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National Sleep Awareness Week — March 7–13, 2011

March 7–13, 2011, is National Sleep Awareness Week. Sleep impairment is linked as a contributing factor to motor vehicle crashes, industrial disasters, and medical and other occupational errors (*1*). Persons experiencing sleep insufficiency are more likely to have chronic diseases such as cardiovascular disease, diabetes, depression, or obesity (*2,3*). In 2008, approximately 28% of surveyed adults in the United States reported frequent insufficient sleep (≥14 days in the past 30 days) (*4*), which has been associated with fair/poor general health, frequent mental and physical distress, depressive symptoms, anxiety, and pain (*3*). Sleep insufficiency and poor sleep quality also can result from sleep disorders such as chronic insomnia, restless legs syndrome, sleep apnea, or narcolepsy (*1*).

The National Sleep Foundation suggests that healthy adults need 7–9 hours of sleep per day, and school-age children might require 10–11 hours of sleep (*5*). Additional information regarding the public health importance of sleep is available at http://www.cdc.gov/sleep. Information regarding sleep health and safety is available from the National Sleep Foundation at http://www.sleepfoundation.org.

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Unhealthy Sleep-Related Behaviors — 12 States, 2009

An estimated 50–70 million adults in the United States have chronic sleep and wakefulness disorders (*1*). Sleep difficulties, some of which are preventable, are associated with chronic diseases, mental disorders, health-risk behaviors, limitations of daily functioning, injury, and mortality (*1,2*). The National Sleep Foundation suggests that most adults need 7–9 hours of sleep per night, although individual variations exist. To assess the prevalence and distribution of selected sleep difficulties and behaviors, CDC analyzed data from a new sleep module added to the Behavioral Risk Factor Surveillance System (BRFSS) in 2009. This report summarizes the results of that analysis, which determined that, among 74,571 adult respondents in 12 states, 35.3% reported having <7 hours of sleep on average during a 24-hour period, 48.0% reported snoring, 37.9% reported unintentionally falling asleep during the day at least 1 day in the preceding 30 days, and 4.7% reported nodding off or falling asleep while driving in the preceding 30 days. Continued public health surveillance of sleep quality, duration, behaviors, and disorders is needed to understand and address sleep difficulties and their impact on health. As a first step, a multifaceted approach that includes increased public awareness and education and training in sleep medicine for appropriate health-care professionals is needed; however, broad societal factors, including technology use and work policies, also must be considered.

INSIDE

239 Effect of Short Sleep Duration on Daily Activities — United States, 2005–2008
243 Vital Signs: Central Line–Associated Blood Stream Infections — United States, 2001, 2008, and 2009
249 Announcements
252 QuickStats

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Centers for Disease Control and Prevention

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized U.S. civilian population aged ≥18 years, conducted by state health departments in collaboration with CDC (*3*). Based on Council of American Survey and Research Organizations (CASRO) guidelines, response rates* for 12 states† that used the optional sleep module in 2009§ ranged from 40.0% (Maryland) to 66.9% (Nebraska). Cooperation rates¶ ranged from 55.5% (California) to 83.9% (Georgia).

The following questions from the sleep module were asked: "On average, how many hours of sleep do you get in a 24-hour period? Think about the time you actually spend sleeping or napping, not just the amount of sleep you think you should get (categorized as <7 hours and ≥7 hours**)." "Do you snore? (can have been told by spouse or someone else; categorized as yes or no)?" "During the past 30 days, for about how many days did you find yourself unintentionally falling asleep during the day (categorized as none or at least 1 day reported)?" and "During the past 30 days, have you ever nodded off or fallen asleep, even just for a brief moment, while driving (categorized as yes or no)?" Age-standardized (to the projected U.S. 2000 population) prevalence estimates were calculated by state and by selected characteristics; 95% confidence intervals were calculated, and statistical significance (at $p<0.05$) was determined by t-test.

Among respondents, 35.3% reported sleeping <7 hours on average during a 24-hour period (Table). Adults aged ≥65 years were significantly less likely to report sleeping <7 hours (24.5%) than persons in all other age categories. Non-Hispanic blacks (48.3%) and non-Hispanic persons of other races (38.7%) were more likely to report sleeping <7 hours than non-Hispanic whites (34.9%). No significant differences were observed by sex. Compared with employed adults (37.4%), those unable to work (46.4%) were significantly more likely to report <7 hours of sleep, but retired adults (25.0%) and homemakers and students (30.8%) were less likely. Adults with at least some college education (35.8%) were significantly more likely to report <7 hours of sleep than those with less than a high school diploma (32.0%) as were divorced, widowed, or separated (39.1%) and never married adults (37.9%), compared with married adults (35.1%).

Snoring was reported by 48.0% of respondents (Table). Persons aged 18–24 years were least likely (25.6%) to report snoring. Hispanics (50.6%) were more likely to report snoring than non-Hispanic whites (46.8%), as were men (56.5%) compared with

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

† California, Georgia, Hawaii, Illinois, Kansas, Louisiana, Maryland, Minnesota, Nebraska, New York, Texas, and Wyoming. (Split sampling was conducted in California, Hawaii, Kansas, Maryland, Nebraska, New York, and Texas.)

§ Additional information available at http://www.cdc.gov/brfss/technical_infodata/surveydata/2009.htm.

¶ The percentage of persons who completed interviews among all eligible persons who were contacted.

** The National Sleep Foundation suggests that adults need 7–9 hours of sleep per night. Additional information available at http://www.sleepfoundation.org/article/how-sleep-works/how-much-sleep-do-we-really-need.

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TABLE. Age-specific and age-adjusted* percentage of adults reporting certain sleep-related behaviors, by selected characteristics — Behavioral Risk Factor Surveillance System, 12 states, 2009

Characteristic	No.†	Sleeping on average <7 hrs in 24-hr period (n = 74,571)		Snoring (n = 68,462)		Unintentionally fell asleep during the day at least 1 day in the preceding 30 days (n = 74,063)		Nodded off or fell asleep while driving in the preceding 30 days (n = 71,578)	
		%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Total	**74,571**	**35.3**	**(34.5–36.1)**	**48.0**	**(47.2–48.8)**	**37.9**	**(37.1–38.7)**	**4.7**	**(4.2– 5.1)**
Age group (yrs)									
18–24	2,330	30.9	(27.8–33.9)	25.6	(22.7–28.6)	43.7	(40.4–47.1)	4.5	(3.0–5.9)
25–34	6,637	39.4	(37.3–41.6)	39.6	(37.4–41.8)	36.1	(34.0–38.2)	7.2	(5.8–8.6)
35–44	10,645	39.3	(37.7–41.0)	51.0	(49.2–52.7)	34.0	(32.3–35.6)	5.7	(4.9–6.6)
45–54	15,407	39.0	(37.6–40.5)	59.3	(57.8–60.8)	35.3	(33.8–36.7)	3.9	(3.3–4.6)
55–64	16,385	34.2	(32.7–35.7)	62.4	(60.9–63.9)	36.5	(35.0–38.0)	3.1	(2.4–3.8)
≥65	23,167	24.5	(23.4–25.6)	50.5	(49.2–51.9)	44.6	(43.4–45.9)	2.0	(1.6–2.3)
Race/Ethnicity									
White, non-Hispanic	55,773	34.9	(33.9–35.9)	46.8	(45.9–47.8)	33.4	(32.5–34.4)	3.2	(2.8–3.6)
Black, non-Hispanic	5,583	48.3	(45.7–51.0)	48.3	(45.8–50.8)	52.4	(49.7–55.1)	6.5	(5.1–7.9)
Hispanic	6,198	33.0	(31.2–34.8)	50.6	(48.8–52.5)	41.9	(40.0–43.8)	6.3	(5.3–7.3)
Other, non-Hispanic§	6,484	38.7	(35.8–41.5)	48.2	(45.4–51.1)	41.0	(38.1–43.9)	7.2	(5.1–9.3)
Sex									
Men	28,330	35.3	(34.2–36.5)	56.5	(55.3–57.8)	38.4	(37.2–39.7)	5.8	(5.1–6.5)
Women	46,241	35.2	(34.2–36.2)	39.6	(38.7–40.6)	37.3	(36.3–38.4)	3.5	(3.1–3.9)
Employment status									
Employed	38,814	37.4	(36.2–38.5)	50.5	(49.4–51.6)	33.5	(32.4–34.6)	5.4	(4.8–6.0)
Unemployed	3,996	35.1	(32.2–38.0)	50.9	(47.9–54.0)	44.0	(41.0–47.0)	4.6	(3.2–6.0)
Retired	20,304	25.0	(16.8–33.2)	37.9	(31.6–44.1)	27.3	(19.7–34.9)	—¶	—
Unable to work	4,001	46.4	(41.2–51.5)	55.8	(50.1–61.4)	57.3	(51.9–62.7)	9.5	(4.4–14.6)
Homemaker/Student	7,134	30.8	(28.9–32.8)	37.0	(35.0–39.0)	39.3	(37.3–41.4)	2.2	(1.6– 2.9)
Education level									
Less than high school diploma or GED	6,393	32.0	(29.8–34.2)	51.2	(48.7–53.7)	43.4	(40.9–45.9)	5.4	(4.2–6.5)
High school diploma or GED	20,504	37.0	(35.4–38.6)	49.9	(48.3–51.5)	39.6	(38.1–41.2)	4.0	(3.4–4.7)
At least some college	47,426	35.8	(34.8–36.8)	47.0	(46.0–47.9)	35.9	(34.9–36.9)	4.8	(4.2– 5.4)
Marital status									
Married	42,965	35.1	(33.5–36.6)	49.5	(47.9–51.1)	35.9	(34.3–37.5)	4.3	(3.8–4.8)
Divorced/Widowed/Separated	21,199	39.1	(36.5–41.8)	46.4	(43.0–49.9)	39.7	(35.9–43.5)	4.4	(3.3–5.5)
Never married	8,590	37.9	(35.9–40.0)	43.5	(41.3–45.7)	42.9	(40.8–45.0)	4.6	(3.5–5.6)
Member of unmarried couple	1,638	34.2	(30.2–38.2)	51.6	(47.4–55.8)	39.5	(35.4–43.6)	5.8	(3.5–8.1)
State									
California	11,713	34.5	(33.3–35.8)	44.8	(43.6–46.1)	37.5	(36.3–38.8)	4.9	(4.3–5.5)
Georgia	5,387	36.9	(34.5–39.2)	51.0	(48.8–53.1)	39.4	(37.1–41.8)	4.2	(3.2– 5.2)
Hawaii	6,288	44.6	(42.6–46.5)	54.0	(52.0–56.0)	42.8	(40.8–44.7)	6.4	(5.4– 7.4)
Illinois	5,549	36.1	(34.3–37.9)	49.3	(47.4–51.1)	38.6	(36.7–40.4)	3.0	(2.3– 3.7)
Kansas	8,703	30.0	(28.6–31.5)	53.9	(52.3–55.5)	35.4	(33.8–36.9)	3.3	(2.8– 3.9)
Louisiana	8,415	35.8	(34.1–37.5)	53.6	(51.9–55.4)	38.1	(36.4–39.8)	4.0	(3.3– 4.7)
Maryland	3,910	39.9	(37.4–42.4)	48.9	(46.4–51.4)	40.7	(38.1–43.3)	4.6	(3.4– 5.7)
Minnesota	5,519	27.6	(25.7–29.4)	51.6	(49.6–53.6)	33.7	(31.8–35.6)	3.1	(2.4– 3.7)
Nebraska	4,939	30.7	(27.9–33.4)	48.7	(45.6–51.7)	35.0	(32.0–38.1)	3.3	(2.3– 4.2)
New York	3,139	40.7	(38.1–43.2)	50.5	(47.8–53.1)	38.9	(36.4–41.4)	3.9	(2.8– 5.0)
Texas	5,310	34.0	(31.5–36.4)	52.1	(49.6–54.6)	38.6	(36.0–41.1)	6.4	(4.5– 8.3)
Wyoming	5,699	31.6	(29.8–33.5)	52.2	(50.4–54.1)	33.0	(31.1–34.9)	4.0	(3.1– 4.9)

Abbreviations: CI = confidence interval; GED = General Educational Development certificate.
* Age adjusted to the 2000 projected U.S. population.
† Unweighted sample. Categories might not sum to survey total because of missing responses.
§ Asian, Native Hawaiian or Pacific Islander, American Indian or Alaska Native, and multiracial.
¶ Cell size <50.

women (39.6%). Compared with employed persons (50.5%), retired adults (37.9%) and homemakers/students (37.0%) were significantly less likely to report snoring. Persons with less than a high school diploma (51.2%) and with a high school diploma or General Educational Development certificate (GED) (49.9%) were significantly more likely to report snoring than those with at least some college or a college degree (47.0%), as were married persons (49.5%) compared with never married (43.5%) persons.

What is already known on this topic?

An estimated 50–70 million U.S. adults have chronic sleep and wakefulness disorders, and the percentage who report <7 hours of sleep on average has increased since the 1980s to approximately one third of all U.S. adults.

What is added by this report?

This report provides the first prevalence estimates from nationwide (12 states) surveillance of unintentionally falling asleep during the day (37.9%) at least 1 day in the preceding 30 days, and nodding off or falling asleep while driving (4.7%) during the same period; in addition, 35.3% reported <7 hours of sleep in a typical 24-hour period.

What are the implications for public health?

Increased public awareness, expanded surveillance and research, training of health-care professionals, and a multifaceted approach that considers related health, employment, lifestyle, and environmental factors will be needed to improve sleep health among U.S. adults and reduce the prevalence of unhealthy sleep-related behaviors and sleep disorders.

An estimated 37.9% of adults reported unintentionally falling asleep during the day at least 1 day in the preceding 30 days (Table). Adults aged 18–24 years (43.7%) and ≥65 years (44.6%) were significantly more likely to report this behavior than all other age groups, as were persons from all other racial/ethnic categories compared with non-Hispanic whites (33.4%). No significant difference was observed by sex. Compared with employed persons (33.5%), those who were unemployed (44.0%), unable to work (57.3%), and homemakers/students (39.3%) were significantly more likely to report unintentionally falling asleep during the day. Persons with at least some college education (35.9%) were significantly less likely to report unintentionally falling asleep than those with a high school diploma or GED (39.6%) or less education (43.4%). Never married adults (42.9%) were significantly more likely to report unintentionally falling asleep during the day than married adults (35.9%).

Nodding off or falling asleep while driving in the preceding 30 days was reported by 4.7% of adults (Table). Persons aged ≥65 years (2.0%) were significantly less likely to report this behavior than persons aged 25–34 years (7.2%), 35–44 years (5.7%), 18–24 years (4.5%), 45–54 years (3.9%), and 55–64 years (3.1%). Hispanics (6.3%), non-Hispanic blacks (6.5%), and non-Hispanics of other races (7.2%) all were significantly more likely to report this behavior than non-Hispanic whites (3.2%). Men were more likely (5.8%) to report this behavior, compared with women (3.5%), and employed persons were more likely (5.4%), compared with homemakers and students (2.2%). No significant differences were observed by educational level or marital status.

Persons who reported sleeping <7 hours on average during a 24-hour period were more likely to report unintentionally falling asleep during the day at least 1 day in the preceding 30 days (46.2% versus 33.2%) and nodding off or falling asleep while driving in the preceding 30 days (7.3% versus 3.0%) (Figure). They also were more likely to report snoring (51.4% versus 46.0%).

Among adults in the 12 states surveyed, reports of <7 hours of sleep ranged from 27.6% in Minnesota to 44.6% in Hawaii. Snoring estimates ranged from 44.8% in California to 54.0% in Hawaii. Estimates of unintentionally falling asleep during the day in the preceding 30 days ranged from 33.0% in Wyoming to 42.8% in Hawaii. Finally, estimates of nodding off or falling asleep while driving in the preceding 30 days ranged from 3.0% in Illinois to 6.4% in Hawaii and Texas.

Reported by

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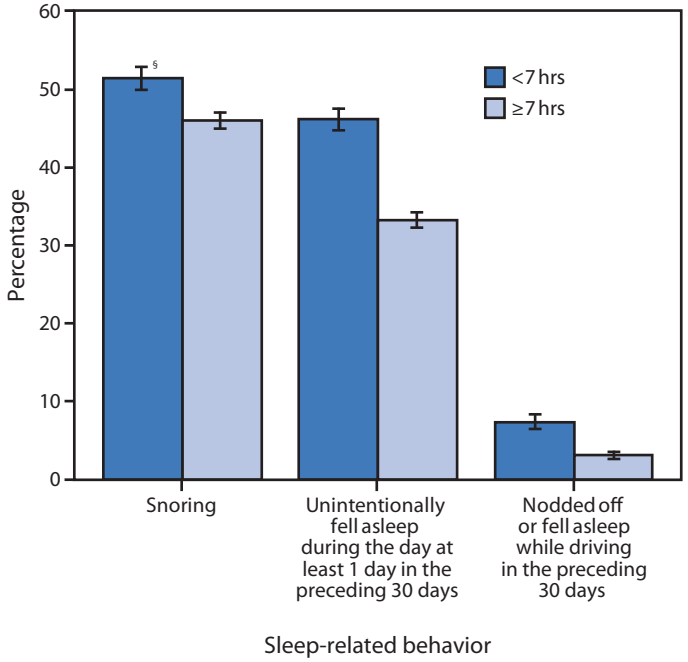
Editorial Note

This report is the first to present estimates of the prevalence of unhealthy sleep-related behaviors based on responses to questions added to BRFSS in 2009. The results highlight two prevalences of self-reported sleep-related behaviors with potentially dangerous consequences: 37.9% of adults in 12 states reported unintentionally falling asleep during the day at least 1 day in the preceding 30 days, and 4.7% reported nodding off or falling asleep while driving during the same period. The sleep module, consisting of questions derived from surveillance-system and clinically validated sleep surveys, was developed by CDC and the National Sleep Awareness Roundtable[††] in response to an Institute of Medicine recommendation to expand surveillance and monitoring of sleep loss and sleep disorders and to increase public awareness of unhealthy sleep behaviors (*1*).

Nationwide surveillance has not previously assessed the prevalence of either unintentionally falling asleep during the day or nodding off or falling asleep while driving. Drowsy driving, one of the most lethal consequences of inadequate sleep, has been responsible for an estimated 1,550 fatalities and 40,000 nonfatal injuries annually in the United States (*4*). In the analysis summarized in this report, the prevalence of falling asleep while driving ranged from 2.0% among persons aged ≥65 years

[††] Additional information available at http://www.nsart.org.

FIGURE. Age-adjusted* percentage of certain sleep-related behaviors, by amount of sleep† — Behavioral Risk Factor Surveillance System, 12 states, 2009



* Age adjusted to the 2000 projected U.S. population.
† On average, during a 24-hour period.
§ 95% confidence interval.

to 7.2% among persons aged 25–34 years. Populations previously found at greatest risk included persons aged 16–29 years (particularly males), those with untreated sleep apnea syndrome or narcolepsy, and those who work shifts, particularly night shifts or extended shifts (*4*). Sleepiness reduces vigilance while driving, slowing reaction time, and leading to deficits in information processing, which can result in crashes (*4*). Differences among adults in the 12 states in the prevalence of nodding off or falling asleep while driving were substantial (range: 3.0% in Illinois to 6.4% in Hawaii and Texas) and might result from differences in the prevalence of populations at greater risk or differences in the use of safety measures, such as road rumble strips, an evidenced-based intervention that alerts inattentive drivers through vibration and sound.§§

Unintentionally falling asleep during the day can be indicative of narcolepsy or hypersomnia and has been associated with obstructive sleep apnea, which, in turn, has been associated with hypertension, cardiovascular disease, stroke, diabetes, and obesity (*1*). Falling asleep on the job can result in productivity losses for employers and dismissal for workers. In addition, depending on circumstances and level of responsibility, unintentionally falling asleep during the day can have dangerous consequences (e.g., while child caretaking, lifeguarding, or operating heavy equipment). To assess the potential impact of unintentionally falling asleep during the day, additional inquiry regarding the circumstances of this behavior is required.

Snoring, reported by 48.0% of participating adults, is a symptom of increased upper airway resistance during sleep and generally considered a marker for obstructive sleep apnea (*1,5*); pregnant women who snore can be at risk for preeclampsia (*5*). The finding in this report regarding average hours slept per 24-hour period is similar to findings in other reports. In this analysis, 35.3% of U.S. adults in 12 states reported having <7 hours of sleep on average during a 24-hour period, compared with approximately 29% in the 2004–2006 National Health Interview Survey (*6*), and compared with 37.1% in the 2005–2008 National Health and Nutrition Examination Survey who said they had <7 hours of sleep on workday and weekday nights (*7*).

Differences in prevalence by sociodemographic characteristics and state were observed for all four sleep-related behaviors. Adults in Hawaii had the highest prevalences for all four behaviors. The reasons for higher prevalences in Hawaii and other variations are unclear and might be subjects for further examination.

The findings in this report are subject to at least three limitations. First, the increase in the number of households with cellular telephones only and the increase in telephone number portability continue to decrease BRFSS response rates, reducing the precision of state estimates and potentially introducing bias. Although in 2009 all states conducted BRFSS surveys for cellular-only households in addition to households with landline telephones, cellular telephone data were not included for the sleep module and other optional modules. Second, institutionalized persons and persons residing in households without landline telephones are not included in the survey, nor are adults from all 50 states and U.S. territories, thereby limiting the generalizability of these findings. Finally, all estimates were based on self-report rather than physiologic measures of sleep behaviors with actigraphy (use of a movement-detection device with software that uses movement patterns to diagnose sleep disorders) (*1*) or polysomnography.

Substantial increases in the percentage of U.S. adults reporting an average of <7 hours of sleep per 24-hour period were observed from 1985 to 2004¶¶ and can be attributed in part to broad societal changes, including increases in technology use

§§ Additional information available at http://drowsydriving.org/2009/07/countermeasures-rumble-strips.

¶¶ Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5437a7.htm.

and shift work (*1*). Sleep disorders are common health concerns that can be evaluated and treated. However, many health-care professionals might have only limited training in somnology and sleep medicine, impeding their ability to recognize, diagnose, and treat sleep disorders or promote sleep health to their patients (*1*). The results described in this report indicate that a large percentage of adults in 12 states reported unhealthy sleep behaviors that can be related to disease comorbidity (e.g., obstructive sleep apnea and obesity), including nearly one in 20 persons who reported nodding off or falling asleep while driving in the preceding 30 days. Expanded surveillance is needed to understand and address the public health burden of sleep loss and disorders (*1*) and their associations with health problems and chronic diseases among adults in all 50 states and U.S. territories, which will enable further assessment of state and nationwide trends.

Healthy People 2020 includes a sleep health section, with four objectives: increase the proportion of persons with symptoms of obstructive sleep apnea who seek medical evaluation, reduce the rate of vehicular crashes per 100 million miles traveled that are caused by drowsy driving, increase the proportion of students in grades 9–12 who get sufficient sleep, and increase the proportion of adults who get sufficient sleep.*** Promoting sleep health, including optimal sleep durations, and reducing the prevalence and impact of sleep disorders will require a multifaceted approach. This approach should consider 1) sleep environments (i.e., living conditions and proximity to noise); 2) type, scheduling, and duration of work (*8*); 3) associated health-risk behaviors such as smoking, physical inactivity, and heavy drinking (*1,9*); 4) chronic conditions such as obesity and depression and other comorbid mental disorders (*1,5*); 5) stress and socioeconomic status (*8*); and 6) validation of new and existing therapeutic technologies (*1*). Drowsy driving also should be addressed, and additional effective interventions developed and implemented. As a first step, greater public awareness of sleep health and sleeping disorders is needed.

*** Available at http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=38.

Acknowledgments

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Effect of Short Sleep Duration on Daily Activities — United States, 2005–2008

Little is known about the extent to which insufficient sleep affects the ability of U.S. adults to carry out daily activities. The National Sleep Foundation suggests that adults need 7–9 hours of sleep per night; shorter and longer sleep durations have been associated with increased morbidity and mortality (*1*). To assess the prevalence of short sleep duration (<7 hours on weekday or workday nights) and its perceived effect on daily activities, CDC analyzed data from the 2005–2008 National Health and Nutrition Examination Survey (NHANES). This report summarizes the results, which found that 37.1% of U.S. adults reported regularly sleeping <7 hours per night, similar to the 35.3% reporting <7 hours of sleep in a 24-hour period in another report using self-reported data (*2*). Short sleep duration was more common among adults aged 20–39 years (37.0%) or 40–59 years (40.3%) than among adults aged ≥60 years (32.0%), and more common among non-Hispanic blacks (53.0%) than among non-Hispanic whites (34.5%), Mexican Americans (35.2%), and persons of other races/ethnicities (41.7%). Among six sleep-related difficulties assessed, the most prevalent was not being able to concentrate on doing things, reported by 23.2% of U.S. adults. Perceived sleep-related difficulties were significantly more likely among persons reporting <7 hours of sleep than among those reporting 7–9 hours of sleep. Based on these findings, at least one third of U.S. residents do not get enough sleep on a regular basis, and this impairs their ability to perform daily tasks. Chronic sleep deprivation also has a cumulative effect on mental and physical well-being and can exacerbate chronic diseases.

This analysis was conducted using data from the last two survey cycles (2005–2006 and 2007–2008) of NHANES, a stratified, multistage probability sample of the civilian noninstitutionalized U.S. population.* A total of 10,896 respondents aged ≥20 years who completed the interviewer-administered survey questions on sleep duration were included in the sample. The response rate for the interviewed sample was 74.8%. Responses to the question "how much sleep do you usually get at night on weekdays or workdays" were grouped into categories as <7 hours, 7–9 hours, and >9 hours. Responses to six questions from the Functional Outcomes of Sleep Questionnaire (*3*) about sleep-related difficulties also were analyzed.†

Descriptive statistics, including population estimates, weighted prevalence, and 95% confidence intervals (CIs), were calculated to account for the complex study design. Analyses were stratified by age, sex, race/ethnicity, and education. Population estimates for sleep duration categories and each sleep-related difficulty were calculated using NHANES 4-year sample weights, which account for the differential probabilities of selection, nonresponse, and noncoverage. To compare prevalence estimates among subgroups that differed by age distribution, all estimates except age-specific estimates were adjusted by the direct method to the 2000 U.S. population. Prevalence estimates were considered significantly different if the 95% CIs did not overlap.

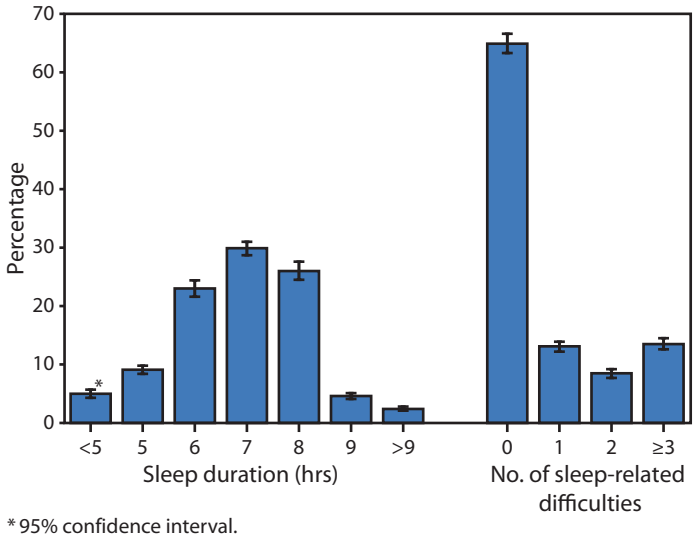
A short sleep duration of <7 hours on weekdays or workdays was reported by 37.1% of respondents; 60.5% reported 7–9 hours of sleep, and 2.4% reported >9 hours (Figure 1). Approximately one third of respondents reported one or more sleep-related difficulties. Among adults who reported <7 hours of sleep, the prevalence of each of the six sleep-related difficulties was higher compared with adults who reported 7–9 hours of sleep (Figure 2). For both groups, the most common sleep-related difficulty was concentrating, which was reported by 19.4% of respondents who received 7–9 hours of sleep, but 29.3% of those who received <7 hours of sleep per night.

Respondents aged 20–39 years (37.0%) or 40–59 years (40.3%) were more likely to report a short sleep duration than those aged ≥60 years (32.0%) (Table). Men (39.8%) and women (35.3%) did not differ significantly in prevalence

* Data and additional information are available at http://www.cdc.gov/nchs/nhanes/nhanes_questionnaires.htm.

† The questions pertaining to the sleep-related difficulties were "Do you have difficulty concentrating on the things you do because you feel sleepy or tired?" "Do you generally have difficulty remembering things because you are sleepy or tired?" "Do you have difficulty working on a hobby, for example, sewing, collecting, gardening, because you are sleepy or tired?" "Do you have difficulty getting things done because you are too sleepy or tired to drive or take public transportation?" "Do you have difficulty taking care of financial affairs and doing paperwork (for example, paying bills or keeping financial records) because you are sleepy or tired?" and "Do you have difficulty performing employed or volunteer work because you are sleepy or tired?" Affirmative responses to these questions included a "yes" to any level of difficulty. Negative responses were "don't do this activity for other reasons," "no difficulty," or "don't know."

FIGURE 1. Distribution of sleep duration and number of sleep-related difficulties among adults aged ≥20 years — National Health and Nutrition Examination Survey, United States, 2005–2008

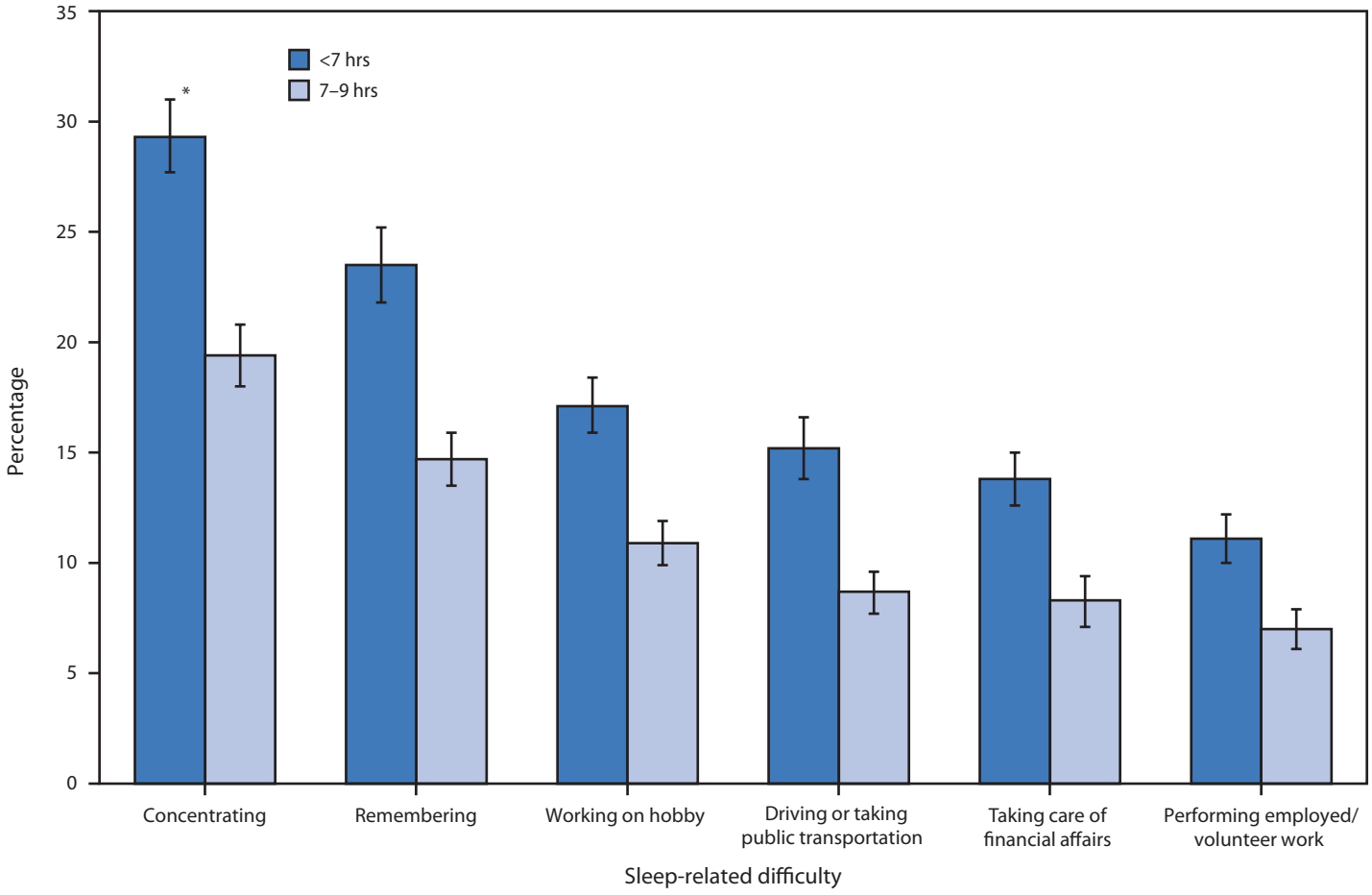


* 95% confidence interval.

of short sleep duration. Non-Hispanic blacks (53.0%) had the highest prevalence of short sleep duration compared with other racial/ethnic populations. Respondents who reported at least some college education (34.5%) had a lower prevalence of short sleep duration than persons with only a high school diploma (40.9%).

Among U.S. adults, 13.5% reported three or more sleep-related difficulties (Figure 1). Overall, the greatest percentage (23.2%) reported difficulty concentrating on things because they were sleepy or tired, followed by difficulty remembering things (18.2%) and difficulty working on hobbies (13.3%) (Table). Difficulty driving or taking public transportation, taking care of financial affairs, or performing employed or volunteer work because of sleepiness or tiredness was reported by 11.3%, 10.5%, and 8.6% of respondents, respectively. Adults aged ≥60 years were less likely than younger adults to report having each of the six sleep-related difficulties, and women were more likely than men to report four of the six sleep-

FIGURE 2. Age-adjusted prevalence of adults aged ≥20 years reporting sleep-related difficulty carrying out selected activities, by usual sleep duration — National Health and Nutrition Examination Survey, United States, 2005–2008



* 95% confidence interval.

TABLE. Age-specific and age-adjusted* percentages of adults aged ≥20 years reporting short sleep duration (<7 hours) and sleep-related difficulty carrying out selected activities, by selected characteristics — National Health and Nutrition Examination Survey, United States, 2005–2008

			Sleep-related difficulty									
		Sleep <7 hrs weekdays or workdays	Concentrating		Remembering		Working on hobby		Driving or taking public transportation		Taking care of financial affairs		Performing employed/ volunteer work	
Characteristic	No.	% (95% CI†)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Total	**10,896**	**37.1 (35.0–39.1)**	**23.2**	**(22.0–24.5)**	**18.2**	**(17.2–19.3)**	**13.3**	**(12.5–14.0)**	**11.3**	**(10.5–12.1)**	**10.5**	**(9.6–11.4)**	**8.6**	**(7.9–9.4)**
Sex														
Men	5,291	38.9 (36.8–41.0)	20.2	(19.0–21.5)	15.0	(13.8–16.2)	10.5	(9.7–11.3)	9.4	(8.4–10.4)	10.0	(8.8–11.3)	7.8	(6.9–8.8)
Women	5,605	35.3 (32.7–37.8)	26.1	(24.4–27.8)	21.4	(19.7–23.0)	15.9	(14.7–17.0)	13.1	(12.0–14.3)	11.0	(9.8–12.2)	9.5	(8.5–10.5)
Age group (yrs)														
20–39	3,830	37.0 (34.3–39.7)	25.1	(23.1–27.1)	18.4	(16.9–19.9)	13.3	(12.0–14.5)	12.6	(11.3–13.9)	10.7	(8.8–12.6)	10.3	(8.8–11.9)
40–59	3,350	40.3 (37.7–42.9)	24.5	(22.5–26.5)	20.3	(18.6–22.1)	15.7	(14.2–17.2)	12.7	(11.1–14.3)	13.2	(12.0–14.5)	10.0	(8.7–11.3)
≥60	3,716	32.0 (30.0–34.1)	18.0	(16.3–19.7)	14.7	(13.0–16.3)	9.4	(8.1–10.6)	6.9	(5.9–7.9)	5.7	(4.9–6.5)	3.5	(2.7–4.3)
Race/Ethnicity														
White, non-Hispanic	5,246	34.5 (31.9–37.2)	23.9	(22.3–25.6)	17.8	(16.4–19.2)	13.9	(12.9–14.8)	10.8	(9.7–11.8)	10.7	(9.4–11.9)	9.1	(8.1–10.0)
Black, non-Hispanic	2,346	53.0 (51.0–54.9)	21.9	(19.8–24.1)	20.0	(17.9–22.1)	14.1	(12.0–16.2)	14.8	(12.8–16.8)	11.2	(9.6–12.9)	8.7	(7.4–10.0)
Mexican-American	2,034	35.2 (32.9–37.5)	18.7	(16.1–21.2)	16.7	(14.8–18.7)	8.7	(7.3–10.1)	9.2	(7.7–10.8)	7.5	(5.8–9.2)	4.9	(4.1–5.7)
Other§	1,270	41.7 (38.4–45.0)	25.2	(22.5–28.0)	21.8	(19.0–24.5)	12.5	(9.9–15.1)	12.5	(10.7–14.3)	11.3	(8.8–13.9)	9.3	(7.3–11.4)
Education¶														
Less than high school diploma	3,247	39.1 (36.2–42.1)	21.2	(18.6–23.8)	20.8	(18.5–23.2)	11.1	(9.3–12.9)	12.0	(9.9–14.1)	8.7	(7.1–10.3)	6.7	(5.1–8.3)
High school diploma	2,641	40.9 (37.4–44.5)	23.1	(21.1–25.1)	18.9	(17.0–20.8)	13.6	(12.2–15.1)	11.6	(10.3–12.9)	9.9	(8.7–11.2)	7.7	(6.3–9.0)
At least some college	4,994	34.5 (32.5–36.5)	23.8	(22.3–25.4)	17.0	(15.7–18.2)	13.7	(12.5–14.9)	10.9	(10.0–11.8)	11.4	(10.0–12.8)	9.8	(8.7–10.9)

* Estimates are age adjusted using the projected 2000 U.S. population as the standard population and using three age groups: 20–39 years, 40–59 years, and ≥60 years.
† Confidence interval.
§ Includes other Hispanics, other race/ethnicities, multiracial, and missing race/ethnicity.
¶ Results for persons with unreported education status (n = 14) are not shown because of small sample size.

related difficulties. Women were more likely to report most sleep-related difficulties than men, regardless of sleep duration, but both men and women reported greater difficulties if they slept <7 hours compared with 7–9 hours.

Mexican Americans were less likely to report sleep-related difficulty in performing employed or volunteer work (4.9%), taking care of financial affairs (7.5%), and working on hobbies (8.7%) than non-Hispanic whites (9.1%, 10.7%, and 13.9%, respectively) and non-Hispanic blacks (8.7%, 11.2%, and 14.1%, respectively). Non-Hispanic blacks reported a greater prevalence than other racial/ethnic populations of sleep-related difficulty in driving or taking public transportation (14.8%). Persons with at least some college education were more likely to report sleep-related difficulty performing employed or volunteer work (9.8%), but less likely to report difficulty remembering things (17.0%), compared with persons with less than a high school education (6.7% and 20.8%, respectively) (Table).

Reported by

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What is already known on this topic?

The National Sleep Foundation suggests that adults need 7–9 hours of sleep per night; shorter and longer sleep durations have been associated with increased morbidity and mortality.

What is added by this report?

Perceived difficulty in carrying out each of several daily activities because of being too sleepy or tired was as much as 50% greater among adults who usually slept <7 hours on weekdays or workdays than among those who usually slept 7–9 hours.

What are the implications for public health practice?

Public health workers should educate themselves and their communities on the substantial impact that insufficient sleep and sleep disorders have on health, wellness, and the ability to perform daily activities, such as concentrating and remembering things. Health-care providers can advise patients on lifestyle changes to improve sleep; patients with more serious sleep problems should be evaluated by a specialist.

Editorial Note

This is the first investigation of the relationship between reported short sleep duration and sleep-related difficulties in performing daily activities among persons in a broad, nonclinical population. The National Sleep Foundation suggests that

adults need 7–9 hours of sleep per night; both shorter and longer sleep durations have been associated with increased morbidity and mortality (*1*). In this analysis, adults who reported usually getting <7 hours of sleep on weekdays or workdays were more likely to have difficulties with daily activities than adults who reported getting 7–9 hours of sleep. Women were more likely to report four of the six sleep-related difficulties than men, regardless of sleep duration. One factor that might contribute to these differences is that men and women might differ in their recognition of sleepiness and its effect on their ability to perform daily functions (*4*).

Most sleep disorders are marked by difficulty falling or staying asleep (e.g., insomnia), sleep-breathing disorders (e.g., sleep apnea), or abnormal movements, behaviors, or sensations during sleep (e.g., restless legs syndrome) (*5*). The sleep-related difficulty questions used in NHANES surveys have been used primarily to measure the effect of excessive sleepiness on functional outcomes in populations with disorders associated with excessive sleepiness (e.g., sleep apnea, narcolepsy, and depression). A previous analysis using 2005–2006 NHANES data found associations between having sleep apnea, insomnia, and restless legs syndrome and having sleep-related difficulties (*6*). In that NHANES sample, the prevalence of specific physician-diagnosed sleep disorders ranged from 4.2% for sleep apnea to 1.2% for insomnia and 0.4% for restless legs syndrome. Difficulties concentrating (44.1%–63.7%) and remembering (29.5%–44.6%) were the most prevalent sleep-related difficulties among persons with those sleep disorders (*6*).

The findings in this report are subject to at least five limitations. First, NHANES only surveyed the noninstitutionalized U.S. population; persons in nursing homes, the military, and other institutions were not included. Second, because of the cross-sectional design of NHANES, causality in the relationship between short sleep duration and the sleep-related difficulties could not be inferred. Third, this analysis relies on self-reported measures that cannot be validated. Fourth, the prevalence of drowsy driving, an important public safety issue related to sleepiness (*7*), could not be estimated because NHANES does not include a question about drowsy driving. Finally, this survey asked about duration of sleep at night, not about total sleep per 24-hour period; therefore, sleep duration estimates are not precisely comparable to those from surveys such as the Behavioral Risk Factor Surveillance System or the National Health Interview Survey.

Poor sleep habits, which include not scheduling enough time for sleep, can be assessed during general medical care visits and improved with effective behavioral changes. Health-care providers should advise patients who need to improve their sleep quality to 1) keep a regular sleep schedule; 2) avoid stimulating activities (e.g., vigorous exercise) within 2 hours of bedtime; 3) avoid caffeine, nicotine, and alcohol in the evening (*8*); 4) avoid going to bed on a full or empty stomach; and 5) sleep in a dark, quiet, well-ventilated space with a comfortable temperature. Because chronic sleep loss has a cumulative effect on mental and physical well-being, potentially exacerbating depression, obesity, diabetes, and other chronic conditions (*5*), treatment of patients with chronic diseases might benefit from counseling about the importance of sufficient sleep. Some patients might need referral to a sleep specialist for evaluation to determine whether they have a specific chronic sleep disorder. Evaluation might include sleep logs to monitor sleep patterns and polysomnography to assess breathing during sleep and measure rapid eye movement and physiologic changes during sleep. Treatment of chronic sleep disorders could include weight loss, changes in sleep behaviors, pharmacologic management, use of continuous positive airway pressure devices, use of dental devices, or upper airway surgery.

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Vital Signs: Central Line–Associated Blood Stream Infections — United States, 2001, 2008, and 2009

On March 1, this report was posted as an MMWR *Early Release on the* MMWR *website (http://www.cdc.gov/mmwr).*

Abstract

Background: Health-care–associated infections (HAIs) affect 5% of patients hospitalized in the United States each year. Central line–associated blood stream infections (CLABSIs) are important and deadly HAIs, with reported mortality of 12%–25%. This report provides national estimates of the number of CLABSIs among patients in intensive-care units (ICUs), inpatient wards, and outpatient hemodialysis facilities in 2008 and 2009 and compares ICU estimates with 2001 data.

Methods: To estimate the total number of CLABSIs among patients aged ≥1 year in the United States, CDC multiplied central-line utilization and CLABSI rates by estimates of the total number of patient-days in each of three settings: ICUs, inpatient wards, and outpatient hemodialysis facilities. CDC identified total inpatient-days from the Healthcare Cost and Utilization Project's National Inpatient Sample and from the Hospital Cost Report Information System. Central-line utilization and CLABSI rates were obtained from the National Nosocomial Infections Surveillance System for 2001 estimates (ICUs only) and from the National Healthcare Safety Network (NHSN) for 2009 estimates (ICUs and inpatient wards). CDC estimated the total number of outpatient hemodialysis patient-days in 2008 using the single-day number of maintenance hemodialysis patients from the U.S. Renal Data System. Outpatient hemodialysis central-line utilization was obtained from the Fistula First Breakthrough Initiative, and hemodialysis CLABSI rates were estimated from NHSN. Annual pathogen-specific CLABSI rates were calculated for 2001–2009.

Results: In 2001, an estimated 43,000 CLABSIs occurred among patients hospitalized in ICUs in the United States. In 2009, the estimated number of ICU CLABSIs had decreased to 18,000. Reductions in CLABSIs caused by *Staphylococcus aureus* were more marked than reductions in infections caused by gram-negative rods, *Candida* spp., and *Enterococcus* spp. In 2009, an estimated 23,000 CLABSIs occurred among patients in inpatient wards and, in 2008, an estimated 37,000 CLABSIs occurred among patients receiving outpatient hemodialysis.

Conclusions: In 2009 alone, an estimated 25,000 fewer CLABSIs occurred in U.S. ICUs than in 2001, a 58% reduction. This represents up to 6,000 lives saved and $414 million in potential excess health-care costs in 2009 and approximately $1.8 billion in cumulative excess health-care costs since 2001. A substantial number of CLABSIs continue to occur, especially in outpatient hemodialysis centers and inpatient wards.

Implications for Public Health Practice: Major reductions have occurred in the burden of CLABSIs in ICUs. State and federal efforts coordinated and supported by CDC, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services and implemented by numerous health-care providers likely have helped drive these reductions. The substantial number of infections occurring in non-ICU settings, especially in outpatient hemodialysis centers, and the smaller decreases in non–*S. aureus* CLABSIs reveal important areas for expanded prevention efforts. Continued success in CLABSI prevention will require increased adherence to current CLABSI prevention recommendations, development and implementation of additional prevention strategies, and the ongoing collection and analysis of data, including specific microbiologic information. To prevent CLABSIs in hemodialysis patients, efforts to reduce central line use for hemodialysis and improve the maintenance of central lines should be expanded. The model of federal, state, facility, and health-care provider collaboration that has proven so successful in CLABSI prevention should be applied to other HAIs and other health-care–associated conditions.

Introduction

Health-care–associated infections (HAIs) account for a substantial portion of health-care–acquired conditions (*1*) that harm patients receiving medical care. Nearly one in every 20 hospitalized patients in the United States each year acquires an HAI. Central line–associated blood-stream infections (CLABSIs) are one of the most deadly types of HAIs, with a mortality rate of 12%–25% (*2*). CDC defines a CLABSI as recovery of a pathogen from a blood culture (a single blood culture for organisms not commonly present on the skin and two or more blood cultures for organisms commonly present on the skin) in a patient who had a central line at the time of infection or within the 48-hour period before development of infection. The infection cannot be related to any other infection the patient might have and must not have been present or incubating when the patient was admitted to the facility.

In recent years, large-scale regional and statewide projects, such as the Pittsburgh Regional Healthcare Initiative and the Michigan Keystone Project, have demonstrated roughly 70% reductions in CLABSI rates in intensive-care units (ICUs) by increasing adherence to recommended best-practices for the insertion of central lines (*3,4*). Decreases in CLABSIs have been attributed to various factors, including increased financial and leadership support for CLABSI prevention, improved education and engagement of clinicians in prevention efforts, packaging of prevention recommendations into practice bundles, increased data monitoring and feedback on progress, improvement of the safety culture in health-care, and local and statewide collaborative prevention efforts.

In 2009, the U.S. Department of Health and Human Services set a national goal for a 50% reduction in CLABSIs by 2013 (*5*). CDC monitors progress toward this goal through the National Healthcare Safety Network (NHSN).* This report describes progress in CLABSI reductions in ICUs and estimates the numbers of CLABSIs occurring in non-ICU settings. CDC estimated the number of CLABSIs among hospitalized patients aged ≥1 years in 2009 and among patients receiving outpatient hemodialysis in 2008. CDC also compared the number of CLABSIs in ICUs and the pathogens causing inpatient CLABSIs in 2001 and 2009.

Methods

For each setting (ICU, inpatient ward, and hemodialysis facility) and period, CDC multiplied patient-day estimates by central-line utilization ratios to estimate the total number of central line-days nationally and then applied CLABSI rates to estimate the total number of infections. CDC estimated the total number of inpatient-days in United States hospitals by averaging estimates from the Healthcare Cost and Utilization Project's National Inpatient Sample (NIS) (*6*) and the Hospital Cost Report Information System (HCRIS) (*7*). Estimates were adjusted by the ratio of federal hospital patient-days to non-federal hospital patient-days reported in the annual American Hospital Association survey in 2007 (*8*). The proportion of patient-days occurring in ICUs was estimated from the 2007 HCRIS. Information on pooled mean central-line utilization and CLABSI rates was obtained from the approximately 260 hospitals participating in the National Nosocomial Infections Surveillance System (NNIS) in 2001 (*9*) and the approximately 1,600 hospitals participating in NHSN in 2009. Surveillance data reported to NNIS and NHSN are collected by trained personnel using standard methodologies and definitions. These data were not available for inpatient wards for 2001. CDC applied a correction factor to NNIS data to account for a change in the CLABSI definition in 2008 (*10*).

CDC obtained the single-day number of maintenance hemodialysis patients in the Medicare End-Stage Renal Disease (ESRD) program for December 31, 2007, and December 31, 2008, from the U.S. Renal Data System (*11*) and multiplied the midpoint by 365 to obtain the estimated number of hemodialysis patient-days in 2008. CDC applied an adjustment factor to account for hemodialysis patients not covered by Medicare. The proportion of hemodialysis patients using a central line was obtained from the Fistula First Breakthrough Initiative (*12*) and applied to the number of hemodialysis patient-days. Pooled mean CLABSI rates were estimated from centers reporting event data to NHSN during 2007–2008. Because dialysis facilities use different definitions than hospitals, access-related bloodstream infection in dialysis patients with a central line was used to approximate CLABSI.

CDC also performed two sensitivity analyses: one in which CLABSI rates and central-line utilization were both underestimated by 25%, and one assuming both were overestimated by 25%. Information on the most common pathogens causing CLABSIs also was analyzed. CLABSIs with more than one pathogen could be reported in multiple categories. Relative changes were calculated by comparing the pathogen group–specific incidence in each year, and incidence rates were compared using a mid-P test with confidence intervals based on the Byar method (*13*).

Results

For the 2009 calculations, an estimated 168 million inpatient-days occurred in nonfederal acute-care hospitals in the United States. After adding approximately 4.9% to account for patient-days in federal hospitals, CDC allocated 12.5% of days to ICUs and 87.5% to inpatient wards, yielding 22.1 million ICU days and 154.3 million inpatient ward days (Tables 1 and 2).

*Additional information available at http://www.cdc.gov/nhsn.

TABLE 1. Data inputs for estimated number of central line–associated blood stream infections (CLABSIs) — United States, 2001, 2008, and 2009

Data inputs	Value	Source
Inpatient health-care utilization data		
Nonfederal hospital inpatient-days, 2007	168,113,488 patient-days	Average of values from the National Inpatient Sample and Hospital Cost Report Information System, 2007
Inflation factor to account for federal health-care facilities	0.049 additional patient-days per nonfederal hospital day	American Hospital Association Database, 2007
Proportion of inpatient-days that are in intensive-care units (ICUs), 2007	0.125	Hospital Cost Report Information System, 2007
Pooled mean ICU central-line utilization, 2001	0.53 central line-days per patient-day	National Nosocomial Infections Surveillance System, 1999–2003
Pooled mean ICU central-line utilization, 2009	0.50 central line-days per patient-day	National Healthcare Safety Network, 2009
Pooled mean inpatient ward central-line utilization, 2009	0.13 central line-days per patient-day	National Healthcare Safety Network, 2009
Inpatient CLABSI rate data		
Pooled mean ICU CLABSI rate adjusted for definition change, 2001	3.64 per 1,000 central line-days	National Nosocomial Infections Surveillance System, 1999–2003
Pooled mean ICU CLABSI rate, 2009	1.65 per 1,000 central line-days	National Healthcare Safety Network, 2009
Pooled mean inpatient ward CLABSI rate, 2009	1.14 per 1,000 central line-days	National Healthcare Safety Network, 2009
Hemodialysis health-care utilization data		
No. of prevalent maintenance hemodialysis end-stage renal disease patients on June 30, 2008	348,253 (equivalent to 127,112,345 patient-days)	Midpoint of U.S. Renal Data System estimates for December 31, 2007, and December 31, 2008
Proportion of hemodialysis patients dialyzed using a catheter, 2008	0.262	Midpoint of values from Fistula First Breakthrough Initiative for January–December 2006 and January–October 2010
Hemodialysis CLABSI rate data		
Pooled mean access-related bloodstream infection rate in hemodialysis patients with a central line, 2008	3.20 per 100 patient-months (equivalent to 1.05 per 1,000 central line-days)	National Healthcare Safety Network, 2007–2008

In 2001, the pooled mean central-line utilization ratio in ICUs was 0.53 central line-days per patient-day, which yielded 11.7 million central line-days. The CLABSI rate was multiplied by 0.817 to account for the change in definition, yielding a rate of 3.64 CLABSIs per 1,000 central line-days (Table 1). By applying this to ICU central line-days, CDC estimated that approximately 43,000 (sensitivity analysis range: 27,000–67,000) CLABSIs occurred in U.S. ICUs in 2001 (Table 2). In 2009, the pooled mean ICU central-line utilization ratio was 0.50, yielding an estimated 11.0 million central line-days (Table 1). Applying the pooled mean ICU CLABSI rate of 1.65 infections per 1,000 central line-days yielded an estimated 18,000 CLABSIs in ICUs in 2009 (sensitivity analysis range: 12,000–28,000) (Tables 1 and 2).

In inpatient wards in 2009, the pooled mean central-line utilization ratio was 0.13, yielding an estimated 20.1 million central line-days (Table 1). Applying the pooled mean inpatient ward CLABSI rate of 1.14 infections per 1,000 central line-days yielded an estimated 23,000 CLABSIs in U.S. inpatient wards in 2009 (sensitivity analysis range: 15,000–37,000) (Tables 1 and 2).

An estimated 127 million outpatient hemodialysis end-stage renal disease (ESRD) patient-days occurred in the United States in 2008. After adjustment for non-Medicare patients, CDC allocated 26.2% of patient-days to those in which a central line was used, based on Fistula First data, which yielded 34.9 million estimated central line-days (Table 1). Applying the pooled mean estimated CLABSI rate of 1.05 per 1,000 central-line days yielded an estimated 37,000 (sensitivity analysis range: 23,000–57,000) CLABSIs in hemodialysis patients in 2008 (Tables 1 and 2).

The reduction in CLABSI incidence in 2009 compared with 2001 was greatest for *Staphylococcus aureus* CLABSIs (73% reduction; rate ratio [RR] = 0.27; 95% confidence interval [CI] = 0.238–0.294) and more modest for gram-negative pathogens (*Klebsiella* spp., *Escherichia coli*, *Acinetobacter baumannii*, or *Pseudomonas aeuriginosa*) (37% reduction; RR = 0.63; CI = 0.568–0.692), *Candida* spp. (46% reduction; RR = 0.54; CI = 0.487–0.606), and *Enterococcus* spp. (55% reduction; RR = 0.45; CI = 0.408–0.491).

TABLE 2. Estimated annual number of central line–associated blood stream infections (CLABSIs), by health-care setting and year — United States, 2001, 2008, and 2009

Health-care setting	Year	No. of infections (upper and lower bound of sensitivity analysis)
Intensive-care units	2001	43,000 (27,000–67,000)
	2009	18,000 (12,000–28,000)
Inpatient wards	2009	23,000 (15,000–37,000)
Outpatient hemodialysis*	2008	37,000 (23,000–57,000)

* Case definitions approximate current definition of CLABSI according to the National Healthcare Safety Network.

Conclusions and Comment

In 2009, an estimated 25,000 fewer CLABSIs occurred among patients in ICUs in the United States than in 2001 (a 58% reduction). The cumulative number of CLABSIs prevented since 2001 is substantially higher because reductions have been occurring annually for the past decade (*14*). Given the reported mortality from CLABSIs, these reductions represent an estimated 3,000–6,000 lives saved and estimated excess health-care costs of $414 million (*15*) in ICUs in 2009 alone. Assuming that each CLABSI carries excess health-care costs of $16,550 and mortality of up to 25%, and that CLABSI reductions were steady during 2001–2009, the cumulative excess health-care costs of all CLABSIs prevented in ICUs could approach $1.8 billion, and the number of lives saved could be as high as 27,000. The majority of CLABSIs are now occurring outside of ICUs, many outside of hospitals altogether, especially in outpatient dialysis clinics. The data in this report indicate that CLABSIs attributed to *S. aureus* have decreased more than other pathogens. Reductions in CLABSIs in ICUs likely reflect the impact of a coordinated effort by state and federal agencies, professional societies, and health-care personnel to implement proven best practices for the insertion of central lines. Toward advancing this success further, CDC guidelines for CLABSI prevention (*2*) have been incorporated in regional, state, and national efforts to reduce CLABSIs, such as the Agency for Healthcare Research and Quality (AHRQ)–supported On the CUSP: Stop BSI campaign, which seeks to enroll facilities in every state† in CLABSI prevention efforts.

Because efforts to improve central line insertion might have limited impact in non-ICU settings, in which central lines are less frequently inserted, additional prevention strategies must be developed. For example, *S. aureus* more commonly inhabits the skin and thus might be a more common cause of insertion-related infections; therefore, the smaller reduction among other pathogens suggests a need for improved implementation of post-insertion line-maintenance practices and strategies to ensure prompt removal of unneeded central lines. In addition, reductions in *S. aureus* CLABSIs likely were enhanced by widespread efforts to interrupt transmission of methicillin-resistant *S. aureus*. Implementation of CDC-recommendations to maintain central lines, remove them promptly when they are no longer needed, and interrupt transmission of resistant bacteria (*16,17*) will reduce CLABSIs further. Focusing on antibiotic-resistant pathogens can be especially important given the increased risk for mortality associated with these pathogens (*18*). Slower declines in non–*S. aureus* CLABSIs also suggest the need to research methods for preventing infections that meet the surveillance definition for a CLABSI but clinically might be related to another cause (e.g., infections caused by translocation of bacteria from the intestine). The variation in reductions among different organisms underscores the importance of collecting pathogen and susceptibility information as part of CLABSI surveillance. Microbiologic information will be critical in helping direct future CLABSI prevention efforts at pathogens that have been reduced less markedly.

The substantial number of estimated CLABSIs among hemodialysis patients emphasizes another important prevention priority because these infections are a major cause of hospital admissions and mortality (*11*). A primary prevention measure is the avoidance of central lines in favor of arteriovenous fistulas or, in some instances, arteriovenous grafts. Currently, approximately 80% of ESRD patients in the United States initiate hemodialysis with a central line (*11*), a proportion that exceeded that of eight of 10 other developed countries and was nearly threefold higher than in Germany (23%) and Japan (29%) (*19*). Interventions to improve arteriovenous fistula placement, including increased access to pre-ESRD nephrology care, are needed to reduce catheter reliance (*11,20*). When catheters must be used, recommended interventions to improve central-line maintenance can reduce CLABSIs in hemodialysis patients and should be consistently implemented (*21*). Novel prevention strategies, such as measures to reduce central-line colonization in hemodialysis patients, also have shown promise and should be explored (*22*).

The findings in this report are subject to at least six limitations. First, estimates were calculated rather than measured directly and limitations in discharge datasets on the details of the types of ICUs and wards in which patient days occurred meant that the overall pooled means for all ICUs and all wards was applied to the aggregate number of patient days in each area. To account for some uncertainty in these estimates, CDC performed a sensitivity analysis. Second, substantial differences between facilities reporting and not reporting data to CDC might have affected the accuracy of these estimates. Third, difficulty exists in comparing these estimates with estimates that were not limited to CLABSIs (*23*) and might have used the pre-2008 definition. Fourth, for

† Additional information available at http://www.safercare.net/otcsbsi/home.html.

Key Points

- Central line–associated blood stream infections (CLABSIs) are serious but preventable infections.
- CLABSIs are largely preventable when health professionals use CDC's *Guidelines for the Prevention of Intravascular Catheter-Related Infections*.
- CLABSIs among patients in hospital intensive-care units were reduced by 58% in 2009 compared with 2001. Many CLABSIs still occur in other places in the hospital and in outpatient-care settings.
- In 2008, an estimated 37,000 CLABSIs occurred among outpatient hemodialysis patients.
- Hemodialysis-related CLABSIs can be reduced by avoiding the use of a central venous catheter in favor of an arteriovenous fistula or, in some cases, an arteriovenous graft, and by improving adherence to best practices for maintaining central lines in hemodialysis patients.
- Additional information is available at http://www.cdc.gov/vitalsigns.

hemodialysis-related CLABSI estimates, uncertainty is introduced because facilities report monthly (not daily) central-line utilization, they use a less specific bloodstream infection definition (compared with the NHSN inpatient definition), and <5% currently report data to NHSN. Fifth, the information provided to NNIS and NHSN is subject to reporting biases, although this is mitigated somewhat by the use of standard and common surveillance definitions and methodologies in both NNIS and NHSN. Finally, data are not available on CLABSIs that occur after patients have been discharged or among non-hemodialysis outpatients with central venous catheters. Hence, the CLABSI data described in this report do not include all patients affected by CLABSIs each year.

The successes of the Pittsburgh Regional Healthcare Initiative and Michigan Keystone Project demonstrate the impact of regional and state-based CLABSI prevention programs. State health departments are now building on these successes and working with state hospital associations and quality-improvement organizations to expand their roles in HAI prevention. As part of CLABSI prevention efforts, 22 states now require that inpatient facilities report CLABSI rates to NHSN, and one state (Colorado) also requires reporting from hemodialysis facilities. As of 2010, all 50 state health departments and the District of Columbia had developed state HAI prevention plans, based on the U.S. Department of Health and Human Services (HHS) *National Action Plan to Reduce Healthcare-Associated Infections* (*5*).

Federal agencies are working together to support state-based and facility level HAI prevention campaigns. AHRQ is expanding the highly successful CUSP CLABSI prevention campaigns into more health-care facilities and outside of ICUs, and expanding this same methodology to other HAIs. The Centers for Medicare & Medicaid Services (CMS) also is working with CDC to improve the monitoring and prevention of HAIs in all health-care settings. CDC will continue to serve as a national resource for technical expertise on HAIs, working on efforts to implement and expand prevention and to investigate new prevention and surveillance approaches. The growing involvement of state health departments in HAI prevention efforts will build on existing public health infrastructure and expertise. In 2009, through the American Recovery and Reinvestment Act, CDC provided $40 million to state health departments to promote HAI prevention. States are using these funds to establish and enhance HAI expertise; complement HAI prevention efforts of health-care facilities, hospital associations, and quality-improvement organizations; engage new partners in HAI prevention; improve the extent and accuracy of HAI reporting to NHSN; and implement specific prevention activities.[§]

Progress in reducing CLABSIs highlights the preventability of these infections and helps establish a prevention framework that can be applied to other HAIs and other hospital-acquired conditions. CDC, AHRQ, CMS, and HHS will continue to support HAI prevention in collaboration with state-based and facility partners. Success in this endeavor will require continued support for the implementation of current prevention best practices, the development of new prevention strategies (*24*), and an ongoing commitment to monitor progress in this endeavor. Further investments, especially in state health departments, will accelerate progress towards HAI elimination.

[§] Additional information available at http://www.cdc.gov/hai/recoveryact/map.html.

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Announcements

Brain Injury Awareness Month — March 2011

This year, in recognition of Brain Injury Awareness Month, CDC encourages school professionals, coaches, parents, and athletes to learn the steps they can take to reduce the risk for concussion among youths participating in sports. An estimated 1.7 million traumatic brain injury (TBI)–related deaths, hospitalizations, and emergency department visits are expected to occur in the United States each year (*1*). Moreover, an estimated 135,000 sports- and recreation-related TBIs, including concussions, are treated in U.S. emergency departments each year (*2*).

A concussion is a type of TBI caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist inside the skull, stretching and damaging the brain cells and creating chemical changes in the brain. Many young athletes accept the risk for injury as one of the many challenges of participating in sports. Others might be unaware that even a mild bump or blow to the head can be serious. Although most athletes with a concussion recover quickly and fully, some will have symptoms that last for days, or even weeks. The effects of a more serious concussion can last for months or longer. A repeat concussion that occurs before the brain recovers from the first (usually within a short period) can be very dangerous and can slow recovery or increase the chances for long-term problems. A repeat concussion can even be fatal.

To date, CDC has disseminated approximately 2 million educational items on concussion in sports through the Heads Up campaign. In addition, CDC has educated approximately 200,000 coaches through online trainings and videos during the past year. CDC's Heads Up to Schools: Know Your Concussion ABCs campaign also is helping strengthen awareness of concussion prevention, recognition, and response among school professionals. CDC's next steps include online training for health-care professionals, developing guidelines for pediatric mild TBIs, and creating online tools for teens and parents. Additional information about preventing, recognizing, and responding to concussions in sports is available at http://www.cdc.gov/concussion.

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Ground Water Awareness Week — March 6–12, 2011

CDC is collaborating with the National Ground Water Association (NGWA) to highlight National Ground Water Awareness Week, March 6–12, 2011. The majority of public water systems in the United States use ground water as their primary source, providing drinking water to nearly 90 million persons (*1*). An additional 16 million U.S. homes use private wells, which also rely on ground water (*2*). NGWA uses this week to stress ground water's importance to the health and well being of humans and the environment (*3*).

Most of the time, ground water sources in the United States are safe to use and not a cause for concern. However, ground water sources sometimes can be contaminated. Contaminants can occur naturally in the environment or they might be the result of local land use practices (e.g., use of fertilizers and pesticides), manufacturing processes, and problems with nearby septic systems. The presence of contaminants in drinking water can lead to illness and disease (*4*).

The U.S. Environmental Protection Agency has worked with individual states to develop new regulations to protect ground water that provides the source for public water systems (*5*). However, private ground water wells (i.e., those serving fewer than 25 persons) must be properly maintained by well owners to ensure the water remains free from harmful chemicals and pathogens. Additional information is available at http://www.cdc.gov/healthywater/drinking/private/wells/index.html. State and local health departments also have resources available to help homeowners protect ground water.

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Announcements

World Kidney Day — March 10, 2011

March 10 is World Kidney Day, an event intended to raise awareness about the importance of kidney disease prevention and early detection. Kidney disease is the ninth leading cause of death in the United States (*1*); moreover, persons with chronic kidney disease (CKD) are more likely to die from cardiovascular disease (CVD) than develop end-stage renal disease (ESRD) (*2*). Among persons with ESRD requiring hemodialysis, the leading causes of hospitalization and death are CVD and infection (*3,4*).

This year, World Kidney Day focuses on the link between CKD and CVD (with the theme of Protect Your Kidneys, Save Your Heart), given that CKD and diabetes are major risk factors for CVD (*2*). Controlling blood glucose, blood pressure, and cholesterol can prevent or delay CKD and CVD and improve health outcomes (*2*). CDC is establishing a national surveillance system to monitor the burden of CKD in the United States. Additional information is available at http://www.cdc.gov/diabetes/projects/kidney.htm.

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Epidemiology in Action Course

CDC and the Rollins School of Public Health at Emory University will cosponsor the course, Epidemiology in Action, to be held May 16–27, 2011, at Emory University in Atlanta, Georgia. This course is designed for state and local public health professionals.

The course emphasizes practical application of epidemiology to public health problems and consists of lectures, workshops, classroom exercises (including actual epidemiologic problems), and roundtable discussions. Topics scheduled for presentation include descriptive epidemiology and biostatistics, analytic epidemiology, epidemic investigations, public health surveillance, surveys and sampling, and Epi Info training, along with discussions of selected diseases. Tuition is charged.

Additional information and applications are available by mail (Emory University, Hubert Department of Global Health [Attn: Pia], 1518 Clifton Rd. NE, CNR Bldg., Rm. 7038, Atlanta, GA 30322); telephone (404-727-3485); fax (404-727-4590); Internet (http://www.sph.emory.edu/epicourses); or e-mail (pvaleri@emory.edu).

Errata

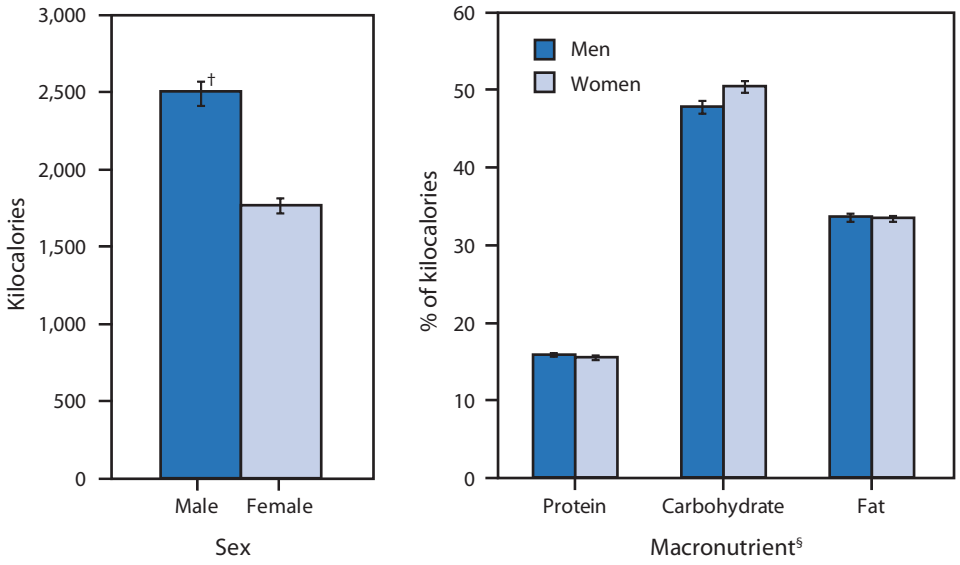
Vol. 59, Nos. 51 & 52

In Table I, "Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending January 1, 2011 (52nd week)," on page 1704, case counts reported for "Brucellosis" were incorrect. In Table II, "Provisional cases of selected notifiable diseases, United States, weeks ending January 1, 2011, and January 2, 2010 (52nd week)" on page 1710, case counts reported for "Hepatitis A, B, and C" were incorrect, and on page 1716, case counts reported for "Varicella" were incorrect. The corrected portions of Table I and II are available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6008a9.htm?s_cid=mm6008a9_w.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Age-Adjusted Kilocalorie and Macronutrient Intake* Among Adults Aged ≥20 Years, by Sex — National Health and Nutrition Examination Survey, United States, 2007–2008



* Based on responses to a series of questions in the 24-hour dietary recall interview of the National Health and Nutrition Examination Survey.
† 95% confidence interval.
§ For both men and women, the percentages do not add up to 100% because calories consumed as alcohol were excluded.

During 2007–2008, the average daily intake of kilocalories was 2,504 kilocalories for men and 1,771 kilocalories for women. Women consumed more energy from carbohydrates than men (50.5% of total daily intake of kilocalories, compared with 47.9% for men). A slight difference was observed in the percentage of kilocalories from protein (15.5% for women and 15.9% for men), and virtually no difference was observed in the percentage of kilocalories from fat (33.6% for men and 33.5% for women).

Source: Wright JD, Wang CY. Trends in intake of energy and macronutrients in adults from 1999–2000 through 2007–2008. NCHS Data Brief no. 49. Available at http://www.cdc.gov/nchs/data/databriefs/db49.htm.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending February 26, 2011 (8th week)*

Disease	Current week	Cum 2011	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	0	—	1	—	1	1	
Arboviral diseases§,¶:									
California serogroup virus disease	—	—	0	74	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	—	10	4	4	4	8	
Powassan virus disease	—	—	—	9	6	2	7	1	
St. Louis encephalitis virus disease	—	—	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	—	2	1	NN	NN	NN	NN	NN	
Botulism, total	—	8	3	109	118	145	144	165	
foodborne	—	1	0	7	10	17	32	20	
infant	—	5	2	77	83	109	85	97	
other (wound and unspecified)	—	2	1	25	25	19	27	48	
Brucellosis	—	5	2	127	115	80	131	121	
Chancroid	1	5	1	36	28	25	23	33	CA (1)
Cholera	—	7	—	12	10	5	7	9	
Cyclosporiasis§	—	16	2	172	141	139	93	137	
Diphtheria	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	1	1	17	35	30	22	29	
nonserotype b	—	10	5	160	236	244	199	175	
unknown serotype	1	33	4	260	178	163	180	179	MO (1)
Hansen disease§	1	8	2	66	103	80	101	66	CA (1)
Hantavirus pulmonary syndrome§	—	1	0	17	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal§	1	6	2	229	242	330	292	288	NY (1)
Influenza-associated pediatric mortality§,††	14	51	4	61	358	90	77	43	NJ (2), PA (2), OH (1), IL (1), MI (1), MN (1), KY (1), TX (3), NV (1), HI (1)
Listeriosis	7	52	10	775	851	759	808	884	WA (1), CA (6)
Measles§§	1	13	1	61	71	140	43	55	WA (1)
Meningococcal disease, invasive¶¶:									
A, C, Y, and W-135	—	15	9	245	301	330	325	318	
serogroup B	1	12	5	112	174	188	167	193	NC (1)
other serogroup	—	—	1	9	23	38	35	32	
unknown serogroup	4	83	13	426	482	616	550	651	FL (1), TN (1), AR (1), CA (1)
Novel influenza A virus infections***	—	1	0	4	43,774	2	4	NN	
Plague	—	—	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic§	—	—	—	—	—	—	—	NN	
Psittacosis§	—	—	0	4	9	8	12	21	
Q fever, total§	—	8	3	124	113	120	171	169	
acute	—	5	1	94	93	106	—	—	
chronic	—	3	0	30	20	14	—	—	
Rabies, human	—	—	—	1	4	2	1	3	
Rubella†††	—	—	0	6	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV§	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	1	15	4	168	161	157	132	125	VT (1)
Syphilis, congenital (age <1 yr)§§§	—	14	7	260	423	431	430	349	
Tetanus	—	—	0	10	18	19	28	41	
Toxic-shock syndrome (staphylococcal)§	2	10	2	78	74	71	92	101	PA (1), MO (1)
Trichinellosis	—	3	0	4	13	39	5	15	
Tularemia	—	1	0	114	93	123	137	95	
Typhoid fever	8	34	7	431	397	449	434	353	NY (5), FL (2), CA (1)
Vancomycin-intermediate *Staphylococcus aureus*§	1	6	1	91	78	63	37	6	MO (1)
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	1	1	—	2	1	
Vibriosis (noncholera *Vibrio* species infections)§	3	25	3	788	789	588	549	NN	FL (3)
Viral hemorrhagic fever¶¶¶	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending February 26, 2011 (8th week)*

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

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

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/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 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 weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 55 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.

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

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

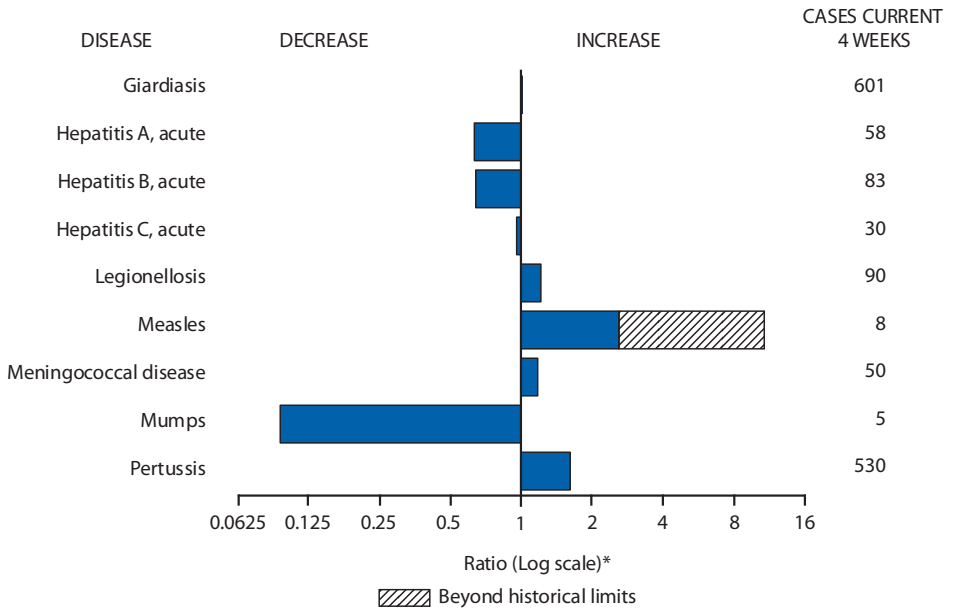
*** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC.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

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

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

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

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals February 26, 2011, with historical data



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

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	*Chlamydia trachomatis* infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	9,568	24,037	26,720	160,765	188,413	141	0	375	1,731	NN	39	120	355	505	820
New England	502	799	2,000	4,746	5,163	—	0	0	—	NN	—	7	19	7	114
Connecticut	31	169	1,512	151	878	N	0	0	N	NN	—	0	4	4	71
Maine†	—	48	100	—	389	N	0	0	N	NN	—	0	7	—	11
Massachusetts	254	403	694	3,147	2,902	N	0	0	N	NN	—	3	9	—	16
New Hampshire	42	51	113	458	294	—	0	0	—	NN	—	1	5	—	7
Rhode Island†	154	67	143	751	524	—	0	0	—	NN	—	0	2	—	3
Vermont†	21	23	84	239	176	N	0	0	N	NN	—	1	5	3	6
Mid. Atlantic	1,930	3,362	5,200	23,583	24,920	—	0	0	—	NN	13	15	38	74	70
New Jersey	524	509	704	3,892	3,958	N	0	0	N	NN	—	0	4	—	4
New York (Upstate)	759	704	1,723	4,935	4,112	N	0	0	N	NN	8	4	13	24	10
New York City	121	1,219	2,772	7,589	9,772	N	0	0	N	NN	—	2	6	7	6
Pennsylvania	526	948	1,187	7,167	7,078	N	0	0	N	NN	5	8	26	43	50
E.N. Central	334	3,603	4,091	21,461	29,730	—	0	3	5	NN	5	30	130	128	201
Illinois	18	852	1,034	3,792	7,956	N	0	0	N	NN	—	3	21	5	37
Indiana	—	414	918	2,650	1,841	N	0	0	N	NN	—	4	10	18	31
Michigan	—	941	1,333	6,326	8,466	—	0	1	1	NN	—	5	18	25	50
Ohio	147	995	1,131	5,896	7,875	—	0	3	4	NN	5	9	24	63	35
Wisconsin	169	427	518	2,797	3,592	N	0	0	N	NN	—	10	64	17	48
W.N. Central	117	1,366	1,562	6,852	11,363	—	0	0	—	NN	1	20	83	56	89
Iowa	—	205	237	1,333	1,704	N	0	0	N	NN	—	4	24	12	23
Kansas	26	185	275	1,248	1,543	N	0	0	N	NN	1	2	9	7	10
Minnesota	—	283	351	947	2,448	—	0	0	—	NN	—	0	16	—	23
Missouri	—	501	619	2,052	3,994	—	0	0	—	NN	—	4	30	17	13
Nebraska†	77	92	185	695	875	N	0	0	N	NN	—	3	26	17	13
North Dakota	—	40	88	114	294	N	0	0	N	NN	—	0	9	—	—
South Dakota	14	61	90	463	505	N	0	0	N	NN	—	1	6	3	7
S. Atlantic	3,403	4,802	5,617	37,564	37,383	—	0	0	—	NN	9	20	39	116	128
Delaware	89	84	220	605	625	—	0	0	—	NN	—	0	1	2	1
District of Columbia	26	98	161	719	750	—	0	0	—	NN	—	0	1	—	1
Florida	624	1,456	1,705	10,350	11,149	N	0	0	N	NN	2	7	19	42	53
Georgia	456	665	1,180	5,482	5,300	N	0	0	N	NN	2	5	11	38	45
Maryland†	260	488	1,083	2,660	2,770	—	0	0	—	NN	—	1	3	6	4
North Carolina	765	750	1,436	7,099	7,689	N	0	0	N	NN	—	0	12	3	8
South Carolina†	478	535	847	3,705	3,956	N	0	0	N	NN	4	2	8	20	5
Virginia†	609	662	970	6,253	4,605	N	0	0	N	NN	1	2	8	5	9
West Virginia	96	75	123	691	539	N	0	0	N	NN	—	0	3	—	2
E.S. Central	416	1,769	2,414	11,472	12,152	—	0	0	—	NN	—	4	19	11	31
Alabama†	—	542	780	3,577	3,559	N	0	0	N	NN	—	2	13	5	8
Kentucky	154	271	614	1,459	1,682	N	0	0	N	NN	—	1	6	5	9
Mississippi	—	381	780	2,399	2,697	N	0	0	N	NN	—	0	2	—	4
Tennessee†	262	581	799	4,037	4,214	N	0	0	N	NN	—	1	5	1	10
W.S. Central	629	3,045	4,238	21,405	27,828	—	0	1	1	NN	—	7	29	13	33
Arkansas†	261	273	391	2,142	1,964	N	0	0	N	NN	—	0	3	—	8
Louisiana	162	342	746	3,121	4,651	—	0	1	1	NN	—	1	6	2	6
Oklahoma	206	258	1,374	1,686	1,793	N	0	0	N	NN	—	1	8	—	4
Texas†	—	2,270	3,110	14,456	19,420	N	0	0	N	NN	—	5	22	11	15
Mountain	279	1,431	1,916	9,500	11,536	50	0	320	1,229	NN	3	10	30	51	77
Arizona	166	489	706	2,038	3,789	50	0	314	1,212	NN	—	1	3	4	4
Colorado	—	338	628	2,868	3,099	N	0	0	N	NN	1	3	6	21	16
Idaho†	—	68	199	399	585	N	0	0	N	NN	—	2	7	7	15
Montana†	74	62	81	522	428	N	0	0	N	NN	2	1	4	6	8
Nevada†	—	176	361	1,382	1,363	—	0	4	8	NN	—	0	7	1	1
New Mexico†	—	162	386	1,249	885	—	0	2	5	NN	—	2	12	9	16
Utah	23	121	157	821	1,033	—	0	2	2	NN	—	1	5	2	11
Wyoming†	16	40	90	221	354	—	0	2	2	NN	—	0	2	1	6
Pacific	1,958	3,676	5,213	24,182	28,338	91	0	98	496	NN	8	12	29	49	77
Alaska	—	112	149	835	946	N	0	0	N	NN	—	0	2	2	2
California	1,533	2,813	4,542	18,529	21,004	91	0	98	496	NN	7	6	18	29	42
Hawaii	—	109	158	528	978	N	0	0	N	NN	—	0	0	—	1
Oregon	111	213	496	1,739	2,101	N	0	0	N	NN	1	3	13	18	23
Washington	314	399	505	2,551	3,309	N	0	0	N	NN	—	1	7	—	9
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	NN	N	0	0	N	NN
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	9	31	71	3	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	95	104	265	897	899	N	0	0	N	NN	N	0	0	N	NN
U.S. Virgin Islands	—	12	29	—	81	—	0	0	—	NN	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Dengue Virus Infection									
	Dengue Fever†					Dengue Hemorrhagic Fever§				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max		
United States	—	6	51	4	48	—	0	2	—	—
New England	—	0	3	—	3	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine¶	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	1	—	—	—	0	0	—	—
Vermont¶	—	0	1	—	—	—	0	0	—	—
Mid. Atlantic	—	2	25	2	20	—	0	1	—	—
New Jersey	—	0	5	—	1	—	0	0	—	—
New York (Upstate)	—	0	5	—	1	—	0	1	—	—
New York City	—	1	17	—	13	—	0	1	—	—
Pennsylvania	—	0	3	2	5	—	0	0	—	—
E.N. Central	—	1	7	2	7	—	0	1	—	—
Illinois	—	0	2	—	1	—	0	0	—	—
Indiana	—	0	2	1	1	—	0	0	—	—
Michigan	—	0	2	—	—	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	1	—	—	0	1	—	—
W.N. Central	—	0	6	—	4	—	0	1	—	—
Iowa	—	0	1	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	2	—	4	—	0	0	—	—
Missouri	—	0	0	—	—	—	0	0	—	—
Nebraska¶	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	2	18	—	9	—	0	1	—	—
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	2	14	—	7	—	0	1	—	—
Georgia	—	0	2	—	1	—	0	0	—	—
Maryland¶	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	—	—	—	0	0	—	—
South Carolina¶	—	0	3	—	—	—	0	0	—	—
Virginia¶	—	0	3	—	1	—	0	0	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—
E.S. Central	—	0	2	—	—	—	0	0	—	—
Alabama¶	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee¶	—	0	1	—	—	—	0	0	—	—
W.S. Central	—	0	1	—	—	—	0	1	—	—
Arkansas¶	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	1	—	—	—	0	0	—	—
Texas¶	—	0	1	—	—	—	0	0	—	—
Mountain	—	0	2	—	2	—	0	0	—	—
Arizona	—	0	1	—	—	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho¶	—	0	1	—	—	—	0	0	—	—
Montana¶	—	0	1	—	—	—	0	0	—	—
Nevada¶	—	0	1	—	1	—	0	0	—	—
New Mexico¶	—	0	0	—	1	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—
Wyoming¶	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	6	—	3	—	0	0	—	—
Alaska	—	0	1	—	—	—	0	0	—	—
California	—	0	5	—	1	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	—	2	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	107	524	88	730	—	1	16	—	15
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	—	9	49	7	17	—	12	58	5	10	—	1	10	1	—
New England	—	0	1	—	1	—	1	8	1	4	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	5	—	—	—	0	2	—	—
Maine§	—	0	1	—	1	—	0	2	1	2	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	3	—	—	—	0	1	—	—
Rhode Island§	—	0	0	—	—	—	0	5	—	2	—	0	0	—	—
Vermont§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	1	6	—	2	—	4	14	2	1	—	0	1	—	—
New Jersey	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	—	0	6	—	—	—	4	14	2	1	—	0	1	—	—
New York City	—	0	3	—	1	—	0	1	—	—	—	0	0	—	—
Pennsylvania	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
E.N. Central	—	0	4	1	2	—	4	40	—	3	—	1	7	1	—
Illinois	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	1	—
Michigan	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Ohio	—	0	3	1	—	—	0	1	—	—	—	0	0	—	—
Wisconsin	—	0	1	—	2	—	4	40	—	3	—	0	4	—	—
W.N. Central	—	1	13	—	1	—	0	3	—	—	—	0	3	—	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	—	1	13	—	1	—	0	3	—	—	—	0	3	—	—
Nebraska§	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	4	17	6	10	—	1	7	1	2	—	0	1	—	—
Delaware	—	0	3	1	1	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	2	1	1	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	4	1	1	—	0	1	—	—	—	0	1	—	—
Maryland§	—	0	3	2	3	—	0	2	—	1	—	0	1	—	—
North Carolina	—	1	13	1	4	—	0	4	1	1	—	0	0	—	—
South Carolina§	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Virginia§	—	1	8	—	—	—	0	2	—	—	—	0	1	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	1	11	—	—	—	0	2	1	—	—	0	1	—	—
Alabama§	—	0	3	—	—	—	0	2	1	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Tennessee§	—	0	7	—	—	—	0	2	—	—	—	0	1	—	—
W.S. Central	—	0	6	—	1	—	0	2	—	—	—	0	1	—	—
Arkansas§	—	0	5	—	—	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	6	—	—	—	0	2	—	—	—	0	0	—	—
Texas§	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
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	—	—	—	0	0	—	—	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	—	—	0	0	—	—	—	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	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Cumulative total *E. ewingii* cases reported for year 2010 = 10, and 1 case report for 2011.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	126	330	489	1,514	2,543	2,255	5,642	6,474	37,900	44,091	24	57	101	411	521
New England	3	29	54	32	240	85	100	202	629	663	—	3	9	7	24
Connecticut	—	5	12	—	58	47	38	169	226	246	—	0	6	—	—
Maine§	2	4	12	16	26	—	2	7	—	42	—	0	2	5	1
Massachusetts	—	13	25	—	98	27	47	80	334	302	—	1	5	—	17
New Hampshire	—	2	8	3	24	3	3	7	17	24	—	0	1	1	4
Rhode Island§	—	0	7	—	10	8	4	15	47	42	—	0	2	—	2
Vermont§	1	3	10	13	24	—	0	17	5	7	—	0	3	1	—
Mid. Atlantic	21	60	106	330	435	372	708	1,169	5,213	5,061	2	11	25	81	124
New Jersey	—	5	18	—	59	114	115	175	1,012	860	—	2	5	10	15
New York (Upstate)	9	22	54	113	154	114	110	227	751	653	1	3	14	19	31
New York City	3	17	33	120	110	32	232	534	1,621	1,884	—	2	6	16	23
Pennsylvania	9	14	27	97	112	112	258	366	1,829	1,664	1	3	11	36	55
E.N. Central	17	55	90	215	456	83	986	1,216	5,803	8,091	1	10	20	57	90
Illinois	—	12	32	24	104	6	211	260	999	1,831	—	3	7	2	20
Indiana	—	5	12	13	67	—	105	279	708	558	—	2	6	7	15
Michigan	—	12	25	44	91	—	249	470	1,725	2,397	—	1	3	9	4
Ohio	16	16	29	102	127	44	317	383	1,815	2,572	1	2	6	29	23
Wisconsin	1	9	33	32	67	33	93	156	556	733	—	1	5	10	28
W.N. Central	9	24	101	131	167	17	288	358	1,389	2,115	6	3	14	19	18
Iowa	1	5	11	29	43	1	34	57	217	250	—	0	1	—	—
Kansas	1	3	10	21	34	3	40	62	220	284	1	0	2	1	4
Minnesota	—	0	75	—	—	—	37	61	115	353	—	0	9	—	1
Missouri	4	8	26	49	47	—	142	181	611	980	3	2	4	10	10
Nebraska§	3	4	9	24	30	12	22	50	159	164	2	0	3	8	1
North Dakota	—	0	5	—	—	—	2	9	6	20	—	0	2	—	2
South Dakota	—	1	7	8	13	1	8	20	61	64	—	0	0	—	—
S. Atlantic	25	73	114	332	524	1,001	1,366	1,801	10,141	11,204	11	15	26	118	114
Delaware	—	0	5	4	7	25	18	48	146	147	—	0	1	—	1
District of Columbia	—	0	5	—	6	8	37	66	273	305	—	0	1	—	—
Florida	12	41	75	188	252	174	382	486	2,707	3,066	6	4	9	44	26
Georgia	7	10	25	57	122	147	225	365	1,667	1,631	1	3	7	29	34
Maryland§	3	5	11	36	38	58	138	235	733	759	1	1	5	9	8
North Carolina	N	0	0	N	N	325	245	596	2,481	2,766	1	2	9	10	16
South Carolina§	1	2	9	9	15	134	152	261	1,061	1,183	—	1	5	6	18
Virginia§	2	9	29	38	79	112	143	223	941	1,288	2	2	6	20	10
West Virginia	—	0	6	—	5	18	13	26	132	59	—	0	3	—	1
E.S. Central	—	4	12	14	41	120	479	697	3,122	3,393	1	3	10	26	32
Alabama§	—	4	11	12	17	—	159	236	1,105	1,035	—	1	4	9	4
Kentucky	N	0	0	N	N	44	73	160	381	512	—	1	3	6	5
Mississippi	N	0	0	N	N	—	109	216	653	751	—	0	2	1	3
Tennessee§	—	0	4	2	24	76	137	195	983	1,095	1	2	5	10	20
W.S. Central	—	6	14	22	58	208	845	1,173	5,800	7,644	1	3	21	28	23
Arkansas§	—	2	7	9	16	89	80	133	674	591	—	0	3	5	3
Louisiana	—	3	8	13	26	45	98	248	884	1,423	—	0	4	11	6
Oklahoma	—	0	5	—	16	74	79	332	546	550	1	2	17	12	13
Texas§	N	0	0	N	N	—	598	866	3,696	5,080	—	0	1	—	1
Mountain	11	31	51	125	244	35	180	235	1,250	1,342	1	5	15	46	77
Arizona	2	3	8	12	23	32	55	87	347	461	—	2	7	17	31
Colorado	6	13	27	72	100	—	54	93	336	410	1	1	5	16	15
Idaho§	1	4	9	20	33	—	2	14	8	22	—	0	2	2	2
Montana§	2	2	7	4	16	1	2	6	15	22	—	0	1	2	—
Nevada§	—	2	11	6	6	—	30	103	290	249	—	0	1	1	4
New Mexico§	—	2	6	4	10	—	23	39	215	122	—	1	3	7	12
Utah	—	4	11	—	41	2	5	15	32	49	—	0	3	1	8
Wyoming§	—	0	5	7	15	—	1	4	7	7	—	0	1	—	5
Pacific	40	52	125	313	378	334	616	811	4,553	4,578	1	3	20	29	19
Alaska	—	2	6	8	11	—	21	37	129	214	—	0	2	6	6
California	30	32	57	217	254	283	507	687	3,882	3,693	—	0	17	6	—
Hawaii	—	1	4	2	9	—	14	26	65	124	1	0	2	5	5
Oregon	5	9	20	61	72	10	19	34	164	165	—	1	5	12	6
Washington	5	8	65	25	32	41	53	86	313	382	—	0	2	—	2
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	5	1	—	—	0	0	—	—
Puerto Rico	1	1	8	5	5	13	6	14	58	38	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	7	—	14	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
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† 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 February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	9	29	43	152	239	27	62	92	272	435	14	15	26	88	105
New England	—	1	5	6	22	—	1	4	2	11	—	0	4	—	12
Connecticut	—	0	3	4	7	—	0	2	—	3	—	0	4	—	7
Maine†	—	0	1	—	1	—	0	1	1	3	—	0	0	—	—
Massachusetts	—	0	5	—	14	—	0	2	—	5	—	0	1	—	5
New Hampshire	—	0	1	—	—	—	0	2	1	—	N	0	0	N	N
Rhode Island†	—	0	4	—	—	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	1	2	—	—	0	1	—	—	—	0	1	—	—
Mid. Atlantic	1	4	10	22	30	1	5	10	28	37	—	2	6	5	10
New Jersey	—	0	2	—	4	—	1	5	2	8	—	0	2	—	—
New York (Upstate)	—	1	4	4	5	1	1	7	9	6	—	1	4	4	8
New York City	—	1	7	8	12	—	1	3	6	14	—	0	1	—	—
Pennsylvania	1	1	3	10	9	—	2	5	11	9	—	0	3	1	2
E.N. Central	—	4	9	23	43	1	9	21	42	84	—	2	7	16	14
Illinois	—	1	3	1	10	—	2	6	6	15	—	0	1	—	—
Indiana	—	0	2	3	2	—	1	6	3	12	—	0	4	8	3
Michigan	—	1	5	7	9	—	2	5	12	22	—	1	6	8	9
Ohio	—	1	5	11	8	1	2	16	19	15	—	0	1	—	1
Wisconsin	—	0	2	1	14	—	1	8	2	20	—	0	2	—	1
W.N. Central	—	1	13	6	9	—	2	7	15	26	1	0	8	2	—
Iowa	—	0	3	1	4	—	0	1	—	5	—	0	0	—	—
Kansas	—	0	2	—	2	—	0	1	2	2	—	0	1	—	—
Minnesota	—	0	12	—	—	—	0	4	—	—	—	0	6	—	—
Missouri	—	0	2	2	2	—	1	3	8	13	—	0	2	—	—
Nebraska†	—	0	4	1	1	—	0	3	4	6	1	0	1	2	—
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	1	—	—	0	0	—	—
S. Atlantic	3	6	14	34	44	14	16	33	87	128	2	2	6	19	16
Delaware	—	0	1	1	2	—	0	2	—	3	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	1	—	1	—	0	1	—	1
Florida	2	3	7	13	20	3	5	11	32	50	1	0	3	6	—
Georgia	1	1	4	8	4	2	3	7	19	33	—	0	2	2	1
Maryland†	—	0	3	4	3	—	1	6	8	10	—	0	3	3	4
North Carolina	—	1	5	2	1	6	1	16	15	10	1	1	3	6	6
South Carolina†	—	0	3	2	8	—	1	4	4	6	—	0	1	—	—
Virginia†	—	1	6	4	5	3	1	6	9	10	—	0	2	2	3
West Virginia	—	0	5	—	—	—	0	12	—	5	—	0	5	—	1
E.S. Central	—	1	5	3	7	5	8	13	55	56	5	3	8	21	20
Alabama†	—	0	2	—	2	1	1	4	9	14	—	0	1	—	1
Kentucky	—	0	5	2	3	—	2	8	17	21	—	2	6	9	18
Mississippi	—	0	1	—	—	—	0	3	1	4	U	0	0	U	U
Tennessee†	—	0	2	1	2	4	2	8	28	17	5	1	4	12	1
W.S. Central	—	2	10	4	15	2	9	32	22	38	3	2	6	13	6
Arkansas†	—	0	1	—	—	—	1	4	1	7	—	0	0	—	—
Louisiana	—	0	2	—	2	—	1	3	6	11	—	0	2	4	—
Oklahoma	—	0	4	—	—	1	2	8	3	3	2	0	6	5	1
Texas†	—	2	7	4	13	1	5	25	12	17	1	0	3	4	5
Mountain	2	2	8	13	29	1	2	8	10	18	—	1	5	5	11
Arizona	—	1	4	5	15	—	0	2	2	4	U	0	0	U	U
Colorado	1	0	2	5	8	1	0	5	1	6	—	0	2	1	3
Idaho†	1	0	2	1	2	—	0	1	1	1	—	0	2	4	3
Montana†	—	0	1	1	1	—	0	0	—	—	—	0	1	—	—
Nevada†	—	0	2	—	1	—	1	3	6	4	—	0	1	—	—
New Mexico†	—	0	1	1	1	—	0	1	—	—	—	0	2	—	3
Utah	—	0	2	—	1	—	0	1	—	3	—	0	2	—	2
Wyoming†	—	0	3	—	—	—	0	1	—	—	—	0	0	—	—
Pacific	3	5	16	41	40	3	6	20	11	37	3	1	8	7	16
Alaska	—	0	1	—	—	—	0	1	—	1	U	0	0	U	U
California	2	4	16	36	31	2	3	16	4	28	2	0	3	2	8
Hawaii	—	0	1	—	3	—	0	1	—	1	U	0	0	U	U
Oregon	—	0	2	2	4	—	1	3	5	6	—	0	3	3	7
Washington	1	0	2	3	2	1	1	5	2	1	1	0	5	2	1
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	6	1	—	—	1	6	7	7	—	0	7	3	2
Puerto Rico	—	0	2	—	3	—	0	2	—	4	—	0	0	—	—
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 February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	23	54	119	221	334	33	403	1,674	607	1,865	7	27	81	137	186
New England	—	4	15	2	17	—	126	504	27	576	—	1	5	2	10
Connecticut	—	0	6	—	3	—	47	213	—	260	—	0	1	—	—
Maine†	—	0	4	1	—	—	12	67	7	22	—	0	1	—	—
Massachusetts	—	2	10	—	8	—	41	223	—	187	—	1	4	—	10
New Hampshire	—	0	5	—	1	—	24	68	14	95	—	0	2	—	—
Rhode Island†	—	0	4	—	4	—	1	40	1	2	—	0	1	—	—
Vermont†	—	0	2	1	1	—	4	27	5	10	—	0	1	2	—
Mid. Atlantic	4	14	48	57	69	21	179	738	388	880	—	7	17	39	50
New Jersey	—	1	11	—	11	—	49	220	1	242	—	0	1	—	—
New York (Upstate)	3	5	19	21	20	10	38	200	68	108	—	1	6	5	12
New York City	—	2	17	15	15	—	2	8	—	25	—	4	14	29	28
Pennsylvania	1	6	19	21	23	11	91	386	319	505	—	1	3	5	10
E.N. Central	6	12	44	36	78	—	26	325	5	73	—	3	9	10	17
Illinois	—	2	15	—	9	—	1	18	—	3	—	0	7	—	7
Indiana	2	2	7	5	10	—	1	7	—	7	—	0	2	1	1
Michigan	—	3	20	6	10	—	1	14	1	—	—	0	4	1	3
Ohio	4	4	15	25	31	—	0	9	3	4	—	1	5	7	6
Wisconsin	—	1	5	—	18	—	21	297	1	59	—	0	1	1	—
W.N. Central	—	2	9	4	8	—	1	11	—	3	—	1	4	1	14
Iowa	—	0	2	—	—	—	0	10	—	2	—	0	2	—	3
Kansas	—	0	2	—	2	—	0	1	—	1	—	0	2	—	3
Minnesota	—	0	8	—	2	—	0	0	—	—	—	0	3	—	3
Missouri	—	1	4	3	2	—	0	1	—	—	—	0	3	—	2
Nebraska†	—	0	2	—	2	—	0	2	—	—	—	0	1	1	3
North Dakota	—	0	1	—	—	—	0	5	—	—	—	0	1	—	—
South Dakota	—	0	2	1	—	—	0	1	—	—	—	0	2	—	—
S. Atlantic	6	10	27	40	63	10	57	176	163	301	3	7	45	55	57
Delaware	—	0	3	—	3	1	10	33	39	79	—	0	1	—	1
District of Columbia	—	0	4	—	—	—	0	4	2	1	—	0	2	1	1
Florida	5	3	9	24	23	1	2	10	9	7	2	2	7	15	22
Georgia	—	1	4	1	9	—	0	2	1	1	—	1	7	10	9
Maryland†	1	2	6	6	14	1	23	105	57	144	—	1	24	10	10
North Carolina	—	1	7	5	2	—	1	9	6	9	—	0	13	6	4
South Carolina†	—	0	2	—	1	—	0	3	—	3	—	0	1	—	—
Virginia†	—	1	10	4	10	7	18	83	49	54	1	1	5	13	10
West Virginia	—	0	3	—	1	—	0	29	—	3	—	0	1	—	—
E.S. Central	1	2	10	10	18	1	0	4	1	5	—	0	3	2	3
Alabama†	—	0	2	1	3	—	0	1	—	—	—	0	1	1	1
Kentucky	—	0	4	4	5	—	0	1	—	1	—	0	1	—	2
Mississippi	—	0	3	1	2	—	0	0	—	—	—	0	2	—	—
Tennessee†	1	1	6	4	8	1	0	4	1	4	—	0	2	1	—
W.S. Central	1	3	8	7	8	—	2	9	—	2	—	1	11	3	11
Arkansas†	—	0	2	—	1	—	0	0	—	—	—	0	1	—	1
Louisiana	—	0	2	1	1	—	0	1	—	—	—	0	1	—	1
Oklahoma	—	0	3	1	—	—	0	0	—	—	—	0	1	1	1
Texas†	1	2	7	5	6	—	2	9	—	2	—	1	10	2	8
Mountain	1	3	10	10	21	—	0	3	1	2	—	1	4	8	8
Arizona	—	1	7	4	5	—	0	1	—	—	—	0	3	3	1
Colorado	—	0	2	1	7	—	0	1	—	—	—	0	3	2	2
Idaho†	—	0	1	1	—	—	0	2	—	1	—	0	1	—	—
Montana†	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
Nevada†	—	0	2	1	4	—	0	1	—	—	—	0	2	2	2
New Mexico†	—	0	2	—	1	—	0	2	1	—	—	0	1	1	—
Utah	1	0	2	3	3	—	0	1	—	1	—	0	0	—	3
Wyoming†	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	4	5	15	55	52	1	4	10	22	23	4	3	10	17	16
Alaska	—	0	2	—	—	—	0	1	—	1	—	0	2	2	—
California	4	4	14	48	52	1	3	8	18	14	2	2	9	9	13
Hawaii	—	0	1	—	—	N	0	0	N	N	—	0	1	—	—
Oregon	—	0	3	2	—	—	1	4	4	8	1	0	3	3	1
Washington	—	0	5	5	—	—	0	3	—	—	1	0	5	3	2
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	N	0	0	N	N	—	0	1	—	3
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.
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† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	5	14	33	110	143	1	16	220	35	594	121	539	1,542	1,748	1,648
New England	—	0	3	1	1	—	0	2	—	13	5	8	24	19	32
Connecticut	—	0	1	1	—	—	0	2	—	8	—	1	8	—	6
Maine§	—	0	1	—	—	—	0	1	—	1	5	1	5	14	1
Massachusetts	—	0	2	—	1	—	0	2	—	4	—	5	13	—	18
New Hampshire	—	0	0	—	—	—	0	1	—	—	—	0	2	5	2
Rhode Island§	—	0	0	—	—	—	0	0	—	—	—	0	9	—	3
Vermont§	—	0	1	—	—	—	0	0	—	—	—	0	4	—	2
Mid. Atlantic	—	1	5	12	17	1	7	209	4	548	17	37	123	207	93
New Jersey	—	0	2	—	4	—	1	16	3	137	—	2	9	1	20
New York (Upstate)	—	0	2	2	2	1	1	75	1	378	10	11	85	71	26
New York City	—	0	3	6	5	—	0	201	—	30	—	0	12	—	—
Pennsylvania	—	0	2	4	6	—	0	16	—	3	7	17	70	135	47
E.N. Central	—	2	9	9	27	—	1	7	10	15	15	113	194	502	457
Illinois	—	0	3	1	4	—	0	2	4	3	—	22	52	76	55
Indiana	—	0	2	2	9	—	0	1	—	2	—	12	26	24	40
Michigan	—	0	4	1	2	—	0	2	1	6	—	30	57	128	132
Ohio	—	0	2	4	6	—	0	5	5	1	15	34	80	223	174
Wisconsin	—	0	3	1	6	—	0	2	—	3	—	10	24	51	56
W.N. Central	—	1	5	11	7	—	1	14	6	4	6	35	193	110	136
Iowa	—	0	3	1	1	—	0	7	—	1	—	12	34	18	26
Kansas	—	0	2	1	1	—	0	1	1	1	—	2	9	11	26
Minnesota	—	0	1	—	—	—	0	1	—	—	—	0	144	—	—
Missouri	—	0	4	5	4	—	0	3	4	2	3	8	44	58	64
Nebraska§	—	0	2	3	1	—	0	10	1	—	3	4	13	19	10
North Dakota	—	0	1	—	—	—	0	1	—	—	—	0	30	3	—
South Dakota	—	0	1	1	—	—	0	1	—	—	—	0	2	1	10
S. Atlantic	2	2	7	18	33	—	0	5	—	8	18	39	75	258	193
Delaware	—	0	1	—	1	—	0	0	—	—	1	0	4	5	—
District of Columbia	—	0	0	—	—	—	0	1	—	—	—	0	2	1	1
Florida	1	1	5	7	14	—	0	3	—	1	7	6	28	45	31
Georgia	—	0	2	1	2	—	0	2	—	—	4	4	13	41	32
Maryland§	—	0	1	1	1	—	0	1	—	3	1	2	6	18	29
North Carolina	1	0	2	5	4	—	0	2	—	—	1	2	34	63	62
South Carolina§	—	0	1	2	3	—	0	2	—	1	4	6	25	28	24
Virginia§	—	0	2	2	7	—	0	2	—	2	—	6	39	57	13
West Virginia	—	0	1	—	1	—	0	1	—	1	—	1	21	—	1
E.S. Central	1	1	3	9	5	—	0	2	3	—	—	15	35	72	120
Alabama§	—	0	1	5	1	—	0	2	1	—	—	4	8	17	32
Kentucky	—	0	2	—	2	—	0	1	—	—	—	5	16	34	41
Mississippi	—	0	1	1	1	—	0	1	2	—	—	1	8	1	11
Tennessee§	1	0	2	3	1	—	0	1	—	—	—	4	11	20	36
W.S. Central	1	1	9	7	16	—	2	12	7	3	8	59	204	90	337
Arkansas§	1	0	1	2	2	—	0	1	—	—	—	3	14	1	18
Louisiana	—	0	2	3	6	—	0	2	—	—	—	1	3	3	6
Oklahoma	—	0	7	1	3	—	0	1	—	—	—	1	63	2	—
Texas§	—	1	8	1	5	—	1	11	7	3	8	48	131	84	313
Mountain	—	1	6	5	8	—	0	4	1	1	22	32	106	282	162
Arizona	—	0	2	3	4	—	0	1	—	1	—	9	28	57	51
Colorado	—	0	4	—	1	—	0	1	—	—	20	8	76	148	18
Idaho§	—	0	1	2	—	—	0	1	—	—	2	2	15	20	33
Montana§	—	0	1	—	—	—	0	0	—	—	—	1	16	32	4
Nevada§	—	0	1	—	1	—	0	1	—	—	—	0	7	3	1
New Mexico§	—	0	1	—	2	—	0	2	1	—	—	1	11	2	24
Utah	—	0	1	—	—	—	0	1	—	—	—	5	13	20	30
Wyoming§	—	0	1	—	—	—	0	1	—	—	—	0	2	—	1
Pacific	1	3	13	38	29	—	0	18	4	2	30	136	853	208	118
Alaska	—	0	1	—	—	—	0	1	—	—	—	1	6	13	5
California	1	2	10	31	19	—	0	18	—	—	13	118	720	123	53
Hawaii	—	0	1	1	—	—	0	1	1	1	—	1	6	4	9
Oregon	—	0	2	4	9	—	0	1	3	1	—	6	15	22	45
Washington	—	0	4	2	1	—	0	2	—	—	17	7	125	46	6
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	4	—	—	0	3	4	—
Puerto Rico	—	0	0	—	—	—	0	1	—	—	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
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† 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 February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	10	62	143	167	404	194	921	1,760	2,955	4,544	25	92	216	306	340
New England	1	4	13	11	36	1	31	68	55	649	—	2	13	4	71
Connecticut	—	0	9	—	14	—	0	25	25	480	—	0	2	2	57
Maine§	—	1	4	4	12	1	2	7	15	10	—	0	3	—	—
Massachusetts	—	0	0	—	—	—	23	52	—	122	—	1	9	—	11
New Hampshire	—	0	5	1	2	—	3	12	12	18	—	0	2	2	3
Rhode Island§	—	0	4	—	—	—	1	17	—	16	—	0	1	—	—
Vermont§	1	1	3	6	8	—	2	5	3	3	—	0	2	—	—
Mid. Atlantic	3	19	41	33	112	20	95	218	279	498	1	9	32	38	33
New Jersey	—	0	0	—	—	—	16	57	8	97	—	1	9	5	6
New York (Upstate)	3	9	19	33	49	14	25	63	79	94	1	4	13	13	10
New York City	—	1	12	—	33	—	23	56	82	138	—	1	7	3	7
Pennsylvania	—	8	24	—	30	6	31	81	110	169	—	3	13	17	10
E.N. Central	1	2	27	5	5	11	91	252	253	495	3	13	44	41	50
Illinois	—	1	11	3	1	—	33	124	59	170	—	2	9	1	14
Indiana	—	0	0	—	—	—	13	62	17	59	—	2	10	9	3
Michigan	—	1	5	1	2	—	16	49	50	92	—	3	16	13	12
Ohio	1	0	12	1	2	11	24	47	114	126	3	2	11	15	5
Wisconsin	—	0	0	—	—	—	10	47	13	48	—	3	17	3	16
W.N. Central	1	4	14	4	25	11	45	97	154	234	2	11	39	20	41
Iowa	—	0	3	—	—	—	9	34	36	26	—	2	16	3	6
Kansas	—	1	4	1	11	2	7	18	25	35	—	1	5	3	4
Minnesota	—	0	4	—	8	—	0	32	—	60	—	0	7	—	11
Missouri	—	1	6	—	1	8	13	44	72	71	1	4	27	7	14
Nebraska§	1	1	4	3	5	1	4	13	13	22	1	1	6	7	4
North Dakota	—	0	3	—	—	—	0	13	—	2	—	0	10	—	—
South Dakota	—	0	0	—	—	—	2	17	8	18	—	0	4	—	2
S. Atlantic	4	20	38	99	190	73	262	615	1,019	1,263	11	15	33	101	48
Delaware	—	0	0	—	—	—	3	11	13	7	—	0	2	1	—
District of Columbia	—	0	0	—	—	—	1	6	1	9	—	0	1	1	1
Florida	4	0	5	13	96	37	108	226	419	579	6	5	23	44	14
Georgia	—	0	0	—	—	6	43	142	195	169	1	2	8	8	8
Maryland§	—	7	14	20	40	5	18	56	72	91	4	2	9	20	8
North Carolina	—	0	0	—	—	9	29	240	139	215	—	2	10	15	2
South Carolina§	—	0	0	—	—	8	25	99	83	75	—	0	2	—	1
Virginia§	—	12	25	66	44	8	20	66	97	103	—	2	9	12	14
West Virginia	—	1	7	—	10	—	2	13	—	15	—	0	3	—	—
E.S. Central	—	3	7	9	13	6	55	177	221	221	3	5	22	20	11
Alabama§	—	1	4	8	—	2	20	52	78	70	—	1	4	2	5
Kentucky	—	0	4	1	—	—	11	32	32	44	—	1	6	4	1
Mississippi	—	0	1	—	—	—	18	67	35	38	—	0	12	—	2
Tennessee§	—	1	4	—	13	4	17	53	76	69	3	2	7	14	3
W.S. Central	—	0	30	—	—	5	125	318	199	293	—	6	67	15	15
Arkansas§	—	0	7	—	—	—	12	43	40	21	—	0	5	1	4
Louisiana	—	0	0	—	—	—	20	49	44	80	—	0	2	—	3
Oklahoma	—	0	30	—	—	4	12	39	30	30	—	0	24	4	1
Texas§	—	0	0	—	—	1	78	267	85	162	—	4	43	10	7
Mountain	—	1	7	1	7	11	49	108	224	328	—	11	34	16	38
Arizona	—	0	0	—	—	1	16	42	66	115	—	1	13	2	7
Colorado	—	0	0	—	—	9	10	24	72	74	—	3	21	5	10
Idaho§	—	0	2	—	—	1	3	9	27	23	—	2	7	4	6
Montana§	—	0	3	1	—	—	1	5	6	19	—	1	5	1	3
Nevada§	—	0	2	—	—	—	5	22	14	21	—	0	5	2	1
New Mexico§	—	0	2	—	2	—	6	19	24	37	—	0	6	2	6
Utah	—	0	2	—	—	—	5	17	12	29	—	1	7	—	5
Wyoming§	—	0	4	—	5	—	1	8	3	10	—	0	3	—	—
Pacific	—	1	12	5	16	56	116	279	551	563	5	12	46	51	33
Alaska	—	0	2	2	6	—	1	4	8	15	—	0	1	—	1
California	—	1	12	—	7	45	79	217	422	436	5	6	28	40	24
Hawaii	—	0	0	—	—	1	6	14	46	35	—	0	4	—	3
Oregon	—	0	2	3	3	2	8	48	46	55	—	2	11	5	4
Washington	—	0	0	—	—	8	14	71	29	22	—	3	17	6	1
Territories															
American Samoa	N	0	0	N	N	—	0	1	—	1	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	3	—	—	0	0	—	—
Puerto Rico	—	1	3	4	9	1	9	21	10	82	—	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.
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† 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 February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF)†									
						Confirmed					Probable				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	122	279	447	1,084	1,998	—	3	10	8	6	1	27	91	31	40
New England	—	4	17	4	99	—	0	0	—	—	—	0	1	—	—
Connecticut	—	0	2	2	63	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	1	1	1	—	0	0	—	—	—	0	1	—	—
Massachusetts	—	3	16	—	31	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	2	—	2	—	0	0	—	—	—	0	1	—	—
Rhode Island§	—	0	2	—	1	—	0	0	—	—	—	0	1	—	—
Vermont§	—	0	1	1	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	3	27	69	69	312	—	0	1	—	—	—	1	4	2	1
New Jersey	—	5	16	11	48	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	3	15	17	23	—	0	1	—	—	—	0	3	—	—
New York City	—	5	14	28	50	—	0	1	—	—	—	0	4	2	1
Pennsylvania	3	11	55	13	191	—	0	0	—	—	—	0	3	—	—
E.N. Central	5	25	239	81	434	—	0	1	—	—	—	1	10	2	1
Illinois	—	8	229	22	308	—	0	1	—	—	—	0	5	—	—
Indiana§	—	1	4	7	6	—	0	1	—	—	—	0	5	—	1
Michigan	—	5	10	14	30	—	0	0	—	—	—	0	1	1	—
Ohio	5	5	18	38	49	—	0	0	—	—	—	0	2	1	—
Wisconsin	—	3	21	—	41	—	0	0	—	—	—	0	1	—	—
W.N. Central	3	25	81	67	417	—	0	4	—	—	—	4	21	2	3
Iowa	—	1	4	4	9	—	0	0	—	—	—	0	1	—	—
Kansas§	1	5	13	14	23	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	3	—	7	—	0	0	—	—	—	0	0	—	—
Missouri	1	17	66	46	373	—	0	4	—	—	—	4	20	2	3
Nebraska§	1	1	10	2	3	—	0	1	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	1	2	—	0	0	—	—	—	0	0	—	—
S. Atlantic	64	55	122	405	225	—	1	7	4	3	1	8	60	15	30
Delaware§	—	0	3	—	20	—	0	1	—	—	—	0	3	—	—
District of Columbia	—	0	4	2	3	—	0	1	—	—	—	0	0	—	—
Florida§	55	25	53	266	79	—	0	1	1	—	1	0	2	3	—
Georgia	5	16	26	71	66	—	0	6	1	2	—	0	0	—	—
Maryland§	2	2	8	14	11	—	0	1	1	—	—	0	5	1	1
North Carolina	—	3	36	34	19	—	0	3	1	1	—	2	48	7	26
South Carolina§	1	1	5	6	14	—	0	1	—	—	—	0	3	1	2
Virginia§	1	3	9	12	13	—	0	2	—	—	—	2	12	3	1
West Virginia	—	0	66	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	4	14	40	59	63	—	0	3	—	1	—	5	29	3	3
Alabama§	3	5	14	31	11	—	0	1	—	—	—	1	8	2	1
Kentucky	—	2	28	5	26	—	0	2	—	—	—	0	0	—	—
Mississippi	1	1	4	7	2	—	0	0	—	—	—	0	3	—	—
Tennessee§	—	5	14	16	24	—	0	2	—	1	—	4	20	1	2
W.S. Central	24	53	126	160	218	—	0	3	—	1	—	1	30	—	1
Arkansas§	—	1	6	4	8	—	0	2	—	—	—	0	19	—	—
Louisiana	—	6	13	12	21	—	0	0	—	—	—	0	1	—	—
Oklahoma	2	4	13	11	32	—	0	3	—	—	—	0	11	—	—
Texas§	22	43	109	133	157	—	0	1	—	1	—	0	3	—	1
Mountain	5	15	32	81	91	—	0	5	4	—	—	0	3	7	1
Arizona	—	8	19	33	54	—	0	5	4	—	—	0	3	7	—
Colorado§	2	2	8	20	16	—	0	1	—	—	—	0	1	—	—
Idaho§	—	0	3	3	2	—	0	0	—	—	—	0	1	—	—
Montana§	2	0	3	7	2	—	0	1	—	—	—	0	1	—	—
Nevada§	—	0	6	1	3	—	0	0	—	—	—	0	0	—	—
New Mexico§	1	3	10	15	11	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	2	3	—	0	0	—	—	—	0	1	—	—
Wyoming§	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Pacific	14	22	72	158	139	—	0	2	—	1	—	0	0	—	—
Alaska	—	0	1	1	—	N	0	0	N	N	N	0	0	N	N
California	12	19	58	131	123	—	0	2	—	1	—	0	0	—	—
Hawaii	—	1	4	12	6	N	0	0	N	N	N	0	0	N	N
Oregon	1	1	4	8	7	—	0	1	—	—	—	0	0	—	—
Washington	1	2	17	6	3	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	*Streptococcus pneumoniae*,† invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	247	273	717	2,497	2,834	15	33	83	182	466	78	248	329	1,230	1,801
New England	3	8	99	36	95	1	1	14	2	20	6	9	20	48	63
Connecticut	—	0	91	—	—	—	0	12	—	—	1	1	8	6	11
Maine§	1	2	13	29	23	—	0	1	1	3	—	0	3	—	6
Massachusetts	—	0	5	—	20	—	0	3	—	14	3	5	15	28	37
New Hampshire	—	0	7	—	33	—	0	1	—	3	—	0	2	3	2
Rhode Island§	—	0	36	1	—	—	0	3	—	—	1	1	4	9	5
Vermont§	2	1	5	6	19	1	0	1	1	—	1	0	1	2	2
Mid. Atlantic	14	30	59	291	205	—	7	19	23	66	10	32	45	140	250
New Jersey	—	1	8	12	20	—	1	5	7	12	4	4	12	28	29
New York (Upstate)	—	3	11	15	35	—	2	9	8	25	2	2	12	21	10
New York City	5	14	32	145	64	—	2	14	—	14	—	17	31	40	152
Pennsylvania	9	11	22	119	86	—	1	5	8	15	4	7	16	51	59
E.N. Central	40	60	102	475	616	1	6	18	34	86	—	27	49	78	257
Illinois	—	2	7	11	24	—	2	5	11	21	—	7	26	14	127
Indiana	—	8	25	53	128	—	0	6	—	14	—	3	14	12	4
Michigan	—	13	29	78	128	—	1	6	6	20	—	4	9	11	49
Ohio	35	25	45	260	252	1	2	6	13	19	—	9	19	38	69
Wisconsin	5	7	19	73	84	—	0	4	4	12	—	1	3	3	8
W.N. Central	7	10	61	86	133	2	1	12	12	28	—	6	18	28	36
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	1	2
Kansas	—	2	7	19	14	—	0	2	1	3	—	0	3	1	1
Minnesota	—	0	46	—	50	—	0	8	—	12	—	3	9	15	5
Missouri	4	2	10	38	30	2	0	4	10	10	—	2	9	11	27
Nebraska§	3	2	9	29	35	—	0	2	1	2	—	0	2	—	1
North Dakota	—	0	11	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	3	—	4	—	0	2	—	1	—	0	1	—	—
S. Atlantic	101	62	145	731	731	7	8	24	55	120	39	60	103	378	375
Delaware	1	1	4	17	3	—	0	1	—	—	—	0	4	3	—
District of Columbia	—	0	3	3	6	—	0	2	—	3	7	3	16	33	19
Florida	55	26	89	384	312	4	3	18	27	35	—	22	44	130	141
Georgia	6	11	21	90	143	1	2	7	11	43	8	11	50	41	37
Maryland§	26	8	32	117	105	2	1	6	6	10	9	7	15	56	20
North Carolina	—	0	0	—	—	—	0	0	—	—	10	5	19	50	88
South Carolina§	13	8	25	112	129	—	1	4	3	16	2	3	10	33	26
Virginia§	—	1	4	8	12	—	1	4	8	10	3	4	22	32	41
West Virginia	—	1	9	—	21	—	0	4	—	3	—	0	2	—	3
E.S. Central	23	25	48	231	272	—	2	7	16	25	2	16	39	71	118
Alabama§	—	0	0	—	—	—	0	0	—	—	—	4	11	24	43
Kentucky	—	4	16	35	15	—	0	3	4	2	1	2	12	22	14
Mississippi	—	1	8	4	19	—	0	2	—	5	—	4	16	9	19
Tennessee§	23	20	43	192	238	—	2	6	12	18	1	4	17	16	42
W.S. Central	7	33	306	205	281	1	4	25	13	51	9	37	68	194	284
Arkansas§	—	3	23	36	22	—	0	3	1	6	6	3	10	22	40
Louisiana	—	2	7	30	30	—	0	2	—	9	3	8	33	25	64
Oklahoma	1	1	4	6	13	1	1	4	6	13	—	2	6	7	11
Texas§	6	27	277	133	216	—	3	18	6	23	—	23	33	140	169
Mountain	50	35	76	382	454	3	4	12	24	63	2	10	26	43	69
Arizona	33	12	36	194	234	3	1	7	11	31	2	2	8	5	26
Colorado	16	11	22	92	109	—	1	4	4	12	—	2	8	11	23
Idaho§	—	0	2	2	3	—	0	2	1	1	—	0	2	2	1
Montana§	—	0	2	1	3	—	0	1	—	—	—	0	2	1	—
Nevada§	—	2	4	16	21	—	0	1	2	3	—	2	9	15	10
New Mexico§	—	3	13	48	34	—	0	3	2	6	—	1	4	6	6
Utah	1	3	8	24	47	—	0	3	4	10	—	1	5	3	3
Wyoming§	—	0	15	5	3	—	0	1	—	—	—	0	0	—	—
Pacific	2	6	18	60	47	—	0	7	3	7	10	45	63	250	349
Alaska	—	2	10	30	25	—	0	5	2	5	—	0	1	—	—
California	2	3	17	30	22	—	0	5	1	2	6	39	55	219	295
Hawaii	—	0	3	—	—	—	0	0	—	—	—	0	5	—	6
Oregon	—	0	0	—	—	—	0	0	—	—	2	1	7	10	9
Washington	—	0	0	—	—	—	0	0	—	—	2	4	11	21	39
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	—	—	6	4	15	30	36
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 February 26, 2011, and February 27, 2010 (8th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	136	258	562	1,496	2,432	—	1	71	—	1	—	1	53	—	—
New England	—	20	45	61	142	—	0	3	—	—	—	0	2	—	—
Connecticut	—	5	20	—	31	—	0	2	—	—	—	0	2	—	—
Maine¶	—	4	16	28	41	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	4	12	—	33	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	2	9	9	24	—	0	1	—	—	—	0	0	—	—
Rhode Island¶	—	0	3	1	1	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	0	10	23	12	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	26	30	62	137	273	—	0	19	—	—	—	0	13	—	—
New Jersey	—	7	30	17	91	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	—	—	0	7	—	—
New York City	—	0	1	—	—	—	0	7	—	—	—	0	4	—	—
Pennsylvania	26	19	41	120	182	—	0	3	—	—	—	0	3	—	—
E.N. Central	19	88	176	493	939	—	0	15	—	—	—	0	8	—	—
Illinois	5	18	45	100	235	—	0	10	—	—	—	0	5	—	—
Indiana¶	4	5	30	43	111	—	0	2	—	—	—	0	2	—	—
Michigan	—	29	62	147	293	—	0	6	—	—	—	0	1	—	—
Ohio	10	25	58	203	241	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	6	22	—	59	—	0	0	—	—	—	0	1	—	—
W.N. Central	2	15	32	42	135	—	0	7	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas¶	2	3	22	30	54	—	0	1	—	—	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	3	—	—
Missouri	—	7	23	10	72	—	0	1	—	—	—	0	0	—	—
Nebraska¶	N	0	0	N	N	—	0	3	—	—	—	0	7	—	—
North Dakota	—	0	10	—	7	—	0	2	—	—	—	0	2	—	—
South Dakota	—	1	7	2	2	—	0	2	—	—	—	0	3	—	—
S. Atlantic	21	34	100	193	282	—	0	5	—	—	—	0	4	—	—
Delaware¶	—	0	3	1	—	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	4	2	—	—	0	1	—	—	—	0	1	—	—
Florida¶	19	16	57	145	145	—	0	3	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	3	—	—
Maryland¶	N	0	0	N	N	—	0	3	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina¶	—	0	35	—	9	—	0	1	—	—	—	0	0	—	—
Virginia¶	2	10	29	45	55	—	0	1	—	—	—	0	1	—	—
West Virginia	—	7	26	—	73	—	0	0	—	—	—	0	0	—	—
E.S. Central	4	5	22	40	30	—	0	1	—	1	—	0	3	—	—
Alabama¶	4	5	22	40	30	—	0	1	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	2	—	—	—	0	1	—	1	—	0	2	—	—
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	52	45	180	288	381	—	0	16	—	—	—	0	3	—	—
Arkansas¶	1	2	32	13	18	—	0	3	—	—	—	0	1	—	—
Louisiana	—	1	4	5	16	—	0	3	—	—	—	0	1	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas¶	51	40	171	270	347	—	0	15	—	—	—	0	2	—	—
Mountain	11	18	49	199	242	—	0	18	—	—	—	0	15	—	—
Arizona	—	0	0	—	—	—	0	13	—	—	—	0	9	—	—
Colorado¶	11	7	31	97	78	—	0	5	—	—	—	0	11	—	—
Idaho¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana¶	—	3	28	64	42	—	0	0	—	—	—	0	0	—	—
Nevada¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
New Mexico¶	—	1	8	8	19	—	0	5	—	—	—	0	2	—	—
Utah	—	4	17	30	102	—	0	1	—	—	—	0	1	—	—
Wyoming¶	—	0	3	—	1	—	0	1	—	—	—	0	1	—	—
Pacific	1	2	13	43	8	—	0	8	—	—	—	0	6	—	—
Alaska	—	1	5	10	4	—	0	0	—	—	—	0	0	—	—
California	—	0	13	23	2	—	0	8	—	—	—	0	6	—	—
Hawaii	1	1	7	10	2	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	1	1	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	8	30	32	63	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
§ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/ncphi/disss/nndss/phs/infdis.htm.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending February 26, 2011 (8th week)

Reporting area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
New England	625	454	126	34	4	7	80
Boston, MA	130	89	34	5	1	1	14
Bridgeport, CT	58	48	8	2	—	—	11
Cambridge, MA	21	16	5	—	—	—	3
Fall River, MA	33	25	4	4	—	—	7
Hartford, CT	67	47	14	5	—	1	8
Lowell, MA	17	14	2	1	—	—	—
Lynn, MA	13	9	2	2	—	—	—
New Bedford, MA	24	20	2	2	—	—	2
New Haven, CT	51	30	17	3	—	1	2
Providence, RI	76	56	13	4	1	2	9
Somerville, MA	—	—	—	—	—	—	—
Springfield, MA	42	33	7	1	1	—	3
Waterbury, CT	28	17	9	2	—	—	7
Worcester, MA	65	50	9	3	1	2	14
Mid. Atlantic	2,464	1,685	562	133	45	39	133
Albany, NY	36	27	8	—	—	1	2
Allentown, PA	38	30	7	1	—	—	—
Buffalo, NY	77	55	17	1	2	2	7
Camden, NJ	30	18	7	2	1	2	4
Elizabeth, NJ	26	20	5	—	—	1	3
Erie, PA	41	34	5	1	—	1	2
Jersey City, NJ	24	16	6	2	—	—	2
New York City, NY	1,061	753	226	58	8	16	51
Newark, NJ	37	15	13	5	3	1	—
Paterson, NJ	U	U	U	U	U	U	U
Philadelphia, PA	791	490	210	54	24	13	37
Pittsburgh, PA§	48	38	6	2	2	—	5
Reading, PA	32	27	5	—	—	—	—
Rochester, NY	80	51	21	3	4	1	11
Schenectady, NY	13	9	3	1	—	—	—
Scranton, PA	27	19	8	—	—	—	2
Syracuse, NY	49	39	9	—	—	1	6
Trenton, NJ	16	16	—	—	—	—	1
Utica, NY	19	13	2	3	1	—	—
Yonkers, NY	19	15	4	—	—	—	—
E.N. Central	1,944	1,298	484	88	38	36	133
Akron, OH	59	38	18	2	1	—	4
Canton, OH	41	27	13	—	—	1	1
Chicago, IL	243	166	59	14	4	—	20
Cincinnati, OH	118	74	26	4	7	7	11
Cleveland, OH	250	178	62	6	3	1	17
Columbus, OH	U	U	U	U	U	U	U
Dayton, OH	159	107	41	5	3	3	12
Detroit, MI	180	94	54	19	7	6	8
Evansville, IN	47	37	8	1	—	1	4
Fort Wayne, IN	91	64	23	2	2	—	3
Gary, IN	19	11	5	1	1	1	—
Grand Rapids, MI	55	38	13	2	1	1	7
Indianapolis, IN	215	146	49	8	6	6	19
Lansing, MI	46	32	13	1	—	—	3
Milwaukee, WI	96	59	28	6	1	2	6
Peoria, IL	52	35	14	—	1	2	5
Rockford, IL	49	34	10	5	—	—	3
South Bend, IN	70	50	15	3	—	2	4
Toledo, OH	86	52	24	9	1	—	5
Youngstown, OH	68	56	9	—	—	3	1
W.N. Central	717	449	184	56	14	14	51
Des Moines, IA	87	68	12	5	1	1	9
Duluth, MN	27	20	3	4	—	—	1
Kansas City, KS	31	20	10	—	1	—	2
Kansas City, MO	87	59	18	8	—	2	8
Lincoln, NE	31	24	5	2	—	—	—
Minneapolis, MN	61	35	19	5	—	2	9
Omaha, NE	95	65	23	5	1	1	8
St. Louis, MO	170	73	61	21	8	7	7
St. Paul, MN	53	38	14	—	1	—	4
Wichita, KS	75	47	19	6	2	1	3
S. Atlantic	1,327	887	310	80	38	12	110
Atlanta, GA	139	93	36	8	2	—	8
Baltimore, MD	110	65	34	5	6	—	7
Charlotte, NC	141	93	30	14	2	2	16
Jacksonville, FL	158	115	29	8	5	1	10
Miami, FL	175	131	33	10	1	—	21
Norfolk, VA	59	43	10	1	2	3	4
Richmond, VA	43	26	12	4	1	—	5
Savannah, GA	56	42	9	1	2	2	5
St. Petersburg, FL	62	38	13	7	1	3	7
Tampa, FL	208	142	44	13	8	1	13
Washington, D.C.	168	97	56	7	8	—	12
Wilmington, DE	8	2	4	2	—	—	2
E.S. Central	921	595	223	65	17	21	75
Birmingham, AL	177	114	36	17	4	6	16
Chattanooga, TN	78	58	13	1	4	2	7
Knoxville, TN	112	75	27	7	2	1	11
Lexington, KY	71	41	23	6	—	1	6
Memphis, TN	189	118	51	13	3	4	12
Mobile, AL	92	62	20	7	1	2	7
Montgomery, AL	27	19	5	1	—	2	5
Nashville, TN	175	108	48	13	3	3	11
W.S. Central	1,454	949	373	85	29	18	98
Austin, TX	96	64	22	7	1	2	4
Baton Rouge, LA	70	50	12	4	2	2	—
Corpus Christi, TX	59	37	13	5	2	2	7
Dallas, TX	294	190	76	15	9	4	28
El Paso, TX	143	97	29	11	5	1	7
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	113	64	35	6	3	5	8
Little Rock, AR	104	65	30	6	2	1	3
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	331	219	88	18	5	1	29
Shreveport, LA	38	30	7	1	—	—	5
Tulsa, OK	206	133	61	12	—	—	7
Mountain	1,262	835	308	73	28	16	103
Albuquerque, NM	150	111	28	8	1	2	18
Boise, ID	66	50	11	1	2	2	5
Colorado Springs, CO	82	41	30	4	4	3	3
Denver, CO	96	60	24	9	2	1	5
Las Vegas, NV	319	216	88	10	4	1	34
Ogden, UT	32	23	6	2	1	—	3
Phoenix, AZ	205	109	60	22	7	5	16
Pueblo, CO	45	31	10	3	1	—	5
Salt Lake City, UT	129	86	33	6	2	2	11
Tucson, AZ	138	108	18	8	4	—	3
Pacific	1,730	1,215	360	95	37	23	206
Berkeley, CA	8	6	2	—	—	—	1
Fresno, CA	117	79	31	5	—	2	20
Glendale, CA	36	26	8	2	—	—	4
Honolulu, HI	83	70	9	1	2	1	14
Long Beach, CA	80	58	19	2	1	—	15
Los Angeles, CA	245	164	56	15	5	5	29
Pasadena, CA	23	17	3	2	1	—	2
Portland, OR	119	84	28	6	1	—	8
Sacramento, CA	221	147	52	13	7	2	22
San Diego, CA	158	107	28	14	6	3	17
San Francisco, CA	134	83	34	10	3	4	26
San Jose, CA	169	128	27	9	5	—	21
Santa Cruz, CA	27	21	6	—	—	—	4
Seattle, WA	112	82	20	7	—	3	1
Spokane, WA	58	45	9	2	1	1	13
Tacoma, WA	140	98	28	7	5	2	9
Total¶	**12,444**	**8,367**	**2,930**	**709**	**250**	**186**	**989**

U: Unavailable. —: No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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