http://www.who.int/csr/disease/avian_influenza/en. Accessed October 1, 2010.
4. CDC. Prevention and control of influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP), 2010. MMWR 2010;59(No. RR-8).
5. Zaman K, Roy E, Arifeen SE, et al. Effectiveness of maternal influenza immunization in mothers and infants. N Engl J Med 2008;359:1555–64.
6. Eick AA, Uyeki TM, Klimov A, et al. Maternal influenza vaccination and effect on influenza virus infection in young infants. Arch Pediatr Adolesc Med 2010. Epub ahead of print (October 4, 2010). Available at http://archpedi.ama-assn.org/cgi/content/short/archpediatrics.2010.192. Accessed October 5, 2010.
7. CDC. Update: recommendations of the Advisory Committee on Immunization Practices (ACIP) regarding use of CSL seasonal influenza vaccine (Afluria) in the United States during 2010–11. MMWR 2010;59:989–92.
8. Harper SA, Bradley JS, Englund JA, et al. Seasonal influenza in adults and children–diagnosis, treatment, chemoprophylaxis, and institutional outbreak management: clinical practice guidelines of the Infectious Diseases Society of America. Clin Infect Dis 2009;48:1003–32.

Vital Signs: Binge Drinking Among High School Students and Adults — United States, 2009

On October 5, this report was posted as an MMWR *Early Release on the* MMWR *website (http://www.cdc.gov/mmwr).*

ABSTRACT

Background: Binge drinking was responsible for more than half of the estimated 79,000 deaths and two thirds of the estimated 2.3 million years of potential life lost as a result of excessive drinking each year in the United States during 2001–2005.

Methods: CDC analyzed data from the 2009 Behavioral Risk Factor Surveillance System (BRFSS) on the prevalence of binge drinking (defined as consuming four or more alcoholic drinks per occasion for women and five or more for men during the past 30 days) among U.S. adults aged ≥18 years who responded to the BRFSS survey by landline or cellular telephone. Data also were analyzed from the 2009 National Youth Risk Behavior Survey (YRBS) on the prevalence of current alcohol use (consuming at least one alcoholic drink during the 30 days before the survey), and binge drinking (consuming five or more alcoholic drinks within a couple of hours during the 30 days before the survey) among U.S. high school students, and on the prevalence of binge drinking among high school students who reported current alcohol use.

Results: Among U.S. adults, the prevalence of reported binge drinking was 15.2% among landline respondents. Binge drinking was more common among men (20.7%), persons aged 18–24 years (25.6%) and 25–34 years (22.5%), whites (16.0%), and persons with annual household incomes of $75,000 or more (19.3%). Among cellular telephone respondents, the overall prevalence of binge drinking (20.6%) was higher than among landline respondents, although the demographic patterns of binge drinking were similar. Prevalence among high school students was 41.8% for current alcohol use, 24.2% for binge drinking, and 60.9% for binge drinking among students who reported current alcohol use.

Conclusions: Binge drinking is common among U.S. adults, particularly those with higher household incomes, and among high school students. Binge drinking estimates for adults were higher in the cellular telephone sample than in the landline sample. Most youths who reported current alcohol use also reported binge drinking.

Implications for Public Health Practice: Binge drinking is a serious problem among adults and youths that can be reduced by implementation of evidence-based interventions.

Excessive alcohol use was the third leading preventable cause of death in the United States (*1*), and it annually accounted for, on average, approximately 79,000 deaths* per year and 2.3 million years of potential life lost (YPLL) during 2001–2005.[†] Binge drinking was responsible for more than half of those deaths and two thirds of the YPLL (*2*). *Healthy People 2010* called for reducing the overall prevalence of binge drinking among adults and youths.[§] For this report, data from landline and cellular telephone respondents to the 2009 Behavioral Risk Factor Surveillance System (BRFSS) were used to estimate the prevalence of binge drinking among adults in the United States, and data from the 2009 National Youth Risk Behavior Survey (YRBS) were used to estimate the prevalence of current alcohol use and binge drinking among high school students in the United States.

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* An estimated 4,675 deaths or 6% of all alcohol-attributable deaths involved persons aged <21 years.

[†] YPLL for 2001–2005 were estimated using the Alcohol-Related Disease Impact (ARDI) application using death and life expectancy data from the National Vital Statistics System. Additional information is available at https://apps.nccd.cdc.gov/ardi/homepage.aspx.

[§] Objectives 26-11c and 26-11d. Available at http://www.healthypeople.gov/data/midcourse/html/focusareas/fa26objectives.htm.

Methods

BRFSS is a state-based telephone survey of civilian, noninstitutionalized U.S. adults that collects information on many leading health conditions and health risk behaviors, including binge drinking. BRFSS surveys are administered to households with landlines in all states and the District of Columbia (DC). In 2009, all 50 states (except South Dakota and Tennessee) and DC began administering up to 10% of their total state completed surveys to cellular telephone users. Annually, respondents who report consuming any alcoholic beverages are asked how many times they engaged in binge drinking, defined as consuming four or more alcoholic drinks per occasion for women and five or more drinks per occasion for men during the preceding 30 days. The prevalence of binge drinking was calculated by dividing the total number of respondents who reported at least one binge drinking episode during the preceding 30 days by the total number of BRFSS respondents. Respondents who refused to answer, had a missing answer, or who answered "don't know/not sure" were excluded from the analysis.

In 2009, the median Council of American Survey and Research Organizations (CASRO) response rate for the landline BRFSS was 52.9% (range among states: 37.9%–66.9%), and the median CASRO cooperation rate was 75.0% (range: 55.5%–88.0%). The preliminary median CASRO response rate for the cellular telephone BRFSS was 37.6% (range among states: 20.5%–60.3%), and the preliminary median CASRO cooperation rate was 76.0% (range: 47.7%–90.9%). A total of 412,005 landline respondents and 15,578 cellular telephone respondents were included in the analysis. Data collected by landline were weighted to the age, sex, and racial/ethnic distribution of each state's adult population and to the respondent's probability of selection. Cellular telephone data were unweighted, but were age-adjusted to the 2000 U.S. Census standard population.

The biennial national YRBS, a component of CDC's Youth Risk Behavior Surveillance System, estimates the prevalence of health risk behaviors among U.S. high school students. The 2009 national survey obtained cross-sectional data representative of public- and private-school students in grades 9–12 in the 50 states and DC (3). Students completed an anonymous, self-administered questionnaire that included questions about alcohol use. Students from 158 schools completed 16,460 questionnaires. The

school response rate was 81%, the student response rate was 88%, and the overall response rate was 71%. After quality control measures were applied, data from 16,410 students were available for analysis.

Current alcohol use is defined in YRBS as having had at least one drink of alcohol on at least 1 day during the 30 days before the survey, and binge drinking is defined as having had five or more drinks of alcohol within a couple of hours on at least 1 day during the 30 days before the survey. The prevalence of current alcohol use was calculated by dividing the total number of respondents who reported current alcohol use by the total number of respondents, and the prevalence of binge drinking was calculated by dividing the total number of respondents who reported binge drinking by the total number of respondents. The prevalence of binge drinking among current drinkers was calculated by dividing the total number of binge drinkers by the total number of current drinkers. Respondents who had missing information were excluded from the analysis. YRBS data were weighted to adjust for school and student nonresponse and oversampling of black and Hispanic students.

BRFSS Results

Landline telephone respondents. The overall prevalence of binge drinking among adult BRFSS landline respondents was 15.2% (Table 1). Binge drinking prevalence among men (20.7%) was twice that for women (10.0%). Binge drinking also was most common among persons aged 18–24 years (25.6%) and 25–34 years (22.5%), and then gradually declined with increasing age. The prevalence of binge drinking among landline respondents who were non-Hispanic whites (16.0%) and Hispanics (16.3%) was significantly higher than the prevalence for non-Hispanic blacks (10.3%). Landline respondents with some college education (16.4%) and college graduates (15.3%) were most likely to report binge drinking, whereas those who did not graduate from high school were the least likely to report binge drinking (12.1%). Binge drinking prevalence also increased with household income and was most commonly reported by respondents with annual household incomes of $75,000 or more (19.3%).

By state, the prevalence of binge drinking ranged from 6.8% (Tennessee) to 23.9% (Wisconsin) (Figure 1). States with the highest prevalence of adult binge drinking were located in the Midwest, North Central Plains, and lower New England. Additional high-prevalence states included Alaska, Delaware, DC, and Nevada.

TABLE 1. Binge-drinking prevalence, by sociodemographic characteristics, among adults surveyed by landline telephone (N = 412,005) — Behavioral Risk Factor Surveillance System (BRFSS), United States, 2009*

Characteristic	Weighted† survey population (%)	Weighted binge-drinking prevalence (%)	(95% CI§)
Total	**100.0**	**15.2**	**(14.9–15.4)**
Sex			
Male	48.5	20.7	(20.2–21.2)
Female	51.5	10.0	(9.7–10.3)
Age group (yrs)			
18–24	11.6	25.6	(24.2–26.9)
25–34	18.5	22.5	(21.7–23.3)
35–44	19.0	17.8	(17.2–18.4)
45–64	33.7	12.1	(11.8–12.4)
≥65	17.2	3.8	(3.6–4.0)
Race/Ethnicity			
White, non-Hispanic white	69.9	16.0	(15.7–16.3)
Black, non-Hispanic black	10.0	10.3	(9.5–11.2)
Hispanic	13.4	16.3	(15.2–17.3)
Other, non-Hispanic	6.7	12.1	(10.9–13.2)
Education level			
Less than high school diploma	10.5	12.2	(11.3–13.2)
High school diploma	28.2	15.0	(14.5–15.5)
Some college	26.6	16.4	(15.8–16.9)
College graduate	34.7	15.3	(14.9–15.8)
Annual household Income			
<$25,000	25.9	12.1	(11.5–12.7)
$25,000 to <$50,000	25.0	14.6	(14.0–15.2)
$50,000 to <$75,000	16.3	16.8	(16.2–17.5)
≥$75,000	32.8	19.3	(18.8–19.9)

* 2009 BRFSS landline respondents were from all 50 states and the District of Columbia.
† Weighted percentage reflects the distribution of the U.S. adult population.
§ Confidence interval.

Cellular telephone respondents. In 2009, the overall, age-adjusted prevalence of binge drinking among adult BRFSS cellular telephone respondents was 20.6% (Table 2). Binge drinking prevalence among men (26.5%) was almost twice that for women (14.5%). Binge drinking also was most common among persons aged 18–24 years (35.4%) and 25–34 years (30.8%), and then gradually declined with increasing age. The prevalence of binge drinking among cellular telephone respondents who were non-Hispanic whites (22.3%), other non-Hispanics (including American Indians/Alaska Natives and Asians/Native Hawaiians or other Pacific Islanders) (19.9%), and Hispanics (17.5%) was significantly higher than the prevalence for non-Hispanic blacks (13.9%). Binge drinking prevalence increased with household income and was reported most commonly by respondents with annual household incomes of $75,000 or more (25.4%).

YRBS Results

In 2009, the prevalence of current alcohol use and of binge drinking among high school students was 41.8% and 24.2%, respectively (Table 3). The prevalence of binge drinking was similar among boys (25.0%) and girls (23.4%). Non-Hispanic white (27.8%) and Hispanic (24.1%) students had a higher prevalence of reported binge drinking than non-Hispanic black students (13.7%). Binge drinking prevalence increased with grade level; prevalence among 12th grade students (33.5%) was more than twice that among 9th grade students (15.3%).

The prevalence of binge drinking among high school students who reported current alcohol use was 60.9% (64.1% among boys and 57.5% among girls) (Table 3). Non-Hispanic white (64.8%) and Hispanic (59.3%) students who reported current alcohol use had a higher prevalence of binge drinking than non-Hispanic black (43.5%) students who reported current alcohol use. The prevalence of binge drinking among students who reported current alcohol use increased with grade level, from 51.1% in 9th grade students to 67.4% in 12th grade students.

From 1993 to 2009, the prevalence of binge drinking among adults did not decrease among men or women. Among high school students, the prevalence of binge drinking decreased among boys, but has remained about the same among girls (Figure 2).

Conclusions and Comment

The results in this report indicate that binge drinking is common among U.S. adults and high school students. Binge drinking among adults was slightly higher in 2009 (15.2%) than in 1993 (14.2%).¶ Although binge drinking continued to be common among all population groups, it was most common among males, persons aged 18–34 years, and those with annual household incomes of $75,000 or more. Estimates of binge drinking were higher for the cellular telephone sample (20.6% overall) than the landline sample (15.2% overall), particularly among younger adults. By state, compared to 1993, the prevalence of binge drinking among adults in 2009 was significantly greater in 20 states, was significantly less in two states, and stayed about the same in 29 states (CDC, unpublished data, 2010). The prevalence of current alcohol use and binge drinking among high school students

¶ Information available at http://www.cdc.gov/alcohol/index.htm.

was lower in 2009 (41.8% and 24.2%) than in 1993 (48.0% and 30.0%); however, the differences in these measures were significant among boys, but not girls.** Current alcohol use and binge drinking increased with grade. The majority of high school students who report current alcohol use also report binge drinking across all demographic groups, except black students. Among adults, 29% of those who report current drinking also report binge drinking (4).

The higher prevalence of binge drinking among adult males, whites, young adults, and persons with higher household incomes has been reported before (5). The high prevalence partly could reflect that binge drinking, unlike other leading health risks (e.g., smoking and obesity), has not been widely recognized as a health risk or subjected to intense prevention efforts (4). The differences in binge drinking among population groups might reflect differences in state and local laws that affect the price, availability, and marketing of alcoholic beverages (6). Estimates of binge drinking from the cellular telephone sample were higher than from the landline sample, although the demographic patterns of binge drinking were similar. Higher estimates of binge drinking have been reported previously among cellular telephone respondents relative to landline respondents in a small number of states (CDC, unpublished data, 2010), but have not been reported nationally. During the last half of 2009, an estimated 24.5% of U.S. households had only cellular telephones.[††] As the U.S. population increasingly adopts cellular telephones in place of landlines, the BRFSS survey will need to incorporate cellular telephone respondents to help assure representativeness, particularly when measuring behaviors that are common among younger adults.

The high prevalence of binge drinking among high school students also is consistent with previous reports (7), and affirms that most youths who drink alcohol do so to the point of intoxication. The similarities in the distribution of binge drinking among youths and adults by various demographic characteristics (e.g., race and ethnicity) also are consistent with the strong relationship between youth and adult drinking in states (8), which is influenced strongly by state alcohol control policies (6).

** Information available at http://apps.nccd.cdc.gov/youthonline/app/default.aspx.
[††] Information available at http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201005.htm.

FIGURE 1. Prevalence of binge drinking among adults surveyed by landline telephone, by state — Behavioral Risk Factor Surveillance System, United States, 2009
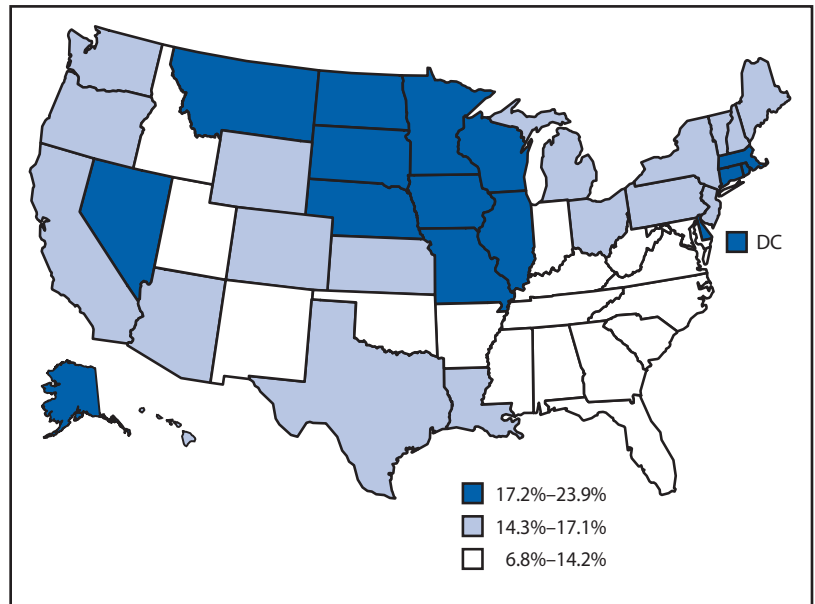
Legend:
- 17.2%–23.9%
- 14.3%–17.1%
- 6.8%–14.2%

TABLE 2. Binge-drinking prevalence, by sociodemographic characteristics, among adults surveyed by cellular telephone (N = 15,578) — Behavioral Risk Factor Surveillance System (BRFSS), United States, 2009*

Characteristic	Unweighted survey population	Unweighted age-adjusted[†] binge-drinking prevalence	
	%	%	(95% CI[§])
Total	100.0	20.6	(19.9–21.3)
Sex			
Male	51.5	26.5	(25.5–27.4)
Female	48.5	14.5	(13.7–15.3)
Age group (yrs)			
18–24	20.3	35.4	(33.8–37.1)
25–34	30.3	30.8	(29.4–32.1)
35–44	17.3	23.0	(21.4–24.6)
45–64	26.7	15.9	(14.8–17.0)
≥65	5.4	4.2	(2.8–5.6)
Race/Ethnicity			
White, non-Hispanic	71.9	22.3	(21.4–23.2)
Black, non-Hispanic	8.7	13.9	(11.9–15.9)
Hispanic	10.5	17.5	(15.5–19.6)
Other, non-Hispanic	8.9	19.9	(17.7–22.0)
Education level			
Less than high school diploma	9.7	19.2	(17.1–21.4)
High school diploma	28.5	19.8	(18.6–21.0)
Some college	30.4	19.9	(18.7–21.1)
College graduate	31.4	22.6	(21.3–23.9)
Annual household Income			
<$25,000	35.8	18.9	(17.8–20.1)
$25,000 to <$50,000	30.7	21.8	(20.5–23.2}
$50,000 to <$75,000	15.5	21.6	(19.8–23.5)
≥$75,000	18.0	25.4	(23.4–27.3)

* 2009 BRFSS cellular telephone respondents were from 48 states (excluding South Dakota and Tennessee) and the District of Columbia.
[†] Age-adjusted to the 2000 U.S. Census standard population.
[§] Confidence interval.

TABLE 3. Prevalence of current alcohol use and binge drinking, by sociodemographic characteristics among 9th–12th grade students — Youth Risk Behavior Survey, United States, 2009

Characteristic	Current alcohol use (n = 14,864*)		Binge drinking (n = 16,009*)		Binge drinking among students reporting current alcohol use (n = 6,231*)	
	Weighted %	(95% CI[†])	Weighted %	(95% CI)	Weighted %	(95% CI)
Total	**41.8**	**(40.2–43.4)**	**24.2**	**(22.7–25.8)**	**60.9**	**(58.4–63.5)**
Sex						
Male	40.8	(38.6–43.0)	25.0	(22.9–27.0)	64.1	(61.0–67.2)
Female	42.9	(41.2–44.6)	23.4	(21.9–25.0)	57.5	(54.6–60.4)
Race/Ethnicity						
White, non-Hispanic	44.7	(42.5–47.0)	27.8	(25.7–29.8)	64.8	(61.9–67.8)
Black, non-Hispanic	33.4	(30.5–36.2)	13.7	(11.7–15.8)	43.5	(39.2–47.9)
Hispanic	42.9	(40.1–45.7)	24.1	(21.7–26.6)	59.3	(55.4–63.2)
Other, non-Hispanic	32.6	(28.2–37.1)	17.6	(14.2–21.0)	56.5	(50.8–62.1)
Grade						
9	31.5	(29.0–34.0)	15.3	(13.8–16.8)	51.1	(47.4–54.8)
10	40.6	(37.8–43.4)	22.3	(19.6–24.9)	58.2	(53.6–62.7)
11	45.7	(41.7–49.7)	28.3	(25.3–31.3)	64.6	(61.7–67.6)
12	51.7	(49.0–54.4)	33.5	(31.1–36.0)	67.4	(64.3–70.4)

* Reflects usable responses to this question.
† Confidence interval.

The findings in this report are subject to at least six limitations. First, BRFSS and YRBS data are self-reported. Among adults, alcohol consumption generally, and excessive drinking in particular, are underreported in surveys because of recall, social desirability, and nonresponse bias (*9*). A recent study found that BRFSS identifies only 22% to 32% of presumed alcohol consumption in states based on alcohol sales (*10*). Second, an increasing proportion of youths and young adults aged 18–34 years use cellular telephones exclusively (*11*); therefore, landline surveys of persons in this age group might not be representative of this population. Third, the results of the cellular telephone survey were unweighted, but results of the landline survey were weighted to represent the U.S. adult population. However, the distribution of cellular telephone respondents by various demographic characteristics (e.g., sex and race/ethnicity) was quite similar to the composition of the general population, and the cellular telephone data were age-adjusted to the 2000 U.S. Census standard population. Fourth, response rates for both the landline and cellular telephone BRFSS were low, which increases the risk for response bias. Fifth, YRBS defines binge drinking for boys and girls as five or more drinks within a couple of hours, and the prevalence of binge drinking among girls would likely have been higher if it were defined using a four-drink threshold, consistent with national recommendations. Finally, YRBS data apply only to youths who attend school, and therefore are not representative of all persons in this age group. Nationwide, in 2007, of persons aged 16–17 years, approximately 4% were not enrolled in a high school program and had not completed high school.§§

FIGURE 2. Prevalence of binge drinking among high school students and adults, by sex — Youth Risk Behavior Survey (YRBS)* and Behavioral Risk Factor Surveillance System (BRFSS),† United States, 1993–2009
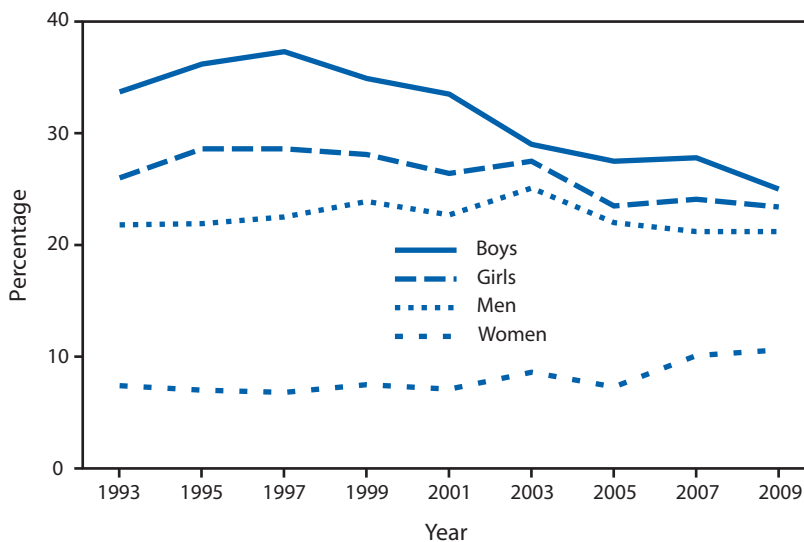
* YRBS binge drinking definition: 1993–2009 having ≥5 alcoholic drinks within a couple of hours during the preceding 30 days.
† BRFSS binge drinking definitions: 1993–2005 having ≥5 alcoholic drinks on one occasion; 2006–2009 males having ≥5 drinks on one occasion, females having ≥4 drinks on one occasion during the preceding 30 days.

§§ Information available at http://nces.ed.gov/pubs2009/2009064.pdf.

Key Points

- Binge drinking causes more than half of the 79,000 deaths caused by excessive drinking.
- Excessive alcohol use, including binge drinking, is the third leading preventable cause of death in the United States.
- Among U.S. adults, 15% (33 million men and women) and one in four high school students reported binge drinking.
- The prevalence of adult binge drinking has not declined for more than 15 years. Implementation of evidence-based interventions can reduce binge drinking in adults and youths.
- Additional information is available at http://www.cdc.gov/vitalsigns.

To reduce the adverse impact of binge drinking on individuals and communities, health professionals and community leaders should consider implementing interventions that have been proven in scientific studies to reduce binge drinking among adults and youths. Evidence-based interventions for individuals include those recommended by the U.S. Preventive Services Task Force¶¶ and evidence-based interventions for communities include those recommended in the Guide to Community Preventive Services.*** Local leaders need to carefully consider which of these interventions would be most acceptable, feasible, and effective in their communities; other innovative solutions also might be found for tackling this problem and further research is encouraged to find such solutions. The findings in this report also support the need to improve public health surveillance for binge drinking among adults by increasing the number of cellular telephone respondents to the BRFSS.

¶¶ Information available at http://www.uspreventiveservicestaskforce.org/uspstf/uspsdrin.htm.
*** Information available at http://www.thecommunityguide.org/alcohol/index.html.

Reported by

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References

1. Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of deaths in the United States, 2000. JAMA 2004;291:1238–45.
2. CDC. Alcohol attributable deaths and years of potential life lost, United States, 2001. MMWR 2004;53:866–70.
3. CDC. Youth risk behavior surveillance—United States, 2009. MMWR 2010;59(No. SS-5).
4. Brewer RD, Swan MH. Binge drinking and violence. JAMA 2005;294:616–8.
5. CDC. Sociodemographic differences in binge drinking among adults—14 states, 2004. MMWR 2009;58:301–4.
6. Nelson TF, Naimi TS, Brewer RD, Weschler H. The state sets the rate: the relationship among state-specific college binge drinking, state binge drinking rates, and selected state alcohol control policies. Am J Public Health 2005;95:441–6.
7. Miller J, Naimi T, Brewer R, Everett Jones S. Binge drinking and associated health risk behaviors among high school students. Pediatrics 2007;119:76–84.
8. Nelson DE, Naimi TS, Brewer RD, Nelson HA. State alcohol-use estimates among youth and adults, 1993–2005. Am J Prev Med 2009;36:218–24.
9. Stockwell T, Donath S, Cooper-Stanbury M, Chikritzhs T, Catalano P, Mateo C. Under-reporting of alcohol consumption in household surveys: a comparison of quantity-frequency, graduated-frequency and recent recall. Addiction 2004;99:1024–33.
10. Nelson DE, Naimi TS, Brewer RD, Roeber J. US state alcohol sales compared to survey data, 1993–2006. Addiction 2010;105:1589–96.
11. Delnevo CD, Gundersen DA, Hagman BT. Declining estimated prevalence of alcohol drinking and smoking among young adults nationally: artifacts of sample undercoverage? Am J Epidemiol 2008;167:15–9.

Announcement

Application Deadline for The CDC Experience Applied Epidemiology Fellowship — December 3, 2010

The CDC Experience is a 1-year fellowship in applied epidemiology for third- and fourth-year medical students. Eight competitively selected fellows spend 10–12 months at CDC in Atlanta, Georgia, where they conduct epidemiologic analyses in areas of public health that interest them. The fellowship provides opportunities to enhance skills in research and analytic thinking, written and oral scientific presentations, and preventive medicine and public health practices.

Through this training, fellows acquire practical tools for approaching population-based health problems. Graduates of The CDC Experience have an appreciation of the role of epidemiology in medicine and health and are better prepared to apply their knowledge and skills to enhance their clinical acumen and help improve the quality of the U.S. health-care system.

Information on applying for the fellowship is available at http://www.cdc.gov/cdcexperiencefellowship. Applications for the class of 2011–12 must be submitted by December 3, 2010. Questions can be addressed to Virginia Watson, program coordinator, by e-mail (vwatson1@cdc.gov).

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Death Rates* for Five Leading Types of Cancer† — United States, 1999–2007
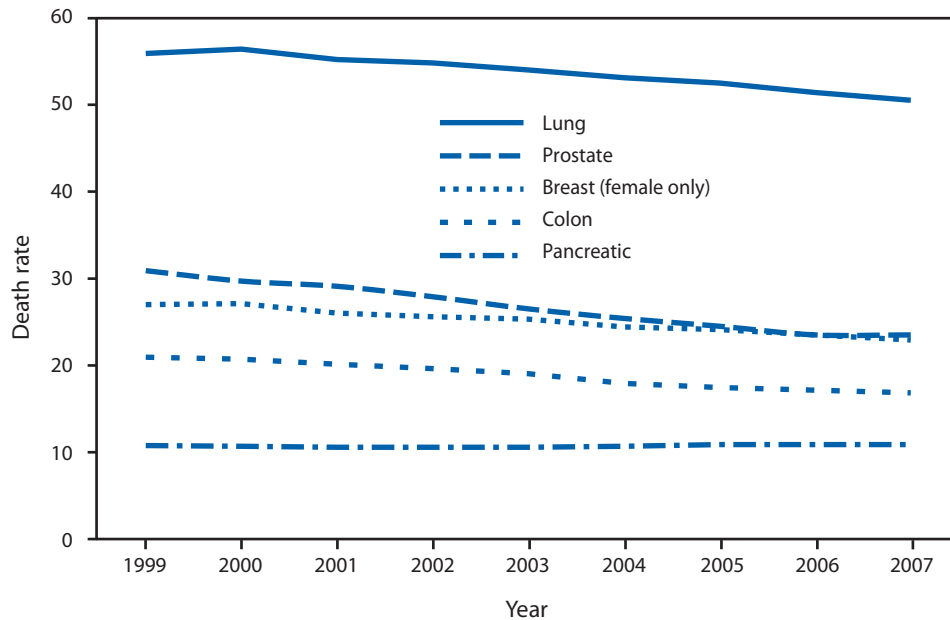
* Age-adjusted rates per 100,000 U.S. standard population.
† Cancer deaths were coded according to the *International Classification of Diseases, 10th Revision*, effective 1999. The following codes were used: lung (C34), colon (C18–C20 and C26.0), breast (C50), pancreatic (C25), and prostate (C61) cancer. Rates for breast cancer are limited to female deaths and population denominators. Rates for prostate cancer are limited to male deaths and population denominators.

Age-adjusted death rates for lung, prostate, breast, and colon cancer declined during 1999–2007. The rate decreased by 9.6% for lung cancer, 23.9% for prostate cancer, 15.2% for breast cancer, and 19.6% for colon cancer. The death rate for pancreatic cancer did not change significantly during this period.

Source: Xu J, Kochanek KD, Murphy SL, Tejada-Vera B. Deaths: final data for 2007. Natl Vital Stat Rep 2010;58(19). Available at http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf.

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 October 2, 2010 (39th week)*

| Disease	Current week	Cum 2010	5-year weekly average[†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2009	2008	2007	2006	2005	
Anthrax	—	—	—	1	—	1	1	—	
Botulism, total	3	70	2	118	145	144	165	135	
foodborne	—	6	0	10	17	32	20	19	
infant	1	48	2	83	109	85	97	85	WA (1)
other (wound and unspecified)	2	16	0	25	19	27	48	31	CA (2)
Brucellosis	—	93	2	115	80	131	121	120	
Chancroid	1	33	0	28	25	23	33	17	VA (1)
Cholera	—	5	0	10	5	7	9	8	
Cyclosporiasis[§]	1	139	1	141	139	93	137	543	TX (1)
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases [§],[¶]:									
California serogroup virus disease	—	40	3	55	62	55	67	80	
Eastern equine encephalitis virus disease	—	10	0	4	4	4	8	21	
Powassan virus disease	—	5	—	6	2	7	1	1	
St. Louis encephalitis virus disease	—	4	0	12	13	9	10	13	
Western equine encephalitis virus disease	—	1	—	—	—	—	—	—	
Haemophilus influenzae,[**] invasive disease (age <5 yrs):									
serotype b	—	12	1	35	30	22	29	9	
nonserotype b	—	130	3	236	244	199	175	135	
unknown serotype	2	169	2	178	163	180	179	217	VT (1), MO (1)
Hansen disease[§]	1	34	2	103	80	101	66	87	CA (1)
Hantavirus pulmonary syndrome[§]	—	15	1	20	18	32	40	26	
Hemolytic uremic syndrome, postdiarrheal[§]	2	156	7	242	330	292	288	221	TX (1), CA (1)
HIV infection, pediatric (age <13 yrs)[††]	—	—	1	—	—	—	—	380	
Influenza-associated pediatric mortality[§],[§§]	—	56	2	358	90	77	43	45	
Listeriosis[¶¶]	13	589	21	851	759	808	884	896	VT (1), OH (3), MO (1), NC (3), FL (1), TX (2), CA (2)
Measles[¶¶]	1	53	0	71	140	43	55	66	NYC (1)
Meningococcal disease, invasive***:									
A, C, Y, and W-135	1	184	4	301	330	325	318	297	MI (1)
serogroup B	1	85	2	174	188	167	193	156	OK (1)
other serogroup	—	7	0	23	38	35	32	27	
unknown serogroup	5	281	8	482	616	550	651	765	OH (1), DE (1), TN (1), CA (2)
Mumps	30	2,402	21	1,991	454	800	6,584	314	NY (2), NYC (5), TX (4), CA (19)
Novel influenza A virus infections[†††]	—	1	0	43,774	2	4	NN	NN	
Plague	—	1	0	8	3	7	17	8	
Poliomyelitis, paralytic	—	—	0	1	—	—	—	1	
Polio virus Infection, nonparalytic[§]	—	—	—	—	—	—	NN	NN	
Psittacosis[§]	—	4	0	9	8	12	21	16	
Q fever, total[§],[§§§]	1	88	2	114	120	171	169	136	
acute	1	69	1	94	106	—	—	—	CA (1)
chronic	—	19	0	20	14	—	—	—	
Rabies, human	—	1	0	4	2	1	3	2	
Rubella[¶¶]	—	6	0	3	16	12	11	11	
Rubella, congenital syndrome	—	—	—	2	—	—	1	1	
SARS-CoV[§],[****]	—	—	—	—	—	—	—	—	
Smallpox[§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome[§]	—	127	1	161	157	132	125	129	
Syphilis, congenital (age <1 yr)[††††]	—	146	8	423	431	430	349	329	
Tetanus	—	6	1	18	19	28	41	27	
Toxic-shock syndrome (staphylococcal)[§]	1	57	1	74	71	92	101	90	CA (1)
Trichinellosis	—	2	0	13	39	5	15	16	
Tularemia	5	80	3	93	123	137	95	154	MO (1), NC (1), OK (2), WA (1)
Typhoid fever	3	283	10	397	449	434	353	324	OR (1), CA (2)
Vancomycin-intermediate *Staphylococcus aureus*[§]	—	66	1	78	63	37	6	2	
Vancomycin-resistant *Staphylococcus aureus*[§]	—	1	—	1	—	2	1	3	
Vibriosis (noncholera *Vibrio* species infections)[§]	13	586	12	789	588	549	NN	NN	MD (1), VA (2), NC (3), FL (2), WA (2), CA (3)
Viral hemorrhagic fever[§§§§]	—	1	—	NN	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending October 2, 2010 (39th week)*

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

* Incidence data for reporting year 2010 is provisional, whereas data for 2005 through 2009 are finalized.
† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/ncphi/disss/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 domestic 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/ncphi/disss/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 monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.
§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since April 26, 2009, a total of 286 influenza-associated pediatric deaths associated with 2009 influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 281 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 133 influenza-associated pediatric deaths occurring during the 2008-09 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 one case of novel influenza A virus infection reported to CDC during 2010 was identified as swine influenza A (H3N2) virus and is unrelated to 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).
§§§ In 2009, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.
¶¶¶ No rubella cases were reported for the current week.
**** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.
†††† 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. 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 October 2, 2010, with historical data
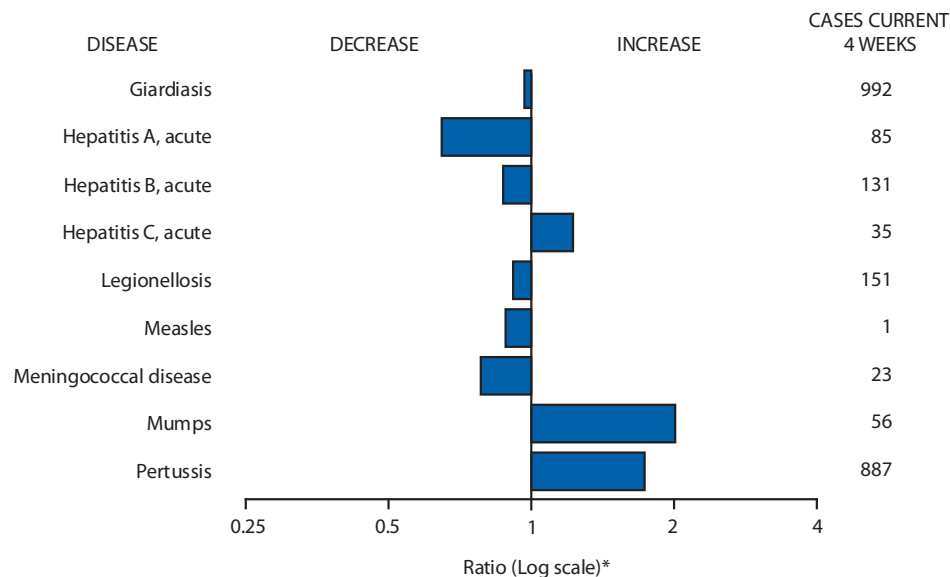
* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2010, and October 3, 2009 (39th week)*

Reporting area	*Chlamydia trachomatis* infection					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	13,350	23,409	26,181	881,293	944,208	104	124	312	5,815	5,694
New England	646	745	1,396	29,625	30,310	3	8	72	364	370
Connecticut	—	216	736	7,172	8,744	—	0	66	66	38
Maine[†]	61	50	75	1,934	1,792	—	1	7	66	43
Massachusetts	422	398	668	15,178	14,482	—	2	8	120	150
New Hampshire	48	41	115	1,786	1,632	—	1	5	44	66
Rhode Island[†]	71	66	120	2,616	2,801	—	0	4	9	17
Vermont[†]	44	24	63	939	859	3	1	9	59	56
Mid. Atlantic	3,049	3,279	4,619	127,682	117,843	13	15	37	622	650
New Jersey	491	491	691	19,621	18,399	—	0	3	—	44
New York (Upstate)	743	674	2,530	25,605	23,179	6	3	16	171	175
New York City	1,297	1,201	2,143	47,237	43,503	—	1	5	59	68
Pennsylvania	518	890	1,092	35,219	32,762	7	9	26	392	363
E.N. Central	825	3,507	4,127	127,953	152,800	22	31	107	1,535	1,353
Illinois	—	807	1,225	25,774	46,699	—	3	15	145	126
Indiana	—	347	786	14,133	17,797	—	4	10	133	226
Michigan	577	896	1,420	35,967	35,160	3	5	17	255	220
Ohio	178	960	1,078	36,388	37,127	16	7	24	373	305
Wisconsin	70	413	500	15,691	16,017	3	10	53	629	476
W.N. Central	102	1,332	1,592	49,581	54,196	15	24	81	1,075	863
Iowa	7	186	289	7,355	7,451	—	4	22	261	173
Kansas	7	185	235	6,988	8,232	1	2	9	112	84
Minnesota	—	273	337	10,041	11,022	—	1	20	98	238
Missouri	—	489	606	17,823	19,763	10	4	30	311	156
Nebraska[†]	73	95	237	3,727	4,170	4	2	27	198	90
North Dakota	—	35	93	1,375	1,305	—	0	18	19	7
South Dakota	15	60	82	2,272	2,253	—	2	6	76	115
S. Atlantic	2,887	4,472	5,681	169,281	191,433	19	19	51	789	861
Delaware	85	84	220	3,294	3,559	—	0	2	7	8
District of Columbia	—	96	177	3,661	5,262	—	0	1	2	6
Florida	686	1,416	1,676	56,080	56,155	8	7	23	295	328
Georgia	—	327	1,323	12,198	30,447	3	5	31	233	281
Maryland[†]	—	444	1,031	15,735	17,007	—	1	3	29	34
North Carolina	620	802	1,562	31,246	31,728	7	1	12	62	91
South Carolina[†]	606	517	698	20,611	20,799	1	1	8	71	44
Virginia[†]	832	596	902	23,670	23,694	—	2	8	75	56
West Virginia	58	70	137	2,786	2,782	—	0	3	15	13
E.S. Central	830	1,714	2,415	66,015	71,022	4	4	17	217	175
Alabama[†]	—	485	673	18,971	20,359	—	1	10	93	53
Kentucky	245	288	642	11,544	9,638	4	1	6	65	48
Mississippi	406	395	780	14,436	18,251	—	0	3	12	16
Tennessee[†]	179	565	731	21,064	22,774	—	1	5	47	58
W.S. Central	1,869	2,989	4,578	118,087	124,260	9	8	39	317	421
Arkansas[†]	392	245	386	8,748	11,139	1	1	3	26	42
Louisiana	345	228	1,075	10,165	21,973	—	1	5	46	41
Oklahoma	66	258	1,375	11,640	11,171	2	1	9	69	96
Texas[†]	1,066	2,222	3,200	87,534	79,977	6	4	30	176	242
Mountain	1,260	1,529	2,081	57,169	59,927	7	10	28	425	456
Arizona	676	504	713	19,667	19,768	—	0	3	27	27
Colorado	251	378	709	13,745	14,287	4	2	8	107	120
Idaho[†]	81	69	200	2,940	2,751	2	2	6	74	74
Montana[†]	48	58	76	2,260	2,291	—	1	4	38	47
Nevada[†]	—	170	337	7,026	7,858	1	0	6	30	19
New Mexico[†]	191	171	453	5,909	6,801	—	2	10	86	116
Utah	—	116	175	4,146	4,696	—	1	4	50	34
Wyoming[†]	13	38	79	1,476	1,475	—	0	2	13	19
Pacific	1,882	3,602	5,350	135,900	142,417	12	12	28	471	545
Alaska	—	109	148	4,383	4,026	—	0	1	2	6
California	1,507	2,749	4,406	104,733	108,899	7	7	19	269	321
Hawaii	—	112	158	4,144	4,627	—	0	0	—	1
Oregon	72	207	468	8,180	8,327	2	3	13	135	156
Washington	303	389	497	14,460	16,538	3	2	8	65	61
Territories										
American Samoa	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	4	31	201	293	—	0	0	—	—
Puerto Rico	118	93	265	4,051	5,731	N	0	0	N	N
U.S. Virgin Islands	—	10	29	323	396	—	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.
* Incidence data for reporting year 2010 is provisional. Data for HIV/AIDS, AIDS, and TB, when available, 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 October 2, 2010, and October 3, 2009 (39th week)*

	Dengue Virus Infection									
	Dengue Fever[†]					Dengue Hemorrhagic Fever[§]				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
Reporting area		Med	Max				Med	Max		
United States	—	4	26	315	NN	—	0	1	2	NN
New England	—	0	2	4	NN	—	0	0	—	NN
Connecticut	—	0	0	—	NN	—	0	0	—	NN
Maine[¶]	—	0	2	3	NN	—	0	0	—	NN
Massachusetts	—	0	0	—	NN	—	0	0	—	NN
New Hampshire	—	0	0	—	NN	—	0	0	—	NN
Rhode Island[¶]	—	0	0	—	NN	—	0	0	—	NN
Vermont[¶]	—	0	1	1	NN	—	0	0	—	NN
Mid. Atlantic	—	0	9	74	NN	—	0	0	—	NN
New Jersey	—	0	0	—	NN	—	0	0	—	NN
New York (Upstate)	—	0	0	—	NN	—	0	0	—	NN
New York City	—	0	7	62	NN	—	0	0	—	NN
Pennsylvania	—	0	2	12	NN	—	0	0	—	NN
E.N. Central	—	0	5	32	NN	—	0	0	—	NN
Illinois	—	0	0	—	NN	—	0	0	—	NN
Indiana	—	0	2	10	NN	—	0	0	—	NN
Michigan	—	0	2	7	NN	—	0	0	—	NN
Ohio	—	0	2	10	NN	—	0	0	—	NN
Wisconsin	—	0	2	5	NN	—	0	0	—	NN
W.N. Central	—	0	2	14	NN	—	0	0	—	NN
Iowa	—	0	1	1	NN	—	0	0	—	NN
Kansas	—	0	1	1	NN	—	0	0	—	NN
Minnesota	—	0	2	11	NN	—	0	0	—	NN
Missouri	—	0	0	—	NN	—	0	0	—	NN
Nebraska[¶]	—	0	0	—	NN	—	0	0	—	NN
North Dakota	—	0	1	1	NN	—	0	0	—	NN
South Dakota	—	0	0	—	NN	—	0	0	—	NN
S. Atlantic	—	1	16	155	NN	—	0	1	1	NN
Delaware	—	0	0	—	NN	—	0	0	—	NN
District of Columbia	—	0	0	—	NN	—	0	0	—	NN
Florida	—	1	14	132	NN	—	0	1	1	NN
Georgia	—	0	2	9	NN	—	0	0	—	NN
Maryland[¶]	—	0	0	—	NN	—	0	0	—	NN
North Carolina	—	0	1	3	NN	—	0	0	—	NN
South Carolina[¶]	—	0	3	9	NN	—	0	0	—	NN
Virginia[¶]	—	0	0	—	NN	—	0	0	—	NN
West Virginia	—	0	1	2	NN	—	0	0	—	NN
E.S. Central	—	0	1	3	NN	—	0	0	—	NN
Alabama[¶]	—	0	1	1	NN	—	0	0	—	NN
Kentucky	—	0	0	—	NN	—	0	0	—	NN
Mississippi	—	0	1	1	NN	—	0	0	—	NN
Tennessee[¶]	—	0	1	1	NN	—	0	0	—	NN
W.S. Central	—	0	1	1	NN	—	0	1	1	NN
Arkansas[¶]	—	0	0	—	NN	—	0	1	1	NN
Louisiana	—	0	0	—	NN	—	0	0	—	NN
Oklahoma	—	0	1	1	NN	—	0	0	—	NN
Texas[¶]	—	0	0	—	NN	—	0	0	—	NN
Mountain	—	0	2	13	NN	—	0	0	—	NN
Arizona	—	0	1	4	NN	—	0	0	—	NN
Colorado	—	0	0	—	NN	—	0	0	—	NN
Idaho[¶]	—	0	1	2	NN	—	0	0	—	NN
Montana[¶]	—	0	1	2	NN	—	0	0	—	NN
Nevada[¶]	—	0	1	4	NN	—	0	0	—	NN
New Mexico[¶]	—	0	1	1	NN	—	0	0	—	NN
Utah	—	0	0	—	NN	—	0	0	—	NN
Wyoming[¶]	—	0	0	—	NN	—	0	0	—	NN
Pacific	—	0	5	19	NN	—	0	0	—	NN
Alaska	—	0	0	—	NN	—	0	0	—	NN
California	—	0	5	11	NN	—	0	0	—	NN
Hawaii	—	0	0	—	NN	—	0	0	—	NN
Oregon	—	0	0	—	NN	—	0	0	—	NN
Washington	—	0	2	8	NN	—	0	0	—	NN
Territories										
American Samoa	—	0	0	—	NN	—	0	0	—	NN
C.N.M.I.	—	—	—	—	NN	—	—	—	—	NN
Guam	—	0	0	—	NN	—	0	0	—	NN
Puerto Rico	—	91	534	7,484	NN	—	0	3	29	NN
U.S. Virgin Islands	—	0	0	—	NN	—	0	0	—	NN

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* Incidence data for reporting year 2010 is provisional.
[†] 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 October 2, 2010, and October 3, 2009 (39th week)*

	Ehrlichiosis/Anaplasmosis[†]														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
Reporting area		Med	Max				Med	Max				Med	Max		
United States	7	11	181	492	791	5	12	309	562	727	1	2	35	89	151
New England	—	0	3	3	41	—	1	17	57	208	—	0	2	7	2
Connecticut	—	0	0	—	—	—	0	13	18	3	—	0	2	5	—
Maine[§]	—	0	1	2	3	—	0	2	14	12	—	0	0	—	—
Massachusetts	—	0	0	—	9	—	0	4	—	83	—	0	0	—	—
New Hampshire	—	0	1	1	4	—	0	3	11	15	—	0	1	2	1
Rhode Island[§]	—	0	2	—	24	—	0	7	14	95	—	0	0	—	1
Vermont[§]	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	1	15	39	154	4	3	17	164	242	—	0	2	4	43
New Jersey	—	0	4	—	89	—	0	2	1	62	—	0	0	—	—
New York (Upstate)	—	1	15	24	42	4	3	17	160	173	—	0	1	4	5
New York City	—	0	3	14	9	—	0	1	3	6	—	0	0	—	1
Pennsylvania	—	0	5	1	14	—	0	1	—	1	—	0	1	—	37
E.N. Central	—	0	4	25	81	—	2	33	264	250	1	1	5	55	64
Illinois	—	0	2	10	33	—	0	1	1	6	—	0	2	4	3
Indiana	—	0	0	—	—	—	0	0	—	—	1	0	3	29	35
Michigan	—	0	1	2	4	—	0	0	—	—	—	0	1	3	—
Ohio	—	0	3	6	12	—	0	1	1	1	—	0	0	—	2
Wisconsin	—	0	3	7	32	—	2	33	262	243	—	0	3	19	24
W.N. Central	1	2	13	113	143	—	0	261	8	7	—	0	30	12	16
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	1	6	6	—	0	0	—	1	—	0	0	—	—
Minnesota	—	0	6	—	1	—	0	261	—	3	—	0	30	—	3
Missouri	—	1	13	105	134	—	0	3	8	2	—	0	3	12	13
Nebraska[§]	1	0	1	2	2	—	0	0	—	1	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	5	4	19	214	225	1	1	7	51	14	—	0	1	4	2
Delaware	—	0	3	16	19	—	0	1	4	2	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	2	8	10	—	0	1	3	3	—	0	0	—	—
Georgia	—	0	4	18	17	—	0	1	1	1	—	0	1	1	—
Maryland[§]	—	0	3	20	36	1	0	2	12	3	—	0	1	2	—
North Carolina	4	1	13	86	59	—	0	4	18	3	—	0	0	—	—
South Carolina[§]	—	0	2	3	9	—	0	1	1	—	—	0	0	—	—
Virginia[§]	1	1	13	63	74	—	0	2	12	2	—	0	1	1	2
West Virginia	—	0	0	—	1	—	0	0	—	—	—	0	1	—	—
E.S. Central	1	1	10	77	114	—	0	2	16	3	—	0	2	6	24
Alabama[§]	—	0	3	10	6	—	0	2	7	1	—	0	0	—	—
Kentucky	—	0	2	11	10	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	3	6	—	0	1	1	—	—	0	0	—	—
Tennessee[§]	1	1	10	53	92	—	0	2	8	2	—	0	2	6	24
W.S. Central	—	0	141	20	30	—	0	23	2	1	—	0	1	1	—
Arkansas[§]	—	0	34	2	4	—	0	6	—	—	—	0	0	—	—
Louisiana	—	0	1	1	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	105	14	24	—	0	16	2	1	—	0	0	—	—
Texas[§]	—	0	2	3	2	—	0	1	—	—	—	0	1	1	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho[§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana[§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada[§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico[§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming[§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	1	3	—	0	0	—	2	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	1	3	—	0	0	—	2	—	0	1	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
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.
* Incidence data for reporting year 2010 is provisional.
[†] Cumulative total *E. ewingii* cases reported for year 2010 = 10.
[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2010, and October 3, 2009 (39th week)*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive[†] All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	251	345	666	13,170	14,153	3,126	5,454	6,319	204,582	230,273	21	59	171	2,170	2,219
New England	5	31	65	1,143	1,335	83	103	196	3,973	3,691	1	3	21	123	151
Connecticut	1	5	13	224	232	—	44	169	1,706	1,744	—	0	15	25	42
Maine[§]	1	4	12	162	176	5	3	11	133	104	—	0	2	10	17
Massachusetts	—	12	33	463	576	67	44	81	1,764	1,471	—	2	8	65	73
New Hampshire	—	3	9	115	157	2	3	7	113	82	—	0	2	9	8
Rhode Island[§]	—	1	7	35	46	8	5	13	210	258	—	0	1	7	7
Vermont[§]	3	4	12	144	148	1	0	17	47	32	1	0	1	7	4
Mid. Atlantic	38	60	106	2,230	2,613	682	674	941	26,508	23,659	4	11	34	423	443
New Jersey	—	6	13	193	336	122	102	161	4,102	3,584	—	2	7	68	104
New York (Upstate)	32	22	84	849	980	116	104	422	4,202	4,331	2	3	20	111	108
New York City	—	16	31	632	642	271	227	394	9,190	8,187	—	2	6	83	54
Pennsylvania	6	15	30	556	655	173	219	330	9,014	7,557	2	4	9	161	177
E.N. Central	26	52	78	2,086	2,229	223	936	1,260	34,828	48,918	2	10	20	361	344
Illinois	—	11	20	380	485	—	182	380	5,920	15,586	—	2	9	99	132
Indiana	—	5	14	191	227	—	92	218	3,979	5,806	—	1	6	68	61
Michigan	5	13	23	510	502	126	245	472	9,860	11,424	—	0	4	26	18
Ohio	20	16	23	631	622	77	315	372	11,655	12,113	2	2	6	92	77
Wisconsin	1	9	21	374	393	20	92	155	3,414	3,989	—	2	5	76	56
W.N. Central	18	26	165	1,101	1,236	23	271	367	10,037	11,416	3	3	24	130	129
Iowa	4	5	11	220	239	5	32	53	1,255	1,280	—	0	1	1	—
Kansas	2	4	10	172	120	1	38	83	1,437	1,967	—	0	2	12	13
Minnesota	—	0	135	136	250	—	38	62	1,410	1,788	—	0	17	25	44
Missouri	9	8	24	321	399	—	122	172	4,677	4,985	3	1	6	65	46
Nebraska[§]	3	4	9	169	134	17	23	50	883	1,040	—	0	2	17	21
North Dakota	—	0	8	19	8	—	2	11	94	93	—	0	4	10	5
South Dakota	—	2	7	64	86	—	6	16	281	263	—	0	0	—	—
S. Atlantic	77	75	143	2,874	2,747	770	1,274	1,651	49,026	57,214	7	14	27	590	610
Delaware	—	0	5	25	19	17	18	48	750	722	—	0	1	5	3
District of Columbia	—	1	4	28	54	—	38	65	1,405	2,060	—	0	1	2	3
Florida	58	39	87	1,622	1,455	213	378	471	15,145	16,293	5	3	9	139	185
Georgia	—	12	51	485	556	—	133	494	4,263	10,297	—	3	9	136	119
Maryland[§]	7	5	11	205	211	—	130	237	4,540	4,647	—	1	6	51	73
North Carolina	N	0	0	N	N	161	259	596	10,452	10,838	—	3	9	105	75
South Carolina[§]	4	2	9	114	80	185	153	233	6,240	6,512	—	2	7	67	59
Virginia[§]	8	9	36	365	333	186	163	271	5,847	5,453	1	2	4	65	68
West Virginia	—	1	5	30	39	8	9	20	384	392	1	0	5	20	25
E.S. Central	—	6	15	187	320	217	475	698	17,892	20,533	2	3	12	132	137
Alabama[§]	—	4	8	134	154	—	141	217	5,516	5,807	—	0	3	21	34
Kentucky	N	0	0	N	N	54	76	156	2,998	2,809	—	0	2	26	19
Mississippi	N	0	0	N	N	123	111	216	4,042	5,715	—	0	2	10	7
Tennessee[§]	—	2	10	53	166	40	144	195	5,336	6,202	2	2	10	75	77
W.S. Central	5	8	18	275	390	593	811	1,236	31,796	36,370	1	2	20	99	97
Arkansas[§]	5	2	9	95	111	111	73	133	2,674	3,443	—	0	3	13	15
Louisiana	—	3	9	117	157	195	68	441	2,980	7,170	—	0	3	17	17
Oklahoma	—	2	7	63	122	18	80	359	3,394	3,523	—	1	15	61	61
Texas[§]	N	0	0	N	N	269	573	963	22,748	22,234	1	0	2	8	4
Mountain	35	30	47	1,211	1,262	142	179	262	6,729	7,104	—	5	15	223	193
Arizona	6	3	6	119	160	69	63	109	2,310	2,349	—	2	10	83	63
Colorado	24	13	27	524	374	37	52	94	1,951	2,137	—	1	5	65	54
Idaho[§]	4	4	9	161	147	2	2	6	85	81	—	0	2	13	3
Montana[§]	—	2	11	78	100	1	2	6	85	59	—	0	1	2	1
Nevada[§]	—	1	11	76	92	—	28	94	1,253	1,381	—	0	2	6	16
New Mexico[§]	1	2	5	69	101	33	19	41	798	813	—	1	5	32	26
Utah	—	4	11	154	239	—	6	15	222	229	—	0	4	16	27
Wyoming[§]	—	1	5	30	49	—	1	4	25	55	—	0	2	6	3
Pacific	47	54	133	2,063	2,021	393	590	811	23,793	21,368	1	2	9	89	115
Alaska	—	2	5	74	90	—	23	37	949	733	—	0	2	18	13
California	28	33	61	1,284	1,321	337	484	693	19,698	17,590	—	0	4	12	39
Hawaii	—	0	4	24	18	—	14	21	514	484	—	0	2	6	27
Oregon	10	9	23	375	309	4	19	43	722	819	1	1	5	49	33
Washington	9	8	75	306	283	52	48	66	1,910	1,742	—	0	4	4	3
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	2	3	—	0	4	23	18	—	0	0	—	—
Puerto Rico	—	1	8	56	132	8	5	14	208	189	—	0	1	1	4
U.S. Virgin Islands	—	0	0	—	—	—	2	7	78	97	—	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.

* Incidence data for reporting year 2010 is provisional.

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

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2010, and October 3, 2009 (39th week)*

	Hepatitis (viral, acute), by type														
	A					**B**					**C**				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
Reporting area		Med	Max				Med	Max				Med	Max		
United States	14	30	69	1,121	1,533	26	59	204	2,279	2,493	6	15	44	613	553
New England	—	2	5	73	90	—	1	5	42	44	1	1	4	29	49
Connecticut	—	0	3	23	18	—	0	2	15	13	—	0	3	19	38
Maine[†]	—	0	1	7	1	—	0	2	11	10	—	0	1	—	1
Massachusetts	—	1	4	36	55	—	0	2	8	17	—	0	1	9	9
New Hampshire	—	0	1	1	7	—	0	2	6	4	N	0	0	N	N
Rhode Island[†]	—	0	4	6	7	U	0	0	U	U	U	0	0	U	U
Vermont[†]	—	0	0	—	2	—	0	1	2	—	1	0	0	1	1
Mid. Atlantic	5	4	8	146	218	1	5	10	213	264	—	2	6	80	79
New Jersey	—	0	3	11	57	—	1	5	54	80	—	0	2	7	5
New York (Upstate)	3	1	4	46	38	—	1	6	39	43	—	1	4	49	36
New York City	—	1	4	48	65	—	1	4	62	53	—	0	1	—	5
Pennsylvania	2	1	4	41	58	1	1	5	58	88	—	0	3	24	33
E.N. Central	2	4	8	151	236	—	8	17	354	340	1	2	8	98	69
Illinois	—	1	3	32	109	—	2	6	61	88	—	0	1	1	4
Indiana	—	0	2	15	16	—	1	5	46	55	—	0	2	21	14
Michigan	—	1	4	44	54	—	3	6	93	106	1	1	6	62	25
Ohio	2	0	5	37	34	—	2	6	80	72	—	0	1	8	23
Wisconsin	—	0	3	23	23	—	1	8	74	19	—	0	1	6	3
W.N. Central	—	1	13	61	89	—	2	15	85	106	—	0	11	15	15
Iowa	—	0	3	5	29	—	0	2	11	28	—	0	1	1	9
Kansas	—	0	2	10	7	—	0	2	5	5	—	0	1	1	1
Minnesota	—	0	12	13	14	—	0	13	6	17	—	0	9	6	2
Missouri	—	0	2	20	18	—	1	3	51	36	—	0	1	5	—
Nebraska[†]	—	0	4	12	18	—	0	2	11	17	—	0	1	2	2
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	1	3	—	0	1	1	3	—	0	0	—	1
S. Atlantic	3	8	14	271	329	8	16	40	658	689	1	4	8	137	125
Delaware	—	0	1	6	3	—	1	2	20	24	U	0	0	U	U
District of Columbia	—	0	1	1	1	—	0	1	3	10	—	0	1	2	1
Florida	2	3	7	105	141	3	6	12	227	222	—	1	6	48	33
Georgia	—	1	3	31	37	4	2	7	111	117	—	0	2	6	29
Maryland[†]	1	0	4	22	36	1	1	6	48	61	—	0	2	20	17
North Carolina	—	0	5	43	34	—	1	16	79	89	—	1	3	35	18
South Carolina[†]	—	1	4	22	48	—	1	4	45	42	—	0	1	1	1
Virginia[†]	—	1	6	39	27	—	1	14	77	72	1	0	2	11	7
West Virginia	—	0	2	2	2	—	0	14	48	52	—	0	5	14	19
E.S. Central	—	1	3	32	33	1	7	13	257	252	2	3	7	113	77
Alabama[†]	—	0	1	5	8	—	1	5	46	73	—	0	2	5	5
Kentucky	—	0	2	13	8	1	2	8	93	59	1	2	5	79	46
Mississippi	—	0	1	2	8	—	0	3	24	22	U	0	0	U	U
Tennessee[†]	—	0	2	12	9	—	2	8	94	98	1	0	4	29	26
W.S. Central	1	2	19	93	149	6	10	109	357	441	—	1	14	54	43
Arkansas[†]	—	0	3	—	7	—	0	4	32	54	—	0	1	—	1
Louisiana	—	0	2	7	5	—	1	4	38	53	—	0	1	5	6
Oklahoma	—	0	3	—	3	2	2	19	73	78	—	0	12	19	12
Texas[†]	1	2	18	86	134	4	5	87	214	256	—	1	3	30	24
Mountain	2	3	8	119	129	2	2	8	92	107	1	1	5	38	37
Arizona	2	1	5	58	55	1	0	2	23	38	U	0	0	U	U
Colorado	—	1	3	25	42	1	0	3	21	21	1	0	2	7	23
Idaho[†]	—	0	2	6	3	—	0	1	6	10	—	0	2	8	2
Montana[†]	—	0	1	4	6	—	0	1	1	—	—	0	0	—	1
Nevada[†]	—	0	2	12	9	—	1	3	33	25	—	0	1	3	3
New Mexico[†]	—	0	1	3	7	—	0	1	3	5	—	0	2	10	5
Utah	—	0	2	8	5	—	0	1	5	4	—	0	2	10	3
Wyoming[†]	—	0	3	3	2	—	0	0	—	4	—	0	0	—	—
Pacific	1	5	16	175	260	8	6	20	221	250	—	1	6	49	59
Alaska	—	0	1	1	2	—	0	1	2	2	U	0	2	U	U
California	1	4	15	142	205	5	4	17	150	180	—	0	4	21	31
Hawaii	—	0	2	2	8	—	0	1	1	5	U	0	0	U	U
Oregon	—	0	2	15	12	—	1	4	32	30	—	0	3	10	15
Washington	—	0	2	15	33	3	1	4	36	33	—	0	6	18	13
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	6	14	4	—	1	6	33	48	—	0	6	27	37
Puerto Rico	—	0	1	9	21	—	0	5	15	26	—	0	0	—	—
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.
* Incidence data for reporting year 2010 is provisional.
[†] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2010, and October 3, 2009 (39th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	45	58	108	2,206	2,571	199	407	2,336	20,269	31,224	24	25	89	1,036	1,080
New England	1	3	11	145	163	20	121	416	5,650	10,848	—	1	4	52	47
Connecticut	1	0	4	32	45	—	36	194	1,929	3,699	—	0	1	1	5
Maine[†]	—	0	2	9	7	18	12	76	567	692	—	0	1	5	2
Massachusetts	—	1	7	77	82	—	39	161	1,876	4,714	—	1	3	37	29
New Hampshire	—	0	5	13	11	2	22	62	963	1,194	—	0	1	2	4
Rhode Island[†]	—	0	3	5	11	—	0	11	45	203	—	0	1	4	4
Vermont[†]	—	0	2	9	7	—	4	26	270	346	—	0	1	3	3
Mid. Atlantic	16	16	31	563	938	110	188	684	9,805	13,591	4	7	17	276	320
New Jersey	—	2	8	52	172	—	45	186	2,468	4,435	—	0	4	1	83
New York (Upstate)	13	5	19	197	281	85	55	577	2,349	3,242	2	1	6	61	40
New York City	—	2	8	91	192	—	1	24	37	899	—	4	14	171	153
Pennsylvania	3	6	16	223	293	25	74	370	4,951	5,015	2	1	3	43	44
E.N. Central	11	11	35	499	549	—	20	154	1,529	2,689	1	2	9	111	143
Illinois	—	1	10	76	97	—	1	14	91	131	—	1	7	37	60
Indiana	2	2	6	83	47	—	1	7	63	76	—	0	2	7	20
Michigan	2	3	19	123	120	—	1	14	88	89	—	0	4	25	23
Ohio	7	4	12	173	221	—	0	5	22	43	1	0	5	34	31
Wisconsin	—	1	11	44	64	—	18	129	1,265	2,350	—	0	1	8	9
W.N. Central	—	2	19	85	90	—	3	1,395	101	196	1	1	11	57	53
Iowa	—	0	2	12	20	—	1	10	71	103	—	0	2	9	10
Kansas	—	0	2	7	6	—	0	1	6	18	—	0	2	9	6
Minnesota	—	0	16	23	8	—	0	1,380	—	68	—	0	11	3	21
Missouri	—	0	4	26	44	—	0	1	1	3	1	0	3	18	9
Nebraska[†]	—	0	2	8	10	—	0	2	9	3	—	0	2	15	6
North Dakota	—	0	1	4	1	—	0	15	13	—	—	0	1	—	—
South Dakota	—	0	1	5	1	—	0	1	1	1	—	0	2	3	1
S. Atlantic	9	11	26	400	404	61	60	166	2,873	3,533	10	6	36	274	280
Delaware	—	0	3	13	15	4	12	31	514	834	—	0	1	2	4
District of Columbia	1	0	4	13	17	—	0	4	18	52	—	0	3	8	12
Florida	2	4	9	138	133	6	2	11	80	66	4	2	7	101	78
Georgia	—	1	4	35	42	—	0	2	8	36	—	0	2	3	58
Maryland[†]	—	3	12	85	99	47	25	74	1,205	1,732	2	1	19	65	60
North Carolina	6	0	7	46	45	—	1	9	71	84	4	0	13	39	21
South Carolina[†]	—	0	2	9	8	—	1	3	26	29	—	0	1	3	3
Virginia[†]	—	1	6	50	39	4	15	79	862	601	—	1	5	51	42
West Virginia	—	0	3	11	6	—	0	33	89	99	—	0	2	2	2
E.S. Central	—	2	10	97	104	—	1	4	39	29	—	0	3	24	28
Alabama[†]	—	0	2	12	13	—	0	1	2	2	—	0	1	6	8
Kentucky	—	0	4	22	40	—	0	1	4	1	—	0	3	6	8
Mississippi	—	0	3	9	4	—	0	0	—	—	—	0	2	2	3
Tennessee[†]	—	1	6	54	47	—	1	4	33	26	—	0	2	10	9
W.S. Central	1	3	14	99	82	1	2	44	74	164	2	1	31	64	51
Arkansas[†]	—	0	2	11	7	—	0	0	—	—	—	0	1	1	4
Louisiana	—	0	3	5	8	—	0	1	2	—	—	0	1	2	5
Oklahoma	—	0	4	11	3	—	0	2	—	—	—	0	1	5	1
Texas[†]	1	2	10	72	64	1	2	42	72	164	2	1	30	56	41
Mountain	—	3	10	119	106	—	0	3	19	47	2	1	3	47	43
Arizona	—	1	5	39	35	—	0	1	4	4	1	0	2	21	8
Colorado	—	1	5	27	17	—	0	1	2	1	1	0	2	15	24
Idaho[†]	—	0	1	5	4	—	0	1	5	13	—	0	1	1	2
Montana[†]	—	0	1	4	5	—	0	1	1	3	—	0	1	2	5
Nevada[†]	—	0	2	18	12	—	0	1	—	12	—	0	1	4	—
New Mexico[†]	—	0	2	6	7	—	0	2	5	4	—	0	1	1	—
Utah	—	0	3	15	22	—	0	1	2	8	—	0	1	3	4
Wyoming[†]	—	0	2	5	4	—	0	1	—	2	—	0	0	—	—
Pacific	7	5	19	199	135	7	4	10	179	127	4	3	19	131	115
Alaska	—	0	2	2	1	—	0	1	5	5	—	0	1	2	2
California	7	4	19	172	102	5	3	10	121	81	4	2	13	91	85
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	1	1
Oregon	—	0	3	10	13	—	1	4	44	31	—	0	1	9	11
Washington	—	0	4	14	18	2	0	3	9	10	—	0	5	28	16
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	2	4	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2010, and October 3, 2009 (39th week)*

Reporting area	Meningococcal disease, invasive[†] All groups					Pertussis					Rabies, animal				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	7	16	43	557	718	227	291	1,756	13,175	11,946	12	70	144	2,601	4,116
New England	—	0	2	13	27	—	8	20	325	526	2	4	24	177	250
Connecticut	—	0	2	2	3	—	1	8	80	41	—	0	22	59	101
Maine[§]	—	0	1	3	4	—	0	5	35	75	1	1	4	49	43
Massachusetts	—	0	1	3	12	—	4	11	164	301	—	0	0	—	—
New Hampshire	—	0	1	—	3	—	0	3	13	64	—	0	5	11	27
Rhode Island[§]	—	0	0	—	4	—	0	8	22	35	—	0	2	14	35
Vermont[§]	—	0	1	5	1	—	0	4	11	10	1	1	5	44	44
Mid. Atlantic	—	1	4	45	80	41	22	63	1,019	908	8	16	41	779	474
New Jersey	—	0	2	9	15	—	3	8	82	185	—	0	0	—	—
New York (Upstate)	—	0	3	9	17	22	8	27	375	161	8	9	19	404	359
New York City	—	0	2	12	13	4	0	11	66	66	—	2	12	112	15
Pennsylvania	—	0	2	15	35	15	9	39	496	496	—	5	24	263	100
E.N. Central	2	2	8	99	129	56	68	169	3,346	2,509	1	2	38	259	210
Illinois	—	0	4	17	33	—	11	29	536	541	1	1	22	158	79
Indiana	—	0	3	22	28	—	9	26	426	287	—	0	0	—	25
Michigan	1	0	2	15	18	10	22	48	936	657	—	1	5	58	62
Ohio	1	1	2	25	31	46	20	69	1,139	885	—	0	12	43	44
Wisconsin	—	0	2	20	19	—	6	16	309	139	—	0	0	—	—
W.N. Central	—	1	6	40	56	12	27	627	1,401	1,755	1	5	16	197	321
Iowa	—	0	3	9	7	—	6	25	310	182	—	0	2	7	28
Kansas	—	0	2	6	10	—	3	9	120	198	1	1	4	53	64
Minnesota	—	0	2	2	10	6	0	601	486	366	—	0	9	26	49
Missouri	—	0	3	16	20	2	8	25	269	837	—	1	6	59	59
Nebraska[§]	—	0	2	5	6	4	2	13	152	119	—	1	4	43	72
North Dakota	—	0	1	2	1	—	0	30	38	17	—	0	7	9	4
South Dakota	—	0	2	—	2	—	1	5	26	36	—	0	2	—	45
S. Atlantic	1	3	7	108	131	25	26	77	1,144	1,308	—	22	85	826	1,716
Delaware	1	0	1	2	2	—	0	4	9	12	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	1	4	5	—	0	0	—	—
Florida	—	1	5	49	42	10	5	28	249	429	—	0	72	72	161
Georgia	—	0	2	9	26	2	3	18	179	195	—	0	13	—	321
Maryland[§]	—	0	1	5	9	2	2	8	88	115	—	6	13	276	319
North Carolina	—	0	2	14	25	—	1	32	124	161	—	0	12	—	391
South Carolina[§]	—	0	1	10	11	2	5	19	278	208	—	0	0	—	—
Virginia[§]	—	0	2	17	11	—	5	15	155	158	—	10	25	421	433
West Virginia	—	0	2	2	5	9	1	8	58	25	—	1	6	57	91
E.S. Central	1	1	4	29	25	4	13	29	557	661	—	3	7	120	120
Alabama[§]	—	0	2	5	7	1	4	8	152	258	—	0	4	38	—
Kentucky	—	0	2	13	4	1	4	13	194	193	—	0	4	16	40
Mississippi	—	0	1	3	3	—	1	6	48	56	—	0	1	1	4
Tennessee[§]	1	0	2	8	11	2	4	10	163	154	—	1	4	65	76
W.S. Central	1	1	9	65	66	37	57	753	2,162	2,491	—	1	33	61	720
Arkansas[§]	—	0	2	5	6	—	3	29	119	285	—	0	7	21	38
Louisiana	—	0	4	12	13	—	1	4	24	129	—	0	0	—	—
Oklahoma	1	0	7	15	8	2	0	41	51	39	—	0	30	40	30
Texas[§]	—	1	7	33	39	35	49	681	1,968	2,038	—	0	26	—	652
Mountain	—	1	6	44	53	24	22	41	925	761	—	1	8	61	91
Arizona	—	0	2	11	12	—	7	14	281	189	—	0	5	—	—
Colorado	—	0	4	13	17	15	3	13	167	185	—	0	0	—	—
Idaho[§]	—	0	2	7	6	9	2	19	164	66	—	0	2	10	8
Montana[§]	—	0	1	1	5	—	1	12	58	43	—	0	3	15	25
Nevada[§]	—	0	1	8	4	—	0	7	26	23	—	0	1	4	6
New Mexico[§]	—	0	1	3	3	—	2	9	81	56	—	0	3	10	21
Utah	—	0	1	1	2	—	4	10	138	177	—	0	2	2	10
Wyoming[§]	—	0	1	—	4	—	0	2	10	22	—	0	4	20	21
Pacific	2	3	16	114	151	28	35	186	2,296	1,027	—	3	12	121	214
Alaska	—	0	1	1	6	—	0	6	32	36	—	0	2	12	11
California	2	1	13	76	98	—	23	166	1,670	512	—	2	12	99	192
Hawaii	—	0	1	1	5	—	0	6	37	34	—	0	0	—	—
Oregon	—	1	3	24	29	—	6	16	265	219	—	0	2	10	11
Washington	—	0	7	12	13	28	4	38	292	226	—	0	0	—	—
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	—	—	0	1	2	1	1	1	3	36	32
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.
* Incidence data for reporting year 2010 is provisional.
[†] Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2010, and October 3, 2009 (39th week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)[†]					Shigellosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	919	915	1,675	36,091	36,497	53	80	203	3,430	3,549	190	255	527	10,104	12,228
New England	3	29	405	1,716	1,858	1	3	49	158	214	—	4	58	255	291
Connecticut	—	0	389	389	430	—	0	49	49	67	—	0	52	52	43
Maine[§]	2	2	7	96	107	—	0	3	15	15	—	0	1	5	5
Massachusetts	—	21	48	945	919	—	2	8	62	79	—	4	16	179	200
New Hampshire	—	3	10	135	230	—	0	2	17	30	—	0	2	9	17
Rhode Island[§]	—	2	17	97	116	—	0	26	2	1	—	0	3	9	21
Vermont[§]	1	1	5	54	56	1	0	2	13	22	—	0	1	1	5
Mid. Atlantic	60	96	215	4,358	4,341	6	7	30	392	348	3	34	53	1,265	2,320
New Jersey	—	18	56	821	921	—	1	4	42	85	—	6	16	257	511
New York (Upstate)	44	24	78	1,121	1,021	5	3	15	154	112	3	4	19	176	174
New York City	—	24	56	1,001	1,003	—	1	7	57	52	—	6	13	228	357
Pennsylvania	16	29	80	1,415	1,396	1	2	13	139	99	—	16	35	604	1,278
E.N. Central	36	80	235	3,948	4,173	2	11	37	580	602	2	27	238	1,343	2,152
Illinois	—	26	113	1,337	1,193	—	1	8	85	146	—	8	228	646	501
Indiana	—	10	53	369	486	—	1	8	61	74	—	1	5	31	59
Michigan	9	15	41	714	785	—	2	16	139	114	—	4	9	183	188
Ohio	26	24	47	1,049	1,151	2	2	11	118	109	2	6	23	246	957
Wisconsin	1	10	43	479	558	—	3	16	177	159	—	5	21	237	447
W.N. Central	20	45	99	1,905	2,110	3	11	39	492	608	20	48	88	1,740	769
Iowa	2	8	35	408	328	—	2	16	134	140	1	1	5	43	47
Kansas	7	7	19	348	322	1	1	6	52	49	2	4	14	197	164
Minnesota	—	1	32	178	453	—	0	14	31	157	—	0	5	14	62
Missouri	10	12	44	643	518	1	3	27	194	115	17	42	75	1,450	464
Nebraska[§]	1	4	13	185	290	1	1	6	59	79	—	0	4	29	25
North Dakota	—	0	39	31	36	—	0	7	—	4	—	0	5	—	3
South Dakota	—	3	8	112	163	—	0	4	22	64	—	0	2	7	4
S. Atlantic	460	267	571	10,672	10,096	13	13	30	527	517	52	40	86	1,796	1,873
Delaware	3	3	11	139	102	—	0	2	4	11	—	1	10	37	97
District of Columbia	—	1	5	57	76	—	0	1	5	2	—	0	4	21	20
Florida	194	127	227	4,424	4,395	6	4	13	183	129	22	13	49	773	356
Georgia	48	40	129	1,863	1,821	3	1	15	85	53	11	13	34	543	492
Maryland[§]	19	15	52	791	612	1	1	6	68	73	3	3	8	98	319
North Carolina	93	29	144	1,292	1,424	1	1	7	46	88	12	2	17	143	333
South Carolina[§]	73	20	80	1,136	720	1	0	3	18	25	—	1	5	55	95
Virginia[§]	30	17	68	825	786	1	2	15	102	112	4	3	15	111	155
West Virginia	—	3	16	145	160	—	0	5	16	24	—	0	8	15	6
E.S. Central	24	51	164	2,520	2,376	—	4	11	186	170	2	11	40	506	640
Alabama[§]	1	14	43	597	677	—	1	4	36	39	—	3	10	111	120
Kentucky	13	8	30	439	369	—	1	6	47	59	—	4	28	188	157
Mississippi	—	13	63	760	722	—	0	2	12	6	—	1	4	34	39
Tennessee[§]	10	14	48	724	608	—	2	7	91	66	2	4	11	173	324
W.S. Central	173	115	547	4,231	4,234	8	5	68	217	232	58	47	251	1,804	2,297
Arkansas[§]	24	10	42	570	483	1	1	5	43	32	—	1	9	46	250
Louisiana	—	20	47	816	880	—	0	2	12	20	—	4	13	180	152
Oklahoma	26	10	46	497	488	1	0	27	19	23	3	6	96	218	226
Texas[§]	123	74	477	2,348	2,383	6	3	41	143	157	55	35	144	1,360	1,669
Mountain	26	48	105	2,028	2,393	11	9	31	442	467	11	15	32	564	933
Arizona	2	18	42	691	813	4	1	5	53	51	5	8	25	297	674
Colorado	18	10	23	447	503	2	2	18	151	143	5	2	6	91	79
Idaho[§]	5	3	9	125	145	3	1	7	70	73	1	0	3	21	7
Montana[§]	1	2	7	72	92	2	1	5	35	28	—	0	1	6	11
Nevada[§]	—	4	20	233	205	—	0	5	28	30	—	0	7	34	57
New Mexico[§]	—	5	15	212	302	—	1	5	32	31	—	1	9	86	88
Utah	—	5	18	212	261	—	1	7	60	98	—	1	4	29	15
Wyoming[§]	—	1	9	36	72	—	0	2	13	13	—	0	2	—	2
Pacific	117	115	299	4,713	4,916	9	9	46	436	391	42	20	64	831	953
Alaska	—	1	5	66	55	—	0	1	2	1	—	0	2	1	2
California	91	84	227	3,562	3,670	5	5	35	193	191	35	16	51	687	763
Hawaii	—	4	14	138	264	—	0	4	18	4	—	0	3	13	33
Oregon	1	8	48	410	346	—	2	7	74	63	1	1	4	44	43
Washington	25	14	61	537	581	4	3	18	149	132	6	1	22	86	112
Territories															
American Samoa	—	1	1	2	—	—	0	0	—	—	—	1	1	2	3
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	4	11	—	0	0	—	—	—	0	3	1	7
Puerto Rico	2	10	39	391	437	—	0	0	—	—	—	0	1	4	11
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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* Incidence data for reporting year 2010 is provisional.
[†] Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 2, 2010, and October 3, 2009 (39th week)*

Reporting area	Spotted Fever Rickettsiosis (including RMSF)[†]									
	Confirmed					Probable				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	1	2	12	125	128	14	16	421	1,123	1,145
New England	—	0	0	—	2	—	0	1	2	9
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	0	—	—	—	0	1	2	4
Massachusetts	—	0	0	—	1	—	0	1	—	5
New Hampshire	—	0	0	—	—	—	0	1	—	—
Rhode Island§	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	0	—	1	—	0	0	—	—
Mid. Atlantic	—	0	2	15	11	2	1	4	45	86
New Jersey	—	0	0	—	2	—	0	2	—	55
New York (Upstate)	—	0	1	2	—	2	0	3	14	12
New York City	—	0	1	1	1	—	0	4	21	6
Pennsylvania	—	0	2	12	8	—	0	1	10	13
E.N. Central	—	0	1	3	9	1	0	8	77	79
Illinois	—	0	1	1	1	—	0	5	24	47
Indiana	—	0	1	2	3	1	0	5	40	10
Michigan	—	0	1	—	4	—	0	2	3	1
Ohio	—	0	0	—	—	—	0	2	9	17
Wisconsin	—	0	0	—	1	—	0	1	1	4
W.N. Central	1	0	4	17	18	1	2	20	242	243
Iowa	—	0	0	—	1	—	0	1	4	4
Kansas	—	0	1	2	1	—	0	0	—	—
Minnesota	—	0	1	—	1	—	0	1	—	1
Missouri	1	0	4	13	7	1	2	19	234	234
Nebraska§	—	0	1	2	8	—	0	1	3	4
North Dakota	—	0	0	—	—	—	0	1	1	—
South Dakota	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	1	9	62	61	9	5	60	384	341
Delaware	—	0	1	1	—	—	0	3	16	16
District of Columbia	—	0	0	—	—	—	0	1	—	—
Florida	—	0	1	3	—	—	0	1	8	5
Georgia	—	0	6	41	48	—	0	0	—	—
Maryland§	—	0	1	2	3	—	0	4	35	34
North Carolina	—	0	3	11	7	9	1	48	214	223
South Carolina§	—	0	1	1	3	—	0	2	10	15
Virginia§	—	0	2	3	—	—	1	11	101	46
West Virginia	—	0	0	—	—	—	0	0	—	2
E.S. Central	—	0	3	16	7	—	4	28	305	239
Alabama§	—	0	1	4	3	—	1	8	59	59
Kentucky	—	0	2	6	1	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	2	8	9
Tennessee§	—	0	2	6	3	—	3	20	238	171
W.S. Central	—	0	3	4	7	1	1	408	60	125
Arkansas§	—	0	1	—	—	—	0	110	20	62
Louisiana	—	0	0	—	—	—	0	1	2	2
Oklahoma	—	0	3	3	5	1	0	287	22	43
Texas§	—	0	1	1	2	—	0	11	16	18
Mountain	—	0	2	2	12	—	0	2	8	23
Arizona	—	0	2	—	6	—	0	1	2	11
Colorado	—	0	0	—	1	—	0	1	1	—
Idaho§	—	0	0	—	—	—	0	1	2	1
Montana§	—	0	1	2	4	—	0	1	1	6
Nevada§	—	0	0	—	—	—	0	0	—	1
New Mexico§	—	0	0	—	—	—	0	1	1	1
Utah	—	0	0	—	—	—	0	1	1	1
Wyoming§	—	0	0	—	1	—	0	0	—	2
Pacific	—	0	2	6	1	—	0	0	—	—
Alaska	N	0	0	N	N	N	0	0	N	N
California	—	0	2	5	1	—	0	0	—	—
Hawaii	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	1	1	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—
Territories										
American Samoa	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
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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* Incidence data for reporting year 2010 is provisional.
[†] 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 October 2, 2010, and October 3, 2009 (39th week)*

Reporting area	*Streptococcus pneumoniae*,[†] invasive disease — All ages					Age <5					Syphilis, primary and secondary				
	Current week	Previous 52 weeks Med	Max	Cum 2010	Cum 2009	Current week	Previous 52 weeks Med	Max	Cum 2010	Cum 2009	Current week	Previous 52 weeks Med	Max	Cum 2010	Cum 2009
United States	90	191	495	10,620	2,250	13	51	156	1,649	1,742	113	241	413	8,907	10,654
New England	—	7	99	571	42	—	1	24	77	57	2	8	22	338	242
Connecticut	—	0	92	254	—	—	0	22	24	—	—	1	10	69	44
Maine[§]	—	2	6	91	13	—	0	2	8	6	1	0	3	22	2
Massachusetts	—	0	5	54	3	—	1	4	37	37	—	5	15	202	173
New Hampshire	—	0	7	59	—	—	0	2	3	10	1	0	1	15	13
Rhode Island[§]	—	0	35	54	15	—	0	2	2	1	—	0	4	28	10
Vermont[§]	—	1	6	59	11	—	0	1	3	3	—	0	2	2	—
Mid. Atlantic	10	18	54	919	145	3	7	48	256	223	37	33	45	1,301	1,352
New Jersey	—	1	8	81	—	—	1	5	41	43	5	4	12	178	172
New York (Upstate)	3	3	12	123	58	2	2	19	88	97	2	2	11	104	92
New York City	—	5	25	345	9	—	1	24	84	70	23	18	31	742	832
Pennsylvania	7	6	22	370	78	1	0	5	43	13	7	7	16	277	256
E.N. Central	21	31	98	2,135	505	2	8	18	266	290	—	26	46	976	1,167
Illinois	—	1	7	70	—	—	2	5	63	45	—	10	23	319	569
Indiana	—	7	24	434	198	—	1	6	37	60	—	3	13	133	122
Michigan	5	8	27	507	20	—	2	6	62	52	—	4	12	160	177
Ohio	13	14	49	875	287	2	2	6	72	100	—	8	16	332	263
Wisconsin	3	5	22	249	—	—	1	4	32	33	—	1	3	32	36
W.N. Central	3	8	182	606	148	1	2	12	109	143	—	5	16	233	245
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	9	19
Kansas	—	1	7	75	48	—	0	2	12	16	—	0	3	13	27
Minnesota	—	0	179	287	37	—	0	10	44	66	—	1	9	92	57
Missouri	2	2	10	88	52	1	0	3	31	39	—	3	9	111	134
Nebraska[§]	—	1	7	97	2	—	0	2	13	10	—	0	1	6	5
North Dakota	—	0	11	44	7	—	0	1	2	4	—	0	1	—	3
South Dakota	1	0	3	15	2	—	0	2	7	8	—	0	1	2	—
S. Atlantic	33	48	144	2,516	1,011	3	12	28	415	416	27	54	218	2,047	2,553
Delaware	—	0	3	28	18	—	0	2	—	3	—	0	2	4	24
District of Columbia	—	0	4	21	17	—	0	2	7	3	—	2	8	99	136
Florida	16	20	89	1,134	588	1	3	18	152	146	6	19	40	762	798
Georgia	2	11	28	415	297	—	3	12	113	110	—	10	167	371	608
Maryland[§]	10	7	31	396	4	1	1	6	44	65	—	6	11	191	226
North Carolina	—	0	0	—	—	—	0	0	—	—	3	7	31	286	429
South Carolina[§]	3	6	25	387	—	—	1	4	41	37	6	2	7	108	98
Virginia[§]	—	0	4	43	—	—	1	4	41	34	12	4	22	222	230
West Virginia	2	1	21	92	87	1	0	4	17	18	—	0	2	4	4
E.S. Central	8	20	50	943	210	1	2	8	93	109	1	18	39	658	875
Alabama[§]	—	0	0	—	—	—	0	0	—	—	—	5	12	173	342
Kentucky	3	2	16	150	57	—	0	2	13	7	1	2	13	98	49
Mississippi	—	1	6	43	38	—	0	2	9	20	—	5	17	160	162
Tennessee[§]	5	13	44	750	115	1	2	7	71	82	—	5	17	227	322
W.S. Central	2	18	91	1,359	94	1	5	41	220	257	31	37	58	1,374	2,165
Arkansas[§]	1	2	9	127	44	—	0	3	13	35	6	3	13	122	193
Louisiana	—	1	8	65	50	—	0	3	19	20	2	7	23	277	628
Oklahoma	1	0	5	39	—	1	1	5	39	48	1	1	6	58	72
Texas[§]	—	15	83	1,128	—	—	3	34	149	154	22	25	42	917	1,272
Mountain	8	21	82	1,342	92	1	5	12	184	221	4	9	22	363	414
Arizona	2	8	51	621	—	—	2	7	79	99	1	3	7	124	186
Colorado	6	7	20	400	—	1	1	4	53	32	—	2	5	88	76
Idaho[§]	—	0	2	11	—	—	0	2	5	7	—	0	1	2	3
Montana[§]	—	0	2	15	—	—	0	1	1	—	—	0	1	1	1
Nevada[§]	—	1	4	58	35	—	0	1	5	7	—	1	9	80	80
New Mexico[§]	—	2	9	118	—	—	0	4	14	25	3	1	4	37	42
Utah	—	2	9	110	48	—	1	4	24	50	—	1	4	31	23
Wyoming[§]	—	0	1	9	9	—	0	1	3	1	—	0	0	—	3
Pacific	5	4	14	229	3	1	0	7	29	26	11	42	60	1,617	1,641
Alaska	—	1	9	86	—	—	0	5	18	17	—	0	1	1	—
California	5	3	12	143	—	1	0	2	11	—	11	36	55	1,385	1,461
Hawaii	—	0	0	—	3	—	0	1	—	9	—	0	3	27	26
Oregon	—	0	0	—	—	—	0	0	—	—	—	1	6	52	42
Washington	—	0	0	—	—	—	0	0	—	—	—	3	10	152	112
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	7	3	15	177	171
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.
* Incidence data for reporting year 2010 is provisional.
† 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 October 2, 2010, and October 3, 2009 (39th week)*

	Varicella (chickenpox)§					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive¶				
Reporting area	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	154	323	549	10,623	16,292	—	0	65	366	377	—	1	38	254	328
New England	1	15	36	486	832	—	0	3	9	—	—	0	1	2	—
Connecticut	—	6	20	224	392	—	0	2	6	—	—	0	1	1	—
Maine§	—	3	15	130	166	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	3	—	0	2	3	—	—	0	1	1	—
New Hampshire	1	2	8	97	161	—	0	0	—	—	—	0	0	—	—
Rhode Island§	—	1	12	23	28	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	10	12	82	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	20	32	62	1,201	1,617	—	0	17	94	9	—	0	9	42	1
New Jersey	1	9	30	420	337	—	0	3	12	3	—	0	3	8	—
New York (Upstate)	N	0	0	N	N	—	0	9	42	3	—	0	6	24	1
New York City	—	0	0	—	—	—	0	7	30	3	—	0	4	7	—
Pennsylvania	19	21	39	781	1,280	—	0	3	10	—	—	0	1	3	—
E.N. Central	49	107	176	3,543	5,057	—	0	7	33	9	—	0	4	16	4
Illinois	3	25	49	924	1,240	—	0	6	14	5	—	0	2	4	—
Indiana§	3	6	35	328	376	—	0	1	1	2	—	0	2	5	2
Michigan	10	35	62	1,049	1,437	—	0	5	17	1	—	0	1	4	—
Ohio	32	28	56	976	1,529	—	0	1	1	—	—	0	1	1	2
Wisconsin	1	7	22	266	475	—	0	0	—	1	—	0	1	2	—
W.N. Central	7	14	40	582	1,058	—	0	7	25	26	—	0	8	58	72
Iowa	N	0	0	N	N	—	0	1	1	—	—	0	1	2	5
Kansas§	4	6	22	216	447	—	0	1	1	4	—	0	2	5	9
Minnesota	—	0	0	—	—	—	0	1	3	1	—	0	1	2	2
Missouri	3	7	23	309	512	—	0	1	4	4	—	0	0	—	1
Nebraska§	N	0	0	N	N	—	0	3	10	11	—	0	7	27	39
North Dakota	—	0	26	32	57	—	0	2	2	—	—	0	1	6	1
South Dakota	—	0	7	25	42	—	0	2	4	6	—	0	3	16	15
S. Atlantic	33	38	99	1,672	2,072	—	0	4	20	16	—	0	3	9	2
Delaware§	—	0	4	21	11	—	0	0	—	—	—	0	0	—	—
District of Columbia	1	0	4	17	26	—	0	0	—	2	—	0	0	—	—
Florida§	13	16	57	826	979	—	0	2	6	2	—	0	1	1	1
Georgia	N	0	0	N	N	—	0	1	4	4	—	0	3	7	—
Maryland§	N	0	0	N	N	—	0	3	8	—	—	0	1	1	1
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina§	—	0	35	75	93	—	0	0	—	3	—	0	0	—	—
Virginia§	10	11	34	384	588	—	0	1	2	5	—	0	0	—	—
West Virginia	9	8	26	349	375	—	0	0	—	—	—	0	0	—	—
E.S. Central	2	6	28	227	432	—	0	1	5	36	—	0	2	7	26
Alabama§	2	6	27	220	428	—	0	1	1	—	—	0	1	2	—
Kentucky	N	0	0	N	N	—	0	1	1	3	—	0	1	1	—
Mississippi	—	0	2	7	4	—	0	1	2	29	—	0	2	3	21
Tennessee§	N	0	0	N	N	—	0	1	1	4	—	0	1	1	5
W.S. Central	31	54	285	2,094	4,046	—	0	13	56	116	—	0	3	12	34
Arkansas§	—	3	32	122	416	—	0	3	5	6	—	0	0	—	—
Louisiana	—	1	5	40	117	—	0	3	12	10	—	0	1	6	10
Oklahoma	N	0	0	N	N	—	0	1	—	8	—	0	0	—	2
Texas§	31	44	272	1,932	3,513	—	0	13	39	92	—	0	2	6	22
Mountain	11	20	37	779	1,089	—	0	11	87	77	—	0	10	85	123
Arizona	—	0	0	—	—	—	0	10	67	12	—	0	9	47	8
Colorado§	10	8	19	324	426	—	0	4	10	36	—	0	6	28	67
Idaho§	N	0	0	N	N	—	0	0	—	9	—	0	2	1	29
Montana§	—	3	17	160	127	—	0	0	—	2	—	0	0	—	3
Nevada§	N	0	0	N	N	—	0	0	—	7	—	0	1	2	5
New Mexico§	1	2	8	85	99	—	0	4	9	6	—	0	2	3	2
Utah	—	6	22	197	437	—	0	0	—	1	—	0	0	—	1
Wyoming§	—	0	3	13	—	—	0	1	1	4	—	0	1	4	8
Pacific	—	1	5	39	89	—	0	7	37	88	—	0	4	23	66
Alaska	—	0	5	31	54	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	7	37	61	—	0	4	23	44
Hawaii	—	0	2	8	35	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	1	—	0	0	—	10
Washington	N	0	0	N	N	—	0	0	—	26	—	0	0	—	12
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	3	12	20	—	0	0	—	—	—	0	0	—	—
Puerto Rico	4	9	30	457	431	—	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.
* Incidence data for reporting year 2010 is provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).
¶ 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/ncphi/disss/nndss/phs/infdis.htm.

TABLE III. Deaths in 122 U.S. cities,* week ending October 2, 2010 (39th week)

Reporting area	All causes, by age (years)						P&I[†] Total	Reporting area	All causes, by age (years)						P&I[†] Total
	All Ages	≥65	45–64	25–44	1–24	<1			All Ages	≥65	45–64	25–44	1–24	<1	
New England	464	322	108	16	11	7	46	**S. Atlantic**	1,264	770	324	104	38	28	64
Boston, MA	131	90	28	5	3	5	19	Atlanta, GA	157	91	45	15	3	3	4
Bridgeport, CT	43	29	11	3	—	—	5	Baltimore, MD	171	87	58	19	4	3	11
Cambridge, MA	22	17	4	—	1	—	2	Charlotte, NC	129	79	30	9	9	2	10
Fall River, MA	18	15	2	1	—	—	3	Jacksonville, FL	194	131	46	12	3	2	3
Hartford, CT	45	24	12	3	5	1	6	Miami, FL	94	59	17	12	2	4	4
Lowell, MA	18	14	4	—	—	—	2	Norfolk, VA	40	25	12	1	1	1	—
Lynn, MA	1	1	—	—	—	—	—	Richmond, VA	52	33	11	6	1	1	3
New Bedford, MA	20	14	5	—	1	—	—	Savannah, GA	51	35	12	1	2	1	7
New Haven, CT	U	U	U	U	U	U	U	St. Petersburg, FL	34	23	9	1	—	1	—
Providence, RI	53	38	15	—	—	—	2	Tampa, FL	168	117	34	10	6	1	7
Somerville, MA	5	4	1	—	—	—	—	Washington, D.C.	162	81	50	15	7	9	13
Springfield, MA	30	18	10	1	1	—	1	Wilmington, DE	12	9	—	3	—	—	2
Waterbury, CT	21	17	4	—	—	—	1	**E.S. Central**	825	530	198	59	14	24	62
Worcester, MA	57	41	12	3	—	1	5	Birmingham, AL	186	125	38	14	4	5	17
Mid. Atlantic	1,707	1,182	380	88	25	32	68	Chattanooga, TN	77	41	32	2	—	2	5
Albany, NY	45	26	14	3	—	2	2	Knoxville, TN	91	61	21	6	2	1	5
Allentown, PA	14	9	2	2	—	1	—	Lexington, KY	45	25	13	5	1	1	3
Buffalo, NY	75	48	18	6	1	2	3	Memphis, TN	170	108	36	13	5	8	15
Camden, NJ	21	14	3	2	—	2	1	Mobile, AL	32	24	6	1	—	1	1
Elizabeth, NJ	18	13	4	1	—	—	—	Montgomery, AL	75	55	14	5	1	—	2
Erie, PA	54	42	9	3	—	—	4	Nashville, TN	149	91	38	13	1	6	14
Jersey City, NJ	17	15	2	—	—	—	3	**W.S. Central**	1,280	818	309	93	38	21	69
New York City, NY	943	672	213	36	10	12	36	Austin, TX	74	43	17	10	2	2	4
Newark, NJ	31	12	9	4	2	4	2	Baton Rouge, LA	71	40	10	12	7	2	1
Paterson, NJ	23	14	8	—	1	—	—	Corpus Christi, TX	74	49	20	2	3	—	4
Philadelphia, PA	236	142	56	22	7	9	6	Dallas, TX	194	106	44	27	9	7	10
Pittsburgh, PA[§]	U	U	U	U	U	U	U	El Paso, TX	129	83	29	11	5	1	3
Reading, PA	40	33	4	2	1	—	5	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	35	21	10	3	1	—	2	Houston, TX	271	191	72	2	2	4	19
Schenectady, NY	19	13	6	—	—	—	1	Little Rock, AR	53	34	13	2	2	2	—
Scranton, PA	27	20	7	—	—	—	1	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	53	46	5	1	1	—	—	San Antonio, TX	222	155	48	11	7	1	17
Trenton, NJ	26	16	7	2	1	—	—	Shreveport, LA	68	45	19	3	—	1	5
Utica, NY	17	15	2	—	—	—	1	Tulsa, OK	124	72	37	13	1	1	6
Yonkers, NY	13	11	1	1	—	—	1	**Mountain**	1,171	777	260	74	42	8	54
E.N. Central	1,880	1,282	447	75	37	39	119	Albuquerque, NM	116	84	20	7	3	2	8
Akron, OH	35	19	13	2	—	1	—	Boise, ID	57	43	12	1	1	—	1
Canton, OH	40	29	7	2	1	1	2	Colorado Springs, CO	68	43	13	7	4	1	—
Chicago, IL	227	152	57	11	6	1	22	Denver, CO	81	48	18	10	3	2	4
Cincinnati, OH	73	39	21	5	4	4	7	Las Vegas, NV	264	162	75	13	9	2	13
Cleveland, OH	213	159	42	5	1	6	6	Ogden, UT	28	20	5	3	—	—	3
Columbus, OH	238	172	52	5	6	3	19	Phoenix, AZ	148	86	38	9	13	1	3
Dayton, OH	123	90	23	4	1	5	8	Pueblo, CO	28	17	8	2	1	—	1
Detroit, MI	121	72	46	2	1	—	7	Salt Lake City, UT	109	79	20	7	3	—	7
Evansville, IN	51	37	10	2	2	—	4	Tucson, AZ	272	195	51	15	5	—	14
Fort Wayne, IN	78	60	10	4	3	1	7	**Pacific**	1,491	1,019	330	76	34	29	120
Gary, IN	18	7	6	3	2	—	—	Berkeley, CA	18	10	4	—	1	3	1
Grand Rapids, MI	67	42	14	5	2	4	6	Fresno, CA	U	U	U	U	U	U	U
Indianapolis, IN	177	106	53	6	4	8	11	Glendale, CA	30	26	4	—	—	—	3
Lansing, MI	44	30	12	1	1	—	2	Honolulu, HI	72	49	16	5	1	1	7
Milwaukee, WI	88	50	28	8	—	2	1	Long Beach, CA	48	34	12	2	—	—	7
Peoria, IL	50	37	10	2	—	1	4	Los Angeles, CA	270	174	53	21	10	12	29
Rockford, IL	58	50	5	1	1	1	1	Pasadena, CA	17	13	4	—	—	—	—
South Bend, IN	53	37	13	2	1	—	6	Portland, OR	127	78	37	5	2	5	9
Toledo, OH	77	53	19	5	—	—	5	Sacramento, CA	180	126	41	8	4	1	9
Youngstown, OH	49	41	6	—	1	1	1	San Diego, CA	131	92	28	7	2	—	7
W.N. Central	596	393	141	31	16	13	32	San Francisco, CA	127	85	30	6	3	2	14
Des Moines, IA	36	27	7	1	—	1	2	San Jose, CA	166	119	34	7	4	2	15
Duluth, MN	32	26	5	—	—	1	1	Santa Cruz, CA	39	29	9	—	1	—	3
Kansas City, KS	33	12	15	5	1	—	—	Seattle, WA	105	64	23	11	5	2	5
Kansas City, MO	97	65	16	9	5	2	5	Spokane, WA	63	45	15	1	1	1	3
Lincoln, NE	41	33	5	1	—	2	1	Tacoma, WA	98	75	20	3	—	—	8
Minneapolis, MN	47	26	14	2	4	1	4	**Total[¶]**	**10,678**	**7,093**	**2,497**	**616**	**255**	**201**	**634**
Omaha, NE	77	52	23	2	—	—	6								
St. Louis, MO	106	59	31	7	2	5	8								
St. Paul, MN	53	41	9	1	2	—	1								
Wichita, KS	74	52	16	3	2	1	4								

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.