

## State-Specific Trends in Fruit and Vegetable Consumption Among Adults — United States, 2000–2009

A diet high in fruits and vegetables can reduce the risk for many leading causes of death (1–3) and can play an important role in weight management (4). *Healthy People 2010* objectives for fruits and vegetables include targets of increasing to 75% the proportion of persons aged  $\geq 2$  years who consume two or more servings of fruit daily and to 50% those who consume three or more servings of vegetables daily.\* To assess states' progress over the past decade in meeting these targets among adults and to provide an update of the 2005 subgroup estimates (5), CDC analyzed data from the Behavioral Risk Factor Surveillance System (BRFSS). This report describes the results of that analysis, which indicated that, in 2009, an estimated 32.5% of adults consumed fruit two or more times per day and 26.3% consumed vegetables three or more times per day, far short of the national targets. Overall, the proportion of adults who met the fruit target declined slightly, but significantly, from 34.4% in 2000 to 32.5% in 2009; no significant change was observed in meeting the vegetable target. No state met either target, and substantial variability occurred among states. Only one state had statistically significant increases in the percentages of adults meeting each target. These findings underscore the need for interventions at national, state, and community levels, across multiple settings (e.g., worksites, community venues, and restaurants) to improve fruit and vegetable access, availability, and affordability, as a means of increasing individual consumption.

BRFSS is an ongoing, state-based, telephone survey of the noninstitutionalized U.S. civilian population aged  $\geq 18$  years. Data are used to monitor the prevalence of health behaviors and progress toward national and state-specific health objectives. BRFSS uses a multistage design based on random-digit dialing methods to gather a representative sample from each state. Data were included from all 50 states and the District of Columbia (DC) for years in which the fruit and vegetable

module was included in the core survey: 2000 (N = 179,139), 2002 (N = 238,852), 2003 (N = 255,657), 2005 (N = 347,278), 2007 (N = 420,217), and 2009 (N = 420,968). Median survey response rates by state, calculated using Council of American Survey Research Organizations (CASRO) guidelines,<sup>†</sup> were 48.9% (range: 28.8%–71.8%) for 2000 and 52.5% (range: 37.9–66.9%) for 2009. Median cooperation rates were 53.2% (range: 35.5%–77.7%) for 2000 and 75.0% (range: 55.5%–88.0%) for 2009.

For each survey year, prevalence estimates were weighted to the respondent's probability of being selected for the age-, race-, and sex-specific distributions for the state based on U.S. Census data. Logistic regression analysis was used to assess temporal changes in consumption during 2000–2009, including year as a continuous variable and controlling for changes in state distributions of age through standardization to the 2000 U.S. standard population; a p-value of  $<0.05$  was used to assess statistical significance.

Six BRFSS questions assess fruit and vegetable intake and are the only diet intake questions on the core survey: "These

<sup>†</sup> Available at [http://www.cdc.gov/brfss/technical\\_infodata/quality.htm](http://www.cdc.gov/brfss/technical_infodata/quality.htm). The response rate is the percentage of persons who completed interviews among all eligible persons, including those who were not successfully contacted. The cooperation rate is the percentage of persons who completed interviews among all eligible persons who were contacted.

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\* Objectives 19-5 and 19-6. Additional information available at <http://www.healthypeople.gov/document/pdf/volume2/19nutrition.pdf>.



next questions are about the foods you usually eat or drink. Please tell me how often you eat or drink each one, for example, twice a week, three times a month, and so forth. How often do you...” 1) “...drink fruit juices such as orange, grapefruit, or tomato?” 2) “Not counting juice, how often do you eat fruit?” 3) “...eat green salad?” 4) “...eat potatoes, not including French fries, fried potatoes, or potato chips?” 5) “...eat carrots?” 6) “Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat?” Consumption was divided by 7 for weekly frequencies, 30 for monthly frequencies, and 365 for yearly frequencies to calculate daily consumption. Total daily consumption of fruit was the sum of responses to questions 1–2 and vegetables the sum of responses to questions 3–6. Participants were not given a definition of serving size. To be consistent with previous reports, respondents who did not answer all six questions and those who reported consuming fruits and vegetables 25 or more times per day were excluded (n = 24,652 for 2009) from the final sample.

In 2009, an estimated 32.5% of U.S. adults consumed fruit two or more times per day (Table 1), with the highest percentage in DC (40.2%) and the lowest in Oklahoma (18.1%). The percentage of adults who consumed vegetables three or more times per day

was 26.3%, with the highest percentage in Tennessee (33.0%) and the lowest in South Dakota (19.6%). Thus, no state met either of the *Healthy People 2010* targets related to fruit and vegetable consumption among adults. Twelve states and DC had 35%–45% of adults who consumed fruit two or more times per day, compared with no states that had 35%–45% of adults who consumed vegetables three or more times per day (Figure).

From 2000 to 2009, the overall prevalence of consuming fruit two or more times per day decreased slightly, but significantly, from 34.4% to 32.5% (Table 1). Slight but significant increasing linear trends for fruit consumption were observed in four states, decreasing trends in 22 states and DC, and no significant change in 24 states. The prevalence of consuming vegetables three or more times per day did not change significantly during this period (26.7% in 2000 and 26.3% in 2009). Slight but significant increasing trends were observed in 11 states and DC, decreasing trends in 14 states, and no significant change in 25 states. Idaho was the only state that had significant, although slight, increases in both fruit and vegetable consumption, whereas 10 states had slight but significant decreases in both proportions.

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TABLE 1. Percentage of U.S. adults aged ≥18 years who consumed fruit two or more times per day and vegetables three or more times per day, by state — Behavioral Risk Factor Surveillance System, 2000–2009\*

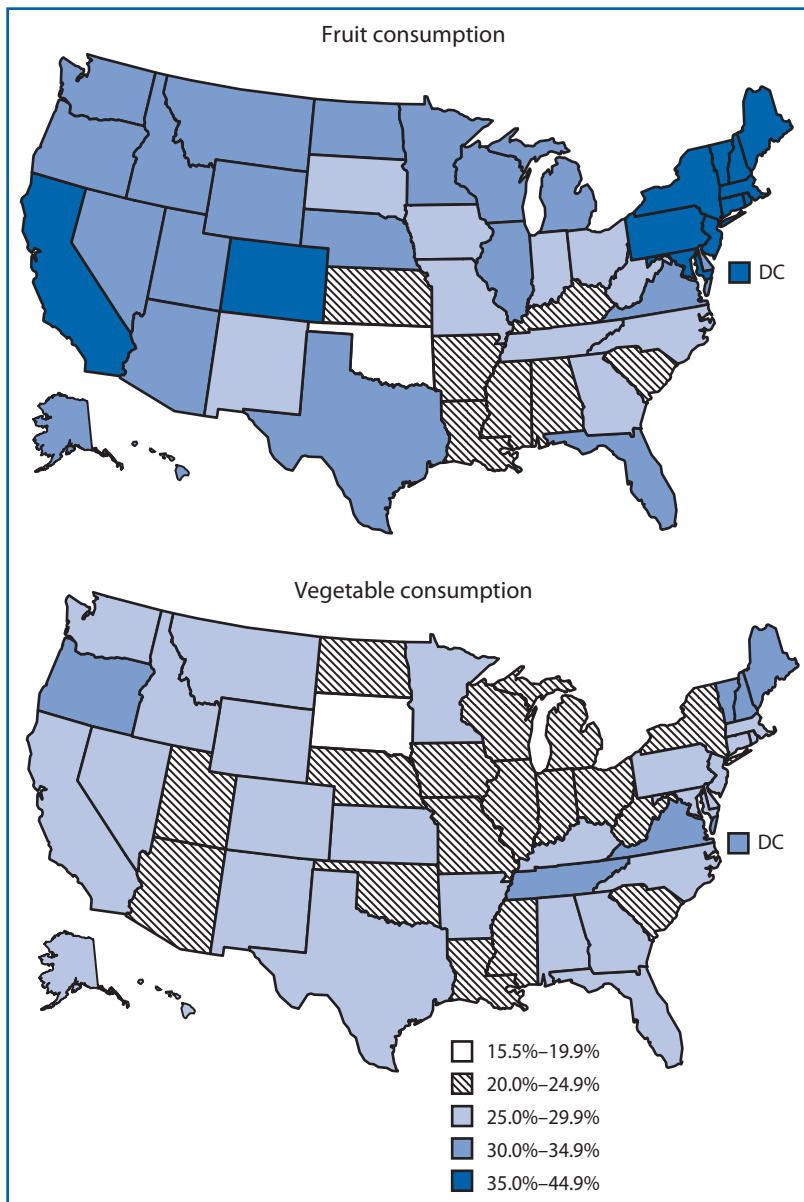
State	Fruit two or more times per day						Vegetables three or more times per day					
	2000	2002	2003	2005	2007	2009	2000	2002	2003	2005	2007	2009
<b>Overall</b>	<b>34.4</b>	<b>33.5</b>	<b>32.2</b>	<b>32.8</b>	<b>32.9</b>	<b>32.5<sup>†</sup></b>	<b>26.7</b>	<b>26.3</b>	<b>26.2</b>	<b>27.1</b>	<b>27.4</b>	<b>26.3</b>
Alabama	25.6	24.0	25.7	23.5	23.9	24.6	30.1	27.8	28.5	27.9	28.5	26.9 <sup>†</sup>
Alaska	31.0	30.6	31.4	33.5	29.9	30.8	25.4	23.8	26.3	24.6	27.7	27.5
Arizona	43.2	31.0	30.8	33.3	33.5	33.7 <sup>†</sup>	38.4	27.1	25.1	26.9	29.9	24.4 <sup>†</sup>
Arkansas	23.5	23.1	22.4	23.3	24.3	24.5	29.4	29.4	28.7	29.1	29.2	26.9
California	40.7	40.4	39.3	40.1	40.6	40.1	23.3	23.5	24.6	26.5	25.6	26.8 <sup>§</sup>
Colorado	33.3	34.6	34.1	33.7	35.4	35.5	25.6	23.6	25.7	25.3	26.5	25.3
Connecticut	43.5	42.2	41.8	37.6	38.6	37.6 <sup>†</sup>	29.2	31.0	30.1	29.9	29.3	28.5
Delaware	34.2	31.9	31.1	28.8	28.9	32.5 <sup>†</sup>	29.8	25.5	26.9	26.5	26.1	27.7
District of Columbia	45.7	43.7	38.3	38.8	41.2	40.2 <sup>†</sup>	26.1	32.5	29.2	31.3	32.8	32.3 <sup>§</sup>
Florida	36.1	36.7	34.5	35.4	36.1	33.3	24.4	27.9	27.4	28.2	29.2	28.3 <sup>§</sup>
Georgia	28.2	27.5	26.2	28.0	27.6	29.9	29.2	29.5	29.8	30.9	30.4	29.5
Hawaii	32.6	29.4	33.1	32.6	39.0	32.9 <sup>§</sup>	27.0	25.7	36.1	29.5	29.6	26.8
Idaho	27.9	28.4	27.9	30.1	29.3	32.9 <sup>§</sup>	24.7	25.1	22.8	27.4	25.2	27.8 <sup>§</sup>
Illinois	33.3	33.0	34.7	34.8	36.9	32.4	25.8	22.6	25.4	24.0	23.3	23.3
Indiana	27.7	28.4	29.0	29.2	30.4	28.1	25.5	24.2	25.0	25.2	26.5	23.7
Iowa	28.4	28.5	27.5	28.9	29.9	27.5	21.4	22.6	21.3	23.4	22.4	21.9
Kansas	30.4	24.1	24.9	25.3	23.9	23.8 <sup>†</sup>	29.8	25.9	26.8	26.5	27.2	26.0 <sup>†</sup>
Kentucky	25.0	23.7	22.5	20.5	24.4	24.4	35.5	32.4	31.4	30.2	28.8	29.4 <sup>†</sup>
Louisiana	24.2	23.5	21.5	28.7	28.5	24.6 <sup>§</sup>	22.8	25.4	25.3	25.9	26.1	21.3
Maine	37.3	37.5	35.9	35.1	36.6	36.0	29.6	30.7	27.9	32.5	31.6	30.6
Maryland	39.0	39.3	37.8	37.6	35.8	36.9 <sup>†</sup>	29.6	31.5	31.4	30.6	28.9	28.7 <sup>†</sup>
Massachusetts	42.7	41.8	39.9	38.9	39.0	36.8 <sup>†</sup>	29.4	29.1	28.2	29.8	28.9	28.1
Michigan	37.3	33.0	29.5	32.2	31.7	32.1 <sup>†</sup>	21.3	21.3	20.5	24.3	23.2	23.9 <sup>§</sup>
Minnesota	37.2	35.2	35.1	36.1	27.2	31.2 <sup>†</sup>	23.3	21.9	23.9	23.1	25.9	26.4 <sup>§</sup>
Mississippi	24.1	22.6	22.1	22.1	24.1	22.9	25.1	25.7	24.0	22.6	22.2	21.6 <sup>†</sup>
Missouri	28.4	23.5	25.2	28.8	25.1	27.3	26.1	26.7	25.7	25.7	26.2	23.0 <sup>†</sup>
Montana	35.4	32.2	29.6	30.6	29.7	33.5 <sup>†</sup>	27.4	26.4	24.1	28.6	28.6	28.0
Nebraska	33.1	31.2	28.5	29.1	33.8	30.2	24.0	22.5	23.0	24.6	26.3	24.3 <sup>§</sup>
Nevada	27.8	33.2	31.0	31.4	30.4	30.3	24.7	21.2	20.8	23.5	24.3	25.5
New Hampshire	39.1	37.7	37.6	37.7	36.3	36.2 <sup>†</sup>	28.5	29.0	28.5	32.3	30.5	30.4
New Jersey	40.3	37.7	37.1	37.4	36.7	36.6 <sup>†</sup>	28.0	27.5	26.3	27.4	29.5	26.2
New Mexico	30.4	30.3	30.1	29.4	27.4	29.8 <sup>†</sup>	23.5	24.8	25.1	26.8	26.3	27.3 <sup>§</sup>
New York	40.7	41.0	37.4	37.6	39.1	38.9 <sup>†</sup>	27.7	24.5	24.2	25.3	27.2	24.7
North Carolina	27.7	28.2	26.9	26.5	25.4	25.0 <sup>†</sup>	32.1	31.2	32.6	32.0	29.7	27.5 <sup>†</sup>
North Dakota	32.2	30.1	30.6	30.4	29.3	31.1	23.8	22.6	22.3	23.8	24.5	24.6
Ohio	30.9	28.6	29.7	30.0	28.5	29.3	24.6	24.5	25.8	25.1	25.2	24.6
Oklahoma	23.3	19.3	17.4	19.6	20.6	18.1 <sup>†</sup>	27.8	25.0	27.4	23.7	24.2	23.5 <sup>†</sup>
Oregon	36.2	35.5	32.5	34.1	33.8	33.0 <sup>†</sup>	27.4	28.2	25.9	29.0	29.8	30.5 <sup>§</sup>
Pennsylvania	33.7	36.9	35.2	33.8	34.9	35.5	25.3	25.0	23.6	26.2	27.1	25.1
Rhode Island	42.8	39.7	37.8	36.3	36.5	36.7 <sup>†</sup>	29.3	27.1	27.7	27.3	26.4	25.9 <sup>†</sup>
South Carolina	29.4	28.5	27.8	25.6	23.8	23.3 <sup>†</sup>	29.9	29.1	26.8	26.2	25.6	22.9 <sup>†</sup>
South Dakota	31.3	30.8	29.2	29.2	25.8	25.2 <sup>†</sup>	25.7	23.4	23.7	24.5	23.9	19.6 <sup>†</sup>
Tennessee	33.8	29.9	25.7	27.2	26.1	26.4 <sup>†</sup>	43.5	39.8	35.3	39.0	37.9	33.0 <sup>†</sup>
Texas	29.1	30.8	28.9	29.4	29.4	30.4	27.4	26.6	26.2	28.5	29.7	27.2
Utah	30.9	31.2	28.5	30.8	32.2	31.5	21.0	20.8	20.4	22.8	24.9	24.4 <sup>§</sup>
Vermont	39.9	39.6	41.6	39.2	38.6	38.9 <sup>†</sup>	29.6	29.4	32.3	31.2	31.8	30.3
Virginia	35.5	33.8	32.6	33.4	33.3	33.7	28.1	31.8	30.0	29.7	30.5	30.3
Washington	35.1	32.9	32.7	34.4	33.8	33.9	23.0	24.8	25.4	27.4	29.2	28.3 <sup>§</sup>
West Virginia	30.0	25.4	23.4	24.7	24.7	25.3 <sup>†</sup>	29.9	29.1	27.7	30.6	25.9	22.1 <sup>†</sup>
Wisconsin	34.0	35.7	32.7	33.4	35.2	34.9	20.3	22.7	20.7	21.1	23.6	23.2 <sup>§</sup>
Wyoming	27.3	29.2	27.8	29.0	32.1	30.3 <sup>§</sup>	25.6	24.7	26.1	25.9	26.8	26.9

\* Results presented are weighted for age, race/ethnicity, and sex. Linear trend analysis includes age-standardized data in the analytic sample from 2000 (N = 174,012), 2002 (N = 232,743), 2003 (N = 248,255), 2005 (N = 333,032), 2007 (N = 401,450), and 2009 (N = 396,316).

<sup>†</sup> Significant decreased linear trend (p<0.05).

<sup>§</sup> Significant increased linear trend (p<0.05).

FIGURE. Percentage of U.S. adults aged  $\geq 18$  years who consumed fruit two or more times per day\* and vegetables three or more times per day,<sup>†</sup> by state — Behavioral Risk Factor Surveillance System, 2009



\* *Healthy People 2010* target for increasing to 75% the proportion of persons consuming two or more servings of fruit daily (objective 19-5).

<sup>†</sup> *Healthy People 2010* target for increasing to 50% the proportion of persons consuming three or more servings of vegetables daily (objective 19-6).

Overall in 2009, the prevalence of consuming fruit two or more times per day or vegetables three or more times per day varied substantially by selected characteristics (Table 2), with the greatest prevalences observed among women (36.1% for fruit two or more times per day and 30.9% for vegetables three or more times per day), persons aged  $\geq 65$  years (41.3% and 29.0%), college graduates (36.9% and 32.2%), persons with annual household income  $\geq \$50,000$

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

Fruit and vegetable consumption, although beneficial to health, has historically been lower than national recommendations.

#### What is added by this report?

Estimates of fruit and vegetable consumption among U.S. adults were far short of *Healthy People 2010* targets, and trends in fruit and vegetable consumption over the past decade were relatively flat; no state has met the *Healthy People 2010* targets.

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

To meet national targets for fruit and vegetable consumption, intensified, multisector (e.g., agriculture, business, food industry, and health care) and multisetting (e.g., worksite, school, child care, and community) approaches are necessary to improve access, availability, and affordability of fruits and vegetables.

(32.9% and 29.4%), and persons with a body mass index (weight [kg] / height [m<sup>2</sup>])  $< 25.0$  (36.6% and 28.3%). Consumption by race/ethnicity varied by the type of produce; for example, Hispanics had the highest prevalence of fruit consumption (37.2%) but the lowest prevalence of vegetable consumption (19.7%).

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#### Editorial Note

The findings in this report indicate that 2009 overall and state-specific estimates of the proportions of U.S. adults consuming fruit two or more times per day or vegetables three or more times per day were far short of the targets set by *Healthy People 2010*; furthermore, trends in fruit and vegetable consumption during the past decade were relatively flat. The prevalence of fruit and vegetable consumption varied by demographic characteristics and body mass index; nonetheless, neither the fruit nor vegetable consumption target was met by any of the subgroups analyzed.

In 2009, no state met the *Healthy People 2010* targets for fruit or vegetable consumption, and substantial variability occurred among states. These variations might be attributed to a number of factors, including

TABLE 2. Percentage of U.S. adults aged ≥18 years who consumed fruit two or more times per day and vegetables three or more times per day, by selected demographic characteristics — Behavioral Risk Factor Surveillance System, 2009

Characteristic	No. of respondents*	Fruit two or more times per day		Vegetables three or more times per day	
		%	(95% CI) <sup>†</sup>	%	(95% CI)
<b>Total</b>	<b>396,316</b>	<b>32.5</b>	<b>(32.2–32.8)</b>	<b>26.3</b>	<b>(26.0–26.6)</b>
<b>Sex</b>					
Men	150,404	28.7	(28.3–29.2)	21.4	(20.9–21.8)
Women	245,912	36.1	(35.7–36.4)	30.9	(30.6–31.3)
<b>Age group (yrs)</b>					
18–24	11,827	30.8	(29.4–32.3)	20.1	(19.0–21.4)
25–34	34,463	31.2	(30.3–32.1)	24.7	(23.9–25.6)
35–44	55,691	28.8	(28.1–29.5)	26.0	(25.4–26.6)
45–54	81,065	30.5	(30.0–31.1)	27.6	(27.1–28.2)
55–64	89,057	32.7	(32.1–33.3)	28.5	(28.0–29.1)
≥65	124,213	41.3	(40.9–41.8)	29.0	(28.5–29.4)
<b>Race/Ethnicity</b>					
Black, non-Hispanic	29,625	33.7	(32.6–34.9)	21.9	(20.9–22.9)
Hispanic	23,067	37.2	(36.0–38.5)	19.7	(18.7–20.7)
White, non-Hispanic	319,159	31.1	(30.8–31.4)	27.7	(27.4–28.0)
Other race	20,953	36.2	(34.7–37.8)	30.9	(29.5–32.5)
<b>Education</b>					
Less than high school diploma	34,890	31.7	(30.6–32.9)	19.5	(18.5–20.5)
High school graduate	117,415	28.9	(28.3–29.5)	21.2	(20.7–21.7)
Some college	107,505	30.8	(30.2–31.4)	26.4	(25.9–27.0)
College graduate	135,976	36.9	(36.4–37.4)	32.2	(31.7–32.7)
<b>Annual household income</b>					
<\$25,000	97,929	32.2	(31.5–32.9)	22.0	(21.4–22.6)
\$25,000–\$49,999	96,668	31.4	(30.8–32.0)	24.8	(24.3–25.4)
≥\$50,000	153,945	32.9	(32.4–33.3)	29.4	(29.0–29.8)
Unknown	23,803	32.0	(30.5–33.5)	21.8	(20.6–23.0)
<b>BMI<sup>§</sup></b>					
<25.0	133,644	36.6	(36.0–37.2)	28.3	(27.8–28.8)
25.0–29.9 (overweight)	139,765	32.0	(31.4–32.5)	25.6	(25.1–26.0)
≥30.0 (obese)	108,381	27.7	(27.2–28.3)	24.3	(23.8–24.8)

\* Because of missing data, number of respondents for demographics characteristics might not sum to the total number of respondents in the sample.

<sup>†</sup> Confidence interval.

<sup>§</sup> Body mass index (weight [kg] / height [m<sup>2</sup>]).

differences in population demographics and access, availability, and affordability of produce. In addition to monitoring progress toward *Healthy People 2010* behavioral targets, CDC monitors policy and environmental measures. In 2009, the first state-specific data were released on policy and environmental supports that increase fruit and vegetable consumption. The findings in this report indicate that 20 states had a state-level food policy advisory council, but only eight had enacted healthy food retail policies (e.g., tax incentives, low-interest business loans, and zoning for stores, markets, and stands) (6), and states having farmers markets that accept electronic benefit transfers (the system delivering benefits in the federal Supplemental Nutrition Assistance Program) ranged from zero to 50%.<sup>§</sup>

To improve access, availability, and affordability of fruits and vegetables through retail stores, farmers markets, farm-to-institution, worksite food standards, and other policy and environmental interventions, CDC provides guidance and funding to 25 states.<sup>¶</sup> To assist these efforts, CDC recently released a guidance document on policy and environmental strategies to improve fruit and vegetable consumption.<sup>\*\*</sup> Other new federal efforts include the First Lady's Let's Move! Campaign,<sup>††</sup> the U.S. Department of Agriculture's Know Your Farmer, Know Your Food program<sup>§§</sup> and CDC's Communities Putting Prevention to Work<sup>¶¶</sup> program, which help support private and public

<sup>¶</sup> Available at <http://www.cdc.gov/obesity/stateprograms/index.html>.

<sup>\*\*</sup> Available at <http://www.cdc.gov/nccdphp/dnpao>.

<sup>††</sup> Available at <http://www.letsmove.gov>.

<sup>§§</sup> Additional information available at <http://www.usda.gov/wps/portal/usda/knownyourfarmer?navid=KNOWYOURFARMER>.

<sup>¶¶</sup> Available at <http://www.cdc.gov/chronicdisease/recovery/community.htm>.

<sup>§</sup> CDC state indicator report on fruits and vegetables, 2009: national action guide. Available at <http://www.fruitsandveggiesmatter.gov/downloads/nationalactionguide2009.pdf>.

partners, connect consumers to growers, and prioritize interventions at the state and community levels.

Data from the BRFSS dietary screener are used to monitor state progress among adults because other national surveys do not provide state-specific estimates. Estimates of fruit and vegetable consumption obtained from a short food frequency module, such as the six-item BRFSS dietary screener described in this report, generally are lower than estimates from more detailed methods of dietary assessment that record all foods (e.g., mixed dishes, soups, and sauces) consumed in a 24-hour period or from longer food frequency questionnaires (e.g., those with 60–120 items) (7,8). However, fruit and vegetable intake estimates derived with more detailed dietary instruments, such as the National Health and Nutrition Examination Survey, also reveal flat trends and consumption below national targets.\*\*\*

The findings in this report are subject to at least four limitations. First, these results might not be generalizable. BRFSS excludes certain populations, including persons residing in institutions and without landline telephones. Certain subpopulations are more likely to be represented in wireless-only households (e.g., younger, Hispanic, and lower-income adults) (9). Second, dietary history was self-reported and subject to social-desirability response bias and recall bias. This might have led to overestimates or underestimates of prevalence of fruit and vegetable consumption. Third, BRFSS has a low median response rate; however, BRFSS weighting procedure partially corrects for nonresponse. Finally, only trends in overall consumption were examined; trends might vary by subpopulation within a state

A number of previous initiatives to promote consumption of fruits and vegetables in the United States have included individual approaches, such as the Fruits and Veggies – More Matters campaign†††

and single-setting interventions, such as community gardens or farmers market voucher programs. Despite these initiatives, fruit and vegetable consumption is lower than recommended. Thus, intensified, multi-sector (e.g., agriculture, business, food industry, and health care) and multisetting (e.g., worksite, school, child care, and community) approaches are necessary to facilitate healthier choices among all persons in the United States.

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††† Additional information available at <http://www.fruitsandveggiesmorematters.org>.

## Parental Attitudes and Experiences During School Dismissals Related to 2009 Influenza A (H1N1) — United States, 2009

During the 2009 influenza A (H1N1) pandemic, child care center and school dismissals (i.e., temporary closures) were common and occurred in the majority of states across the United States. However, little is known about the economic and social problems parents face during such dismissals. To learn more about parents' attitudes and experiences after short-term school dismissals related to H1N1, CDC and the Harvard Opinion Research Program (HORP) conducted a randomized telephone poll of 523 parents from 39 states whose child care center or school had been closed temporarily in response to H1N1. This report summarizes the results of that poll, which found that 90% of parents agreed with the dismissal decision, and 85% believed dismissal effectively reduced influenza transmission. In most cases (58%), dismissal lasted  $\leq 3$  days. Overall, most parents did not report adverse effects related to dismissals of short duration. Only 3% of respondents said dismissal was a major problem, and 75% reported that it was not a problem. Approximately 20% of parents reported that an adult in the household missed work because of the dismissal, and 19% had a child who missed a free or reduced-cost lunch, but only 2% and  $<1\%$ , respectively, said these were major problems. The findings in this report underscore that when making a decision to close child care centers or schools, public health officials should consider the acceptability of the resulting disruption to students, families, and communities.

During November 19–December 9, 2009, HORP conducted a nationwide, random-digit-dialed telephone poll in areas of 39 states identified as having any schools reported closed by CDC's School Dismissal Monitoring System.\* Social Science Research Solutions, a polling company, oversaw field operations. Starting from a random sample of residential telephone numbers, trained interviewers used screening questions to identify 523 parents from all 39 states with a child aged  $<18$  years whose child care center or school had been closed temporarily in response to H1N1 at any time since the opening of school in late summer or fall 2009. Telephone calls were made during the day

and evening on weekdays and weekends, and multiple attempts (a mean of six attempts on nonresponding numbers) were made to reach each respondent before considering a telephone number unreachable. Respondents answered closed-ended questions during a telephone interview lasting approximately 15 minutes. To minimize recall bias, the data collection period was kept relatively short (3 weeks), and parents were polled as close to the period of H1N1-related school dismissals as possible; the time since dismissal ranged from approximately 1 day to 4 months. The response rate was 40.4%.<sup>†</sup> Data were weighted to match the U.S. Census by sex, age, race, education, number of children in household, and home ownership,<sup>§</sup> and by metropolitan area status according to the telephone exchange report<sup>¶</sup> to mitigate possible nonresponse biases (1).

Dismissals lasting  $\leq 3$  school days were reported by 58% of parents, and 26% reported dismissals for  $\geq 5$  school days (Table 1). Most parents (90%) agreed with the school dismissal decision. Among the parents, 81% believed the major reason for dismissal was to reduce transmission of H1N1 by keeping children apart, and 85% thought that dismissal was very or somewhat effective in reducing the number of cases of H1N1 influenza among children in the child care center or school.

When asked whether school dismissal overall was a problem for their families, 75% responded "not at all," 20% said it was a minor problem, and 3% said it was a major problem. When presented with a list of possible consequences, 42% reported they had experienced one or more associated with dismissal (Table 2). The most commonly reported consequences faced by parents and families included missed work

<sup>†</sup> The calculation of response rate is based on the following formula:  $(I + P) / (I + P) + (R + NC + O) + (UH + UO)$ ; where I = complete interviews, P = partial interviews, R = refusal and break off, NC = noncontact, O = other numbers (e.g., intended respondent deceased), UH = unknown household (not known if household or business number), and UO = unknown other. Additional information on the methodology used to calculate the response rate is available at [http://www.aapor.org/response\\_rates\\_an\\_overview.htm](http://www.aapor.org/response_rates_an_overview.htm).

<sup>§</sup> Additional information available at <http://www.census.gov/main/www/cen2000.html>.

<sup>¶</sup> A telephone exchange report is produced by a company selling randomly produced telephone numbers. The report provides an estimate of the population in any given exchange (three-digit area code plus first three digits).

\* A daily, web-based or fax report monitoring system developed and implemented by CDC and the U.S. Department of Education in August 2009. Additional information is available at [http://www.cdc.gov/h1n1flu/schools/dismissal\\_form](http://www.cdc.gov/h1n1flu/schools/dismissal_form).

**TABLE 1. Characteristics of child care center and school dismissals associated with the 2009 influenza A (H1N1) pandemic, and parental attitudes — Harvard Opinion Research Program Poll, United States, November–December 2009**

Characteristic/Attitude	Respondents (N = 523)	
	No.*	(%)†
<b>Length of child care/school dismissal (school days)</b>		
1	56	(10)
2	114	(19)
3	157	(29)
4	79	(15)
5	71	(17)
>5	39	(9)
Don't know	6	(2)
<b>Child care/After-school activities canceled</b>		
Yes	385	(74)
No	93	(17)
No activities	5	(1)
Don't know	39	(8)
<b>Degree to which dismissal was a problem</b>		
Major problem	17	(3)
Minor problem	111	(20)
Not a problem	393	(75)
Don't know	2	(1)
<b>Agreement with dismissal</b>		
Strongly agree	364	(71)
Somewhat agree	108	(19)
Somewhat disagree	33	(7)
Strongly disagree	14	(2)
Don't know	4	(1)
<b>Perceived as a "major reason" for dismissal<sup>§</sup></b>		
To reduce transmission by keeping children apart	437	(81)
To reduce transmission by cleaning building and surfaces	390	(73)
Because school cannot operate effectively with high student absenteeism	329	(58)
Because school could not operate effectively with high teacher absenteeism	194	(36)
Because school would lose funds for high students absenteeism	159	(35)
<b>Perceived effectiveness of dismissal</b>		
Very or somewhat effective	454	(85)
Not very or at all effective	56	(11)
Don't know	12	(3)
<b>Source of most information about dismissal</b>		
Individual school website, newsletter, or e-mail	146	(26)
Local news	120	(24)
School district website or newsletter	99	(20)
Parent listserv or bulletin board	27	(4)
Friends	19	(3)
Family	13	(2)
Local or state public health agency	7	(1)
Child's pediatrician	3	(1)
Other	82	(17)
None	5	(1)
Don't know	2	(1)
<b>Level of satisfaction with information</b>		
Very satisfied	384	(70)
Somewhat satisfied	104	(20)
Not very satisfied	24	(6)
Not at all satisfied	7	(2)
Don't know	4	(2)

\* Unweighted numbers.

† Data were weighted by sex, age, race, education, number of children in household, home ownership, and metropolitan area status. Percentages for a given question might not sum to 100% because of rounding or multiple responses.

§ Participants could select more than one response.

(20%) and child missing free or reduced-cost school lunches (19%). Few parents reported feeling at risk of losing their job (2%) or having their child miss health services usually provided by the school (1%). Overall, 7% reported any one of the specified issues posed a major problem.

Among parents, 4% reported problems arranging care for their children (Table 3). Most parents (81%) reported that an adult in the household stayed with the child for some time during the school dismissal. Fewer parents reported that other adults, including family members outside the household (20%), a neighbor or friend (1%), or a babysitter (3%), stayed with the child at least some of the time, and 10% reported that their child stayed at home alone at least some of the time.

A majority of parents (56%) reported their child participated in at least one activity involving persons outside the household during the school dismissal (Table 3). Children spent time with friends at one another's homes (30%), went grocery shopping (30%), and went to fast food restaurants (23%). Fewer parents reported children going to public events such as movies, sporting events, or concerts (17%), large shopping areas or malls (15%), or social events such as parties or dances (6%).

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#### Editorial Note

This report is the first to describe the attitudes and experiences of a national sample of parents about school dismissals associated with an influenza pandemic. Findings from previous studies were limited to hypothetical scenarios or local investigations of actual dismissals (2–6). The previous studies generally found parents anticipated problems with extended hypothetical dismissals (6) but experienced relatively few problems from actual short-term dismissals (2–4). The findings in this report regarding parental support and beliefs about reasons for dismissal are similar to those reported in local studies of short-term, influenza-related dismissals in the United States (2–4). When deciding whether to close child care centers or schools



**TABLE 2. Consequences of child care center or school dismissal associated with the 2009 influenza A (H1N1) pandemic on parents (N = 523) — Harvard Opinion Research Program Poll, United States, November–December 2009**

Consequence/Problem	Respondents experienced consequence No.* (%)†	Respondents reporting consequence as			Don't know, not applicable, or refused No. (%)
		Major problem	Minor problem	Not a problem	
		No. (%)	No. (%)	No. (%)	
Missed work	111 (20)	12 (2)	64 (11)	35 (7)	412 (80)
Child missed free or reduced-cost school meals	87 (19)	0 (<1)	14 (4)	73 (15)	436 (81)
Incurred financial costs in excess of typical days	61 (11)	13 (2)	40 (8)	8 (1)	462 (89)
Lost pay or income	54 (10)	14 (2)	34 (7)	6 (1)	469 (90)
Missed appointment with potential financial impact	29 (7)	11 (3)	17 (4)	1 (<1)	494 (93)
Missed another kind of important appointment or event	39 (7)	1 (1)	30 (5)	8 (1)	484 (93)
Felt at risk of losing job	10 (2)	6 (1)	4 (1)	0 (0)	513 (98)
Child missed health services usually provided by school	7 (1)	1 (<1)	4 (1)	2 (<1)	516 (99)
Experienced any specified issues <sup>§</sup>	213 (42)	34 (7)	116 (24)	79 (13)	310 (58)

\* Numbers are unweighted.

† Data were weighted by sex, age, race, education, number of children in household, home ownership, and metropolitan area status. Percentages for a given question might not sum to 100% because of rounding or multiple responses.

§ Respondents who experienced one or more of the listed issues/problems.

**TABLE 3. Child care arrangements, community sites visited, and activities engaged in by children (n = 523) during child care center or school dismissals associated with the 2009 influenza A (H1N1) pandemic — Harvard Opinion Research Program Poll, United States, November–December 2009**

Activity	No.* (%)†
<b>Child care arrangements</b>	
Had plan in advance	321 (62)
Had problems arranging care	29 (4)
<b>Who cared for child</b>	
Adult in household	403 (81)
Family member outside household	91 (20)
Friend/Neighbor	8 (1)
Professional care provider	18 (3)
Child stayed at home alone	77 (10)
<b>Sites and activities visited by child</b>	
Friends' houses or friends visiting their house	161 (30)
Grocery shopping	154 (30)
Fast food restaurants	105 (23)
Public events (e.g. movies, sporting events, or concerts)	78 (17)
Shopping areas or malls	63 (15)
Social events (e.g., parties or dances)	32 (6)
Participated in at least one of these activities	289 (56)

\* Unweighted numbers.

† Data were weighted by sex, age, race, education, number of children in household, home ownership, and metropolitan area status. Percentages for a given question might not sum to 100% because of rounding or multiple responses.

during influenza epidemics, state and local school and health authorities should weigh high staff and student absenteeism and the health consequences of the disease and its spread against potential negative consequences of dismissals on families (e.g., missing work and disruption of arrangements for care of the child). The results of this poll, similar to other studies (2,4),

show that parental support for short-term child care center and school dismissals can be high. However, the findings also show that parents might simultaneously hold perceptions about the intent of the dismissal that might be related to their support. If parents believed schools were dismissed for reasons related to absenteeism, for example, support might be lower. Support also might be contingent on specific community factors, dismissal duration, and perceptions about influenza risk and severity (2,4). Little evidence for or against the effectiveness of school dismissals in interrupting influenza transmission is available (7).

Most school dismissals reported in this study were brief, which might explain why parents reported few problems with missing work or arranging child care. Although only 3% of parents said they experienced major problems, 10% lost pay or income, and 11% incurred additional costs. If the dismissal had lasted much longer, economic loss and child care provision might have become more important. A 12-day dismissal in Australia resulted in approximately half of the adults sampled missing work and reporting less parental support of school dismissal than described in this report (5). In another study, when parents considered hypothetical scenarios of prolonged school dismissals lasting up to 3 months, substantial proportions of parents had concerns about missing work and economic loss (6).

Consistent with other U.S and Australian studies (2–5), most parents in this poll reported that their child participated in social activities outside the home during the dismissal. Whether such congregation

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

During the 2009 influenza A (H1N1) pandemic, child care center and school dismissals were common and occurred in the majority of states across the United States, but little is known about the economic and social problems that parents face during these dismissals.

**What does this report add?**

A national sample of 523 parents from 39 states found that, overall, most did not report adverse effects related to school dismissal of short duration.

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

When deciding whether to close child care centers or schools during influenza epidemics, state and local school and health authorities should weigh health consequences of the disease and its spread, and high staff and student absenteeism, against potential negative consequences of dismissals on families, such as missing work and arranging for child care.

poses similar transmission risk as attending child care centers or schools is unknown because of differences in population density, numbers of contacts, and duration and type of physical contact. Although not addressed in this poll, parents might be unfamiliar with the underlying concept of social distancing and its role outside the school environment. Future community mitigation efforts should address the public's basic knowledge of school dismissals as part of nonpharmaceutical interventions that include social distancing in other venues (e.g., workplaces), hand hygiene, covering coughs and sneezes, and encouraging ill persons to stay at home.

Polls are fielded more quickly and have shorter data collection periods than other types of surveys. In the context of a pandemic response, this short turnaround can facilitate integration of findings into policymaking and refinement of guidance needed during the remainder of the pandemic (8). However, the shorter data collection period often results in a lower response rate, compared with traditional surveys conducted over longer periods, and data typically are weighted to key demographics. Research suggests that weighted data from lower response rate polls conducted within days are comparable to data from higher-response surveys conducted over longer periods (1). Thus, although not frequently used, polling might be an effective tool in pandemic and other emergency public health responses (8).

The findings in this report are subject to at least three limitations. First, these findings might not be generalizable to areas with lower levels of influenza activity because the poll focused solely on experiences and perceptions in areas experiencing school dismissals and high levels of influenza activity. Second, sample size did not permit assessment of several factors associated with parental support of dismissals that might be useful to decision makers (e.g., length of dismissal, perceived H1N1 severity or risk, urban or rural setting, or child's age). Finally, the participation rate was greater for respondents in certain groups, and the weighting might not have addressed nonresponse biases completely.

The findings from this poll were presented to the National Association of County and City Health Officials to assist field staff members in making local school dismissal decisions and will be used in developing future pandemic influenza response guidance. When deciding whether to close child care centers or schools during influenza pandemics, school and health officials collaboratively should consider such factors as the level and severity of illness, the need to protect staff members and students at high risk, the likelihood of high absenteeism, and parental or public concerns (9).

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## Vital Signs: Current Cigarette Smoking Among Adults Aged $\geq 18$ Years — United States, 2009

*On September 7, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).*

### ABSTRACT

**Background:** Cigarette smoking continues to be the leading cause of preventable morbidity and mortality in the United States, causing approximately 443,000 premature deaths annually.

**Methods:** The 2009 National Health Interview Survey and the 2009 Behavioral Risk Factor Surveillance System were used to estimate national and state adult smoking prevalence, respectively. Cigarette smokers were defined as adults aged  $\geq 18$  years who reported having smoked  $\geq 100$  cigarettes in their lifetime and now smoke every day or some days.

**Results:** In 2009, 20.6% of U.S. adults aged  $\geq 18$  years were current cigarette smokers. Men (23.5%) were more likely than women (17.9%) to be current smokers. The prevalence of smoking was 31.1% among persons below the federal poverty level. For adults aged  $\geq 25$  years, the prevalence of smoking was 28.5% among persons with less than a high school diploma, compared with 5.6% among those with a graduate degree. Regional differences were observed, with the West having the lowest prevalence (16.4%) and higher prevalences being observed in the South (21.8%) and Midwest (23.1%). From 2005 to 2009, the proportion of U.S. adults who were current cigarette smokers did not change (20.9% in 2005 and 20.6% in 2009).

**Conclusions:** Previous declines in smoking prevalence in the United States have stalled during the past 5 years; the burden of cigarette smoking continues to be high, especially in persons living below the federal poverty level and with low educational attainment. Sustained, adequately funded, comprehensive tobacco control programs could reduce adult smoking.

**Implications for Public Health Practice:** To further reduce disease and death from cigarette smoking, declines in cigarette smoking among adults must accelerate. The Patient Protection and Affordable Care Act is expected to expand access to evidence-based smoking-cessation services and treatments; this likely will result in additional use of these services and reductions of current smoking and its adverse effects among U.S. adults. Population-based prevention strategies such as tobacco taxes, media campaigns, and smoke-free policies, in concert with clinical cessation interventions, can help adults quit and prevent the uptake of tobacco use, furthering the reduction in the current prevalence of tobacco use in the United States across age groups.

Cigarette smoking continues to be the leading cause of preventable morbidity and mortality in the United States. The negative health consequences of cigarette smoking have been well-documented and include cardiovascular disease, multiple cancers, pulmonary disease, adverse reproductive outcomes, and exacerbation of other chronic health conditions (1). Cigarette smoking causes approximately 443,000

premature deaths in the United States annually and \$193 billion in direct health-care expenditures and productivity losses because of premature mortality each year.\*

Despite significant declines during the past 30 years, cigarette smoking in the United States continues

\*Additional information available at [http://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/fast\\_facts/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm).

to be widespread; in 2008, one in five U.S. adults (20.6%) were current smokers (2). Year-to-year decreases in smoking prevalence have been observed only sporadically in recent years. For example, a slight decrease occurred from 2006 to 2007 but not from 2007 to 2008 (2). Monitoring tobacco use is essential in the effort to curb the epidemic of tobacco use.<sup>†</sup> To assess progress toward the *Healthy People 2010* objective of reducing the prevalence of cigarette smoking among adults to  $\leq 12\%$  (objective 27-1a),<sup>§</sup> this report provides the most recent national estimates of smoking prevalence among adults aged  $\geq 18$  years, based on data from the 2009 National Health Interview Survey (NHIS), and provides state-level estimates based on data from the 2009 Behavioral Risk Factor Surveillance System (BRFSS) survey.

## Methods

The 2009 NHIS adult core questionnaire collects national health information on illness and disability. The questionnaire was administered by in-person interview and included a random probability sample of 27,731 noninstitutionalized civilian adults aged  $\geq 18$  years; the overall response rate was 65.4%. Of the 27,731, a total of 128 were excluded because of unknown smoking status; thus, the final sample size used in the analyses was 27,603. The BRFSS survey is a state-based, random-digit-dialed telephone survey of the noninstitutionalized civilian adult population and collects information on preventive health practices, health-risk behaviors, and health-care access in the United States. The core questionnaire includes questions on current cigarette smoking; the Council of American Survey and Research Organizations (CASRO) median response rate was 52.5% (from 38.0% in Oregon to 66.9% in Nebraska), and the median cooperation rate was 75.0% (55.5% in California to 88.0% in Kentucky).<sup>¶</sup>

Smoking status was defined identically for both surveillance systems by using two questions, "Have you smoked at least 100 cigarettes in your entire life?"

<sup>†</sup> Additional information available at [http://www.who.int/tobacco/mpower/mpower\\_report\\_full\\_2008.pdf](http://www.who.int/tobacco/mpower/mpower_report_full_2008.pdf).

<sup>§</sup> Additional information available at <http://www.healthypeople.gov/document/html/objectives/27-01.htm>.

<sup>¶</sup> Based on Council of American Survey and Research Organizations (CASRO) definitions. The response rate is the percentage of persons who completed interviews among all eligible persons, including those who were not successfully contacted. The cooperation rate is the percentage of persons who completed interviews among all eligible persons who were contacted.

and "Do you now smoke cigarettes every day, some days, or not at all?" Respondents who had smoked at least 100 cigarettes during their lifetime and, at the time of interview, reported smoking every day or some days were classified as current smokers. Smoking status was examined by race/ethnicity, age group, education (among persons aged  $\geq 25$  years), poverty status, and region (overall and by sex). Starting in 2007, income-related follow-up questions were added to NHIS to reduce the number of responses with unknown values.\*\* For this report, poverty status was defined using 2008 poverty thresholds published by the U.S. Census Bureau in 2009; family income was reported by the family respondent, who might or might not have been the same as the sample adult respondent from whom smoking information was collected.

Data from the 2009 NHIS were adjusted for non-response and weighted to provide national estimates of cigarette smoking prevalence; 95% confidence intervals were calculated to account for the survey's multistage probability sample design. Data from the 2009 BRFSS were weighted to adjust for differences in probability of selection and nonresponse, as well as noncoverage (e.g., households lacking landlines), and these sampling weights were used to calculate all estimates. Using NHIS data, the Wald test from logistic regression analysis was used to analyze temporal changes in current smoking prevalence during 2005–2009, overall and by region. For this 5-year trend analysis, results were adjusted for sex, age, and race/ethnicity; a p-value of  $< 0.05$  was used to determine statistical significance. NHIS results with relative standard error of  $\geq 30\%$  are not reported.

## Results

In 2009, an estimated 20.6% (46.6 million) of U.S. adults were current cigarette smokers; of these, 78.1% (36.4 million) smoked every day, and 21.9% (10.2 million) smoked on some days. Prevalence of current smoking was higher among men (23.5%) than women (17.9%) (Table). Among racial/ethnic groups, Asians had the lowest prevalence (12.0%), and Hispanics had a lower prevalence of smoking (14.5%) than non-Hispanic blacks (21.3%) and non-Hispanic whites (22.1%). Adults reporting multiple races had the highest prevalence (29.5%), followed by American Indians/Alaska Natives (23.2%).

\*\* Additional information available at [ftp://ftp.cdc.gov/pub/health\\_statistics/nchs/dataset\\_documentation/nhis/1997/srvydesc.pdf](ftp://ftp.cdc.gov/pub/health_statistics/nchs/dataset_documentation/nhis/1997/srvydesc.pdf).

TABLE. Percentage of persons aged ≥18 years who were current cigarette smokers,\* by selected characteristics — National Health Interview Survey, United States, 2009

Characteristic	Total (N = 27,603)		Men (n = 12,193)		Women (n = 15,410)	
	%	(95% CI)	%	(95% CI†)	%	(95% CI)
<b>Age group (yrs)</b>						
18–24	21.8	(19.4–24.2)	28.0	(24.5–31.5)	15.6	(12.9–18.3)
25–44	24.0	(22.8–25.1)	26.5	(24.7–28.2)	21.5	(20.1–22.9)
45–64	21.9	(20.7–23.2)	24.5	(22.8–26.2)	19.5	(17.9–21.1)
≥65	9.5	(8.5–10.5)	9.5	(8.1–10.9)	9.5	(8.2–10.8)
<b>Race/Ethnicity<sup>§</sup></b>						
White, non-Hispanic	22.1	(21.2–23.1)	24.5	(23.2–25.9)	19.8	(18.8–20.8)
Black, non-Hispanic	21.3	(19.6–22.9)	23.9	(21.5–26.2)	19.2	(17.1–21.3)
Hispanic	14.5	(13.2–15.8)	19.0	(16.9–21.1)	9.8	(8.5–11.0)
American Indian/Alaska Native	23.2	(12.9–33.5)	29.7	(15.4–44.0)	—¶	—
Asian, non-Hispanic**	12.0	(10.0–14.0)	16.9	(14.0–19.9)	7.5	(4.8–10.3)
Multiple race, non-Hispanic	29.5	(22.9–36.1)	33.7	(24.4–43.0)	24.8	(16.6–33.0)
<b>Education<sup>††</sup></b>						
0–12 yrs (no diploma)	26.4	(24.5–28.3)	30.5	(27.6–33.5)	22.2	(19.9–24.5)
≤8 yrs	17.1	(14.5–19.6)	22.2	(18.0–26.4)	11.9	(9.2–14.7)
9–11 yrs	33.6	(30.7–36.5)	36.5	(32.2–40.9)	30.5	(26.6–34.4)
12 yrs (no diploma)	28.5	(23.2–33.9)	34.1	(26.0–42.1)	23.3	(17.0–29.6)
GED <sup>§§</sup>	49.1	(44.5–53.8)	53.2	(46.6–59.8)	44.7	(38.2–51.2)
High school graduate	25.1	(23.6–26.5)	29.0	(26.9–31.2)	21.5	(19.8–23.3)
Some college (no degree)	23.3	(21.7–24.9)	26.1	(23.4–28.8)	21.0	(19.0–22.9)
Associate degree	19.7	(17.9–21.5)	20.6	(17.5–23.6)	19.1	(16.5–21.6)
Undergraduate degree	11.1	(10.0–12.3)	12.4	(10.7–14.2)	9.9	(8.3–11.4)
Graduate degree	5.6	(4.6–6.6)	4.9	(3.6–6.3)	6.3	(4.7–7.9)
<b>Poverty status<sup>¶¶</sup></b>						
At or above poverty level	19.4	(18.6–20.2)	22.2	(21.1–23.3)	16.7	(15.7–17.6)
Below poverty level	31.1	(29.1–32.9)	34.2	(31.0–37.5)	28.7	(26.5–30.9)
Unspecified	17.3	(15.3–19.3)	22.3	(18.6–26.1)	13.2	(11.0–15.4)
<b>Region<sup>***</sup></b>						
Northeast	20.0	(18.0–22.0)	23.4	(20.5–26.3)	16.9	(14.8–19.0)
New England	19.4	(15.2–23.6)	21.5	(14.4–28.6)	17.5	(14.6–20.4)
Mid-Atlantic	20.2	(18.0–22.4)	24.1	(21.1–27.1)	16.7	(14.1–19.3)
Midwest	23.1	(21.6–24.7)	25.7	(23.3–28.1)	20.8	(19.2–22.3)
East North Central	23.8	(22.1–25.5)	26.7	(23.8–29.6)	21.1	(19.5–22.6)
West North Central	21.8	(18.8–24.8)	23.6	(19.7–27.5)	20.1	(16.5–23.7)
South	21.8	(20.7–22.9)	24.5	(22.8–26.2)	19.3	(18.1–20.5)
South Atlantic	20.1	(18.7–21.5)	22.3	(20.1–24.5)	18.0	(16.4–19.6)
East South Central	25.8	(22.7–28.9)	30.1	(25.0–35.2)	22.3	(20.0–24.6)
West South Central	22.5	(20.5–24.5)	25.5	(22.6–28.4)	19.8	(17.4–22.2)
West	16.4	(14.9–17.9)	19.5	(17.6–21.4)	13.3	(11.3–15.2)
Mountain	18.8	(16.0–21.6)	21.7	(18.1–25.3)	16.0	(13.0–19.0)
Pacific	15.3	(13.6–17.0)	18.6	(16.4–20.8)	12.1	(9.7–14.5)
<b>Total</b>	<b>20.6</b>	<b>(19.9–21.3)</b>	<b>23.5</b>	<b>(22.4–24.5)</b>	<b>17.9</b>	<b>(17.1–18.7)</b>

\* Persons who reported smoking at least 100 cigarettes during their lifetimes and who, at the time of interview, reported smoking every day or some days. Excludes 128 respondents whose smoking status was unknown.

† 95% confidence interval.

§ Excludes 53 respondents of unknown race.

¶ Data not reported because of unstable percentages; relative standard error ≥30%.

\*\* Does not include Native Hawaiians or Other Pacific Islanders.

†† Among persons aged ≥25 years. Excludes 137 persons whose educational level was unknown.

§§ General Educational Development certificate.

¶¶ Family income is reported by the family respondent who might or might not be the same as the sample adult respondent from whom smoking information is collected; 2009 estimates are based on reported family income and 2008 poverty thresholds published by the U.S. Census Bureau.

\*\*\* *New England*: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. *Mid-Atlantic*: New York, Pennsylvania, and New Jersey. *East North Central*: Wisconsin, Michigan, Illinois, Indiana, and Ohio. *West North Central*: Missouri, North Dakota, South Dakota, Nebraska, Kansas, Minnesota, and Iowa. *South Atlantic*: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida. *East South Central*: Kentucky, Tennessee, Mississippi, and Alabama. *West South Central*: Oklahoma, Texas, Arkansas, and Louisiana. *Mountain*: Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico. *Pacific*: Alaska, Washington, Oregon, California, and Hawaii.

**Key Points**

- Smoking causes approximately 443,000 premature deaths, accounts for up to 30% of cancer deaths, and is the single most preventable cause of disease and death in the United States.
- Despite the adverse health effects of smoking cigarettes, one in five U.S. adults (46.6 million men and women) currently smoke.
- The prevalence of adult smoking is not decreasing. Effective population-based strategies to encourage cessation (e.g., tobacco taxes, smoke-free policies, and media campaigns) are essential to accelerate the reduction in tobacco use among adults in the United States and prevent smoking initiation in young persons.
- Effective cessation methods should be made available to increase success rates when tobacco users make quit attempts.
- Additional information is available at <http://www.cdc.gov/tobacco> and <http://www.cdc.gov/vitalsigns>.

Variations in smoking prevalence in 2009 were observed by education level (Table). Smoking prevalence was highest among adults who had obtained a General Education Development certificate (GED) (49.1%) and generally declined with increasing education, being lowest among adults with a graduate degree (5.6%). The prevalence of current smoking was higher among adults living below the federal poverty level (31.1%) than among those at or above this level (19.4%). Smoking prevalence did not vary significantly for adults aged 18–24 years (21.8%), 25–44 years (24.0%), and 45–64 years (21.9%); however, it was lowest for adults aged  $\geq 65$  years (9.5%). Regionally, smoking prevalence was higher in the Midwest (23.1%) and South (21.8%), and lowest prevalence for adult current smoking was observed for the West (16.4%).

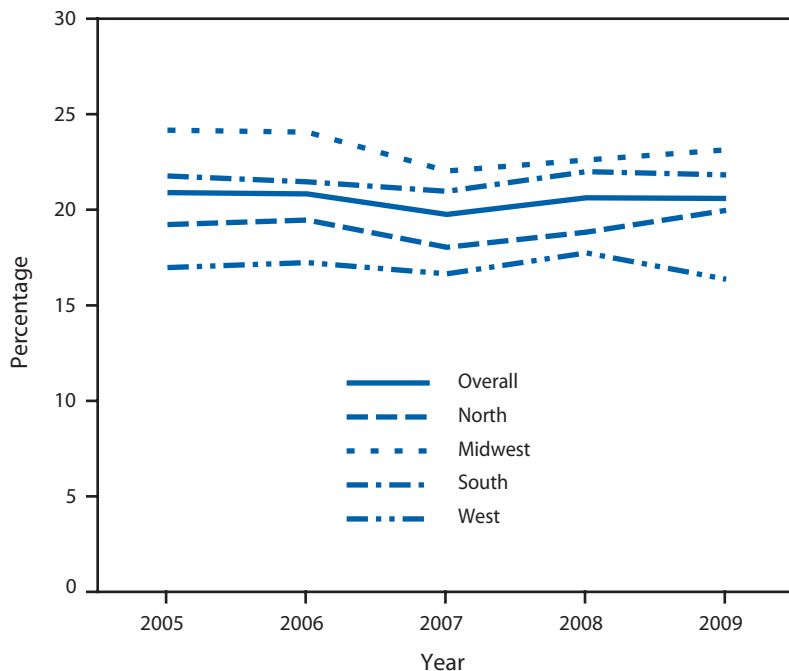
During 2005–2009, the proportion of U.S. adults who were current cigarette smokers was 20.9% in 2005<sup>††</sup> and 20.6% in 2009, with no significant difference (Figure 1). No significant changes in current smoking prevalence for U.S. adults were observed during the 5-year period overall and for each of the four regions: Northeast, Midwest, South, or West ( $p \geq 0.05$ ).

By state, the prevalence of current smoking ranged from 9.8% (Utah) to 25.6% (Kentucky and West Virginia) (Figure 2). States with the highest prevalence of adult current smoking were clustered in the Midwest and Southeast regions.

**Conclusions and Comment**

The results of these analyses indicate that the national estimates for the prevalence of current cigarette smoking among adults aged  $\geq 18$  years did not decline from 2008 (20.6%) (2) to 2009, and during the past 5 years (2005–2009) virtually no change has been observed, even by region. In 2009, certain population subgroups (e.g., Hispanic and Asian women, persons with higher levels of education, and older adults) continue to meet the *Healthy People 2010* target of  $\leq 12\%$  prevalence of smoking. Although smoking prevalence was found to be lowest among Asian and Hispanic women, the findings in this report cannot assess specific Asian and Hispanic subgroups. In a previous report, variations in smoking

**FIGURE 1. Percentage of adults aged  $\geq 18$  years who were current smokers,\* by geographic region — National Health Interview Survey, United States, 2005–2009**



\* Persons who reported smoking at least 100 cigarettes during their lifetimes and who, at the time of the survey, reported smoking every day or some days.

<sup>††</sup> Additional information available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5542a1.htm>.

prevalence were observed within specific Asian and Hispanic subgroups and between the sexes within these subgroups, suggesting that overall prevalence for Asians and Hispanics do not accurately represent the wide variability across subgroups (3).

Differences in understanding the health hazards of smoking and receptivity to antismoking messages might be related to the prevalence variations observed by education level (4). For example, persons with higher levels of education might have a better understanding of the health hazards of smoking and might be more receptive to health messaging about the dangers of smoking (4). Nonetheless, most population subgroups, particularly those with low education and income levels, will not meet the *Healthy People 2010* target.

Differences also were noted by state and region. In 2009, the lowest prevalence was observed in the West, with lowest prevalence in Utah, followed by California. California traditionally has been cited for its success in tobacco control because of its long-running comprehensive tobacco control program (5). California's adult smoking prevalence declined approximately 40% during 1998–2006, and consequently lung cancer incidence in California has been declining four times faster than in the rest of the nation (5). Similarly, Maine, New York, and Washington have seen 45%–60% reductions in youth smoking with sustained comprehensive statewide programs (5).

Youth smoking is an important indicator to monitor because most adult established smokers (>80%) begin before the age of 18 years.<sup>§§</sup> In 2009, one in five U.S. high school students (19.5%) reported smoking cigarettes in the preceding 30 days (6). Moreover, declines in current smoking among high school students have slowed, with an 11% decline from 21.9% in 2003 to 19.5% in 2009 compared with a 40% decline observed from 1997 (36.4%) to 2003 (21.9%) (7). The slowing in the decline observed for youth cigarette smoking indicates that cigarette smoking among adults and the associated morbidity and mortality will continue to be important public health issues for the foreseeable future.

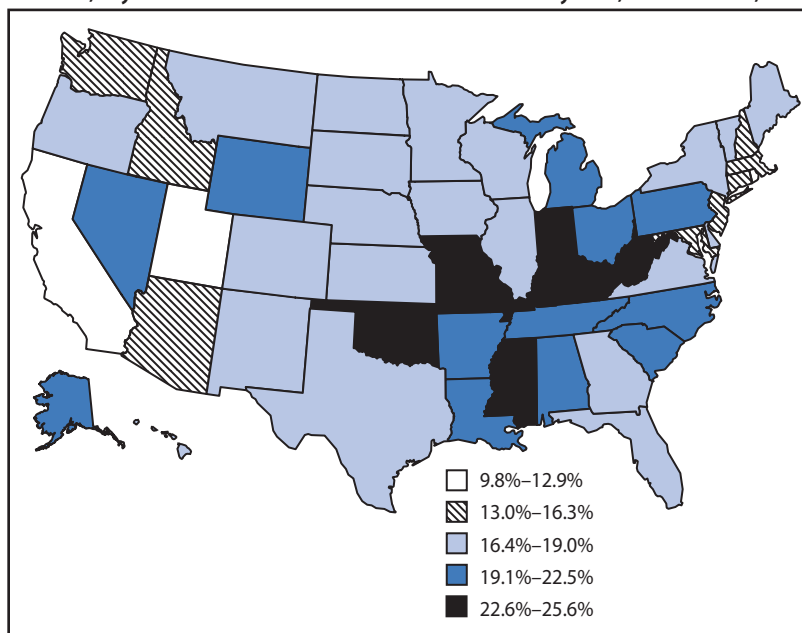
The findings in this report are subject to at least six limitations. First, the estimates of cigarette smoking

were self-reported and were not validated by biochemical tests. However, other studies using levels of serum cotinine (a breakdown product of nicotine), yield similar prevalence estimates as those obtained from self-reports (8). Second, questionnaires are administered only in English and Spanish; therefore, smoking prevalence for certain racial/ethnic populations might be overestimated or underestimated if English and Spanish are not the primary languages spoken. Third, race/ethnicity was not adjusted for socioeconomic status. Fourth, because NHIS and BRFSS do not include institutionalized populations and persons in the military, the results are not generalizable to these groups. Fifth, BRFSS does not currently include adults without telephone service (1.9%) or with wireless-only service (13.6%).<sup>¶¶</sup> Because adults with wireless-only service are more likely to smoke cigarettes than the rest of the U.S. population and wireless-only service varies by state, state smoking prevalence might be underestimated.<sup>\*\*\*</sup> Finally, small samples sizes for certain population groups resulted in some imprecise estimates. This might explain why

¶¶ Additional information available at <http://www.cdc.gov/nchs/data/nhsr/nhsr014.pdf>.

\*\*\* Additional information available at <http://www.cdc.gov/nchs/nhis.htm>.

FIGURE 2. Percentage of persons aged ≥18 years who were current cigarette smokers,\* by state — Behavioral Risk Factor Surveillance System, United States, 2009



\* Persons who reported smoking at least 100 cigarettes during their lifetimes and who, at the time of the survey, reported smoking every day or some days.

§§ Additional information available at <http://www.oas.samhsa.gov/nsduh/2k8nsduh/2k8results.cfm>.

the 2009 prevalence estimate for American Indian/Alaska Native women is lower than prevalence estimates from recent years.

The *Healthy People 2010* objective of reducing the overall prevalence of cigarette smoking among U.S. adults to  $\leq 12\%$  (objective 27-1a) will not be met in 2010. However, for some subpopulations and states, this goal has been reached, demonstrating that the national target is achievable. To meet this goal for the entire population in the future, evidence-based strategies focused on populations such as persons with lower education are needed (5). Effective strategies including price increases, comprehensive smoke-free policies, and media campaigns to counter pro-tobacco industry influences need to be implemented aggressively in coordination with providing access to affordable and effective cessation treatments and services (5,9). If each state sustained comprehensive tobacco control programs for 5 years with CDC-recommended levels of funding, an estimated 5 million fewer persons in the country would smoke, resulting in prevention of premature tobacco-related deaths (5).

As this analysis shows, some populations have a higher prevalence of cigarette use; thus, a focus on reducing tobacco-related disparities also is necessary (5). The Patient Protection and Affordable Care Act<sup>†††</sup> is expected to expand access to evidence-based smoking-cessation services and treatments. Given the decline in smoking prevalence that was observed after the implementation of a mandated tobacco cessation coverage for the Massachusetts Medicaid program (10), expanded access to cessation services and treatments might result in reductions in current smoking and its adverse effects among U.S. adults. For this to occur, health professionals need to better identify, educate, and offer appropriate cessation services to persons who use tobacco.

The enactment of the 2009 Family Smoking Prevention and Tobacco Control Act<sup>§§§</sup> has provided new opportunities for reductions in tobacco use (7,9). The Act gives the Food and Drug Administration authority to regulate the manufacturing, marketing,

and distribution of tobacco products. Full implementation of comprehensive tobacco control policies and programs at CDC-recommended levels of funding (5) would resume progress toward reducing the prevalence of smoking in the population.

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<sup>†††</sup> Additional information available at <http://www.dol.gov/ebsa/healthreform>.

<sup>§§§</sup> Family Smoking Prevention and Tobacco Control Act, Pub. L. 111-31, 123 Stat 1776 (2009). Additional information available at <http://www.gpo.gov/fdsys/pkg/PLAW-111publ31/content-detail.html>.



## Vital Signs: Nonsmokers' Exposure to Secondhand Smoke — United States, 1999–2008

*On September 7, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).*

### ABSTRACT

**Background:** Secondhand exposure to tobacco smoke causes heart disease and lung cancer in nonsmoking adults and sudden infant death syndrome, acute respiratory infections, middle ear disease, exacerbated asthma, respiratory symptoms, and decreased lung function in children.

**Methods:** National Health and Nutrition Examination Survey data from 1999–2008 were analyzed to determine the proportion of the nonsmoking population with serum cotinine (the primary nicotine metabolite) levels  $\geq 0.05$  ng/mL, by age, sex, race/ethnicity, household income level, and to determine whether the household included a person who smoked inside the home.

**Results:** During 2007–2008, approximately 88 million nonsmokers aged  $\geq 3$  years in the United States were exposed to secondhand smoke. The prevalence of serum cotinine levels  $\geq 0.05$  ng/mL in the nonsmoking population declined significantly from 52.5% (95% CI = 47.1%–57.9%) during 1999–2000 to 40.1% (95% CI = 35.0%–45.3%) during 2007–2008. The decline was significant for each sex, age, race/ethnicity, and income group studied except non-Hispanic whites. The change was greatest from 1999–2000 to 2001–2002. For every period throughout the study, prevalence was highest among males, non-Hispanic blacks, children (aged 3–11 years) and youths (aged 12–19 years), and those in households below the federal poverty level.

**Conclusions:** Secondhand smoke exposure has declined in the United States, but 88 million nonsmokers aged  $\geq 3$  years are still exposed, progress in reducing exposure has slowed, and disparities in exposure persist, with children being among the most exposed. Nearly all nonsmokers who live with someone who smokes inside their home are exposed to secondhand smoke.

**Implications for public health practice:** The only way to protect nonsmokers fully is to eliminate smoking in indoor spaces. Continued efforts at smoking cessation and comprehensive statewide laws prohibiting smoking in workplaces and public places are needed to ensure that all nonsmokers are protected from this serious health hazard. Health-care providers should educate patients and parents about the dangers of secondhand smoke and follow clinical care guidelines to help smokers quit.

Secondhand exposure to tobacco smoke causes heart disease and lung cancer in nonsmoking adults and sudden infant death syndrome, acute respiratory infections, middle ear disease, exacerbated asthma, respiratory symptoms, and decreased lung function in children (1). No risk-free level of secondhand smoke exposure exists (1). Levels of secondhand smoke exposure among U.S. nonsmokers have fallen substantially during the past 20 years (2). However, millions of

nonsmokers remain exposed to secondhand smoke in homes, workplaces, public places, and vehicles (1). Using data from the National Health and Nutrition Examination Survey (NHANES) for 1999–2008, this report describes recent trends in secondhand smoke exposure among nonsmokers by analyzing levels of serum cotinine, a metabolite of nicotine that reflects recent exposure.

## Methods

NHANES produces data for a nationally representative sample of the noninstitutionalized U.S. civilian population every 2 years. NHANES surveys include a home interview, physical examination at a mobile examination center where biologic specimens are collected, and laboratory specimen testing, including serum cotinine analysis for participants aged  $\geq 3$  years. Response rates exceeded 75% for all 2-year study cycles.\* From the 1999–2000, 2001–2002, 2003–2004, 2005–2006, and 2007–2008 NHANES cycles, 30,451 respondents were determined to be nonsmokers (by cotinine level  $\leq 10$  ng/mL and self-reported history for persons aged  $\geq 12$  years) and were included in the analysis.

Serum cotinine was analyzed using an isotope dilution liquid chromatography tandem mass spectrometry method (2). Cotinine concentrations below a level known as the limit of detection (LOD) might be estimated inaccurately. The cotinine LOD initially was 0.05 ng/mL and changed to 0.015 ng/mL after improvements to the method. Cotinine levels below the LOD were reported as  $\text{LOD} / \sqrt{2}$ ; this value represents the approximate midpoint of the interval between zero and LOD on a log scale.

Serum cotinine levels  $>10$  ng/mL are associated with active smoking within the past few days (3). Therefore, children aged 3–11 years were assumed to be nonsmokers if their serum cotinine concentration was  $\leq 10$  ng/mL. Youths aged 12–19 years were considered nonsmokers if their serum cotinine concentration was  $\leq 10$  ng/mL and they did not report smoking within the preceding 30 days or use of any nicotine-containing product within the preceding 5 days at their physical examination. Adults aged  $\geq 20$  years were considered nonsmokers if their serum cotinine concentration was  $\leq 10$  ng/mL and they did not report being a current smoker during their home interview or report use of any nicotine-containing product within the preceding 5 days at their physical examination.

The percentage of the nonsmoking population with serum cotinine levels  $\geq 0.05$  ng/mL, the higher LOD, was calculated by survey cycle, sex, race/ethnicity group, age group, household income level, and whether households contained a person who smoked inside the home; 95% confidence intervals (CIs) were calculated using a log transformation for values  $>98\%$  and the Wald method otherwise. Sample sizes

\*Additional information available at [http://www.cdc.gov/nchs/nhanes/response\\_rates\\_cps.htm](http://www.cdc.gov/nchs/nhanes/response_rates_cps.htm).

are insufficient to allow separate reporting for race/ethnicity groups other than non-Hispanic whites, non-Hispanic blacks, and Mexican-Americans, but all race/ethnicity groups are included in the reported values for the total population and the values shown by sex, age group, and household income level. For 2007–2008, the most recently completed NHANES cycle, the number of nonsmokers with serum cotinine  $\geq 0.05$  ng/mL was calculated by age group using the midpoint population as the denominator, and the distribution of serum cotinine concentrations was examined separately for nonsmokers who lived with and without someone who smoked inside the home.

Two-sided t-tests were used to assess differences between population group percentages within study cycles and differences within population groups across study cycles;  $p < 0.05$  was considered statistically significant. Data analyses accounted for the complex survey design, differential probability of sample selection, nonresponse, and sample noncoverage.

## Results

The overall prevalence of serum cotinine concentrations  $\geq 0.05$  ng/mL among the nonsmoking population fell from 52.5% (CI = 47.1%–57.9%) during 1999–2000 to 40.1% (CI = 35.0%–45.3%) during 2007–2008 (Table 1). However, the decline occurred only among the subset of the nonsmoking population that did not live with someone who smoked inside the home. The decline was significant for each sex, age, race/ethnicity, and income group studied except non-Hispanic whites. Prevalence fluctuated from cycle to cycle rather than showing a consistent decline; the greatest decline (10.8% percentage points) occurred from 1999–2000 to 2001–2002.

For every survey cycle, a significantly higher prevalence of cotinine concentrations  $\geq 0.05$  ng/mL was observed among males than among females, among non-Hispanic blacks than among non-Hispanic whites and Mexican-Americans, among children aged 3–11 years and youths aged 12–19 years than among adults aged  $\geq 20$  years, and among those below the federal poverty level than among those at or above the poverty level.

During 2007–2008, approximately 88 million nonsmokers aged  $\geq 3$  years in the United States were exposed to secondhand smoke (CI = 76 million–99 million) (Table 2). Of these, 32 million were aged 3–19 years, reflecting the higher prevalence of

**TABLE 1. Percentage of the nonsmoking population aged  $\geq 3$  years with serum cotinine levels  $\geq 0.05$  ng/mL, by selected characteristics — National Health and Nutrition Examination Survey, United States, 1999–2008**

Characteristic	% with serum cotinine $\geq 0.05$ ng/mL (95% CI*)				
	1999–2000	2001–2002	2003–2004	2005–2006	2007–2008
<b>Total</b>	52.5 (47.1–57.9)	41.7 (35.5–47.9)	47.6 (40.3–54.9)	39.1 (35.6–42.7)	40.1 (35.0–45.3)
<b>Sex</b>					
Male	58.5 (52.1–64.9)	45.5 (38.9–52.1)	51.9 (44.3–59.5)	43.0 (39.1–46.9)	43.5 (37.5–49.4)
Female	47.5 (42.5–52.5)	38.6 (32.4–44.7)	44.2 (36.8–51.6)	35.9 (31.6–40.2)	37.4 (32.6–42.2)
<b>Age group (yrs)</b>					
3–11	64.9 (56.0–73.9)	55.7 (47.1–64.2)	64.8 (55.5–74.2)	50.8 (45.4–56.1)	53.6 (46.2–61.0)
12–19	63.1 (56.4–69.7)	46.9 (36.6–57.1)	57.1 (50.3–63.9)	45.4 (38.7–52.1)	46.5 (38.3–54.8)
$\geq 20$	48.0 (42.6–53.4)	37.8 (31.7–44.0)	42.4 (35.1–49.8)	35.8 (32.5–39.1)	36.7 (32.0–41.3)
<b>Race/Ethnicity</b>					
White, non-Hispanic	49.6 (42.4–56.7)	36.3 (29.4–43.1)	45.9 (36.6–55.3)	36.6 (32.3–40.8)	40.1 (32.2–48.0)
Black, non-Hispanic	74.2 (70.2–78.2)	71.8 (66.7–77.0)	68.1 (59.7–76.4)	60.2 (53.0–67.3)	55.9 (50.6–61.3)
Mexican-American	44.3 (37.4–51.1)	39.9 (30.1–49.7)	34.0 (25.5–42.5)	33.8 (26.5–41.1)	28.5 (23.1–33.9)
<b>Poverty status</b>					
Below poverty level	71.6 (64.8–78.5)	60.2 (47.1–73.3)	63.6 (55.0–72.2)	62.7 (57.1–68.4)	60.5 (55.0–66.0)
At or above poverty level	48.8 (42.8–54.8)	38.4 (32.9–44.0)	44.8 (37.7–52.0)	35.9 (32.7–39.1)	36.9 (31.3–42.5)
Unspecified	53.5 (48.4–58.6)	44.1 (32.7–55.5)	50.5 (36.4–64.6)	42.0 (29.0–55.0)	39.6 (30.8–48.5)

\* Confidence interval.

**TABLE 2. Percentage and estimated number of nonsmokers with serum cotinine levels  $\geq 0.05$  ng/mL, by age group — National Health and Nutrition Examination Survey, United States, 2007–2008**

Age group (yrs)	% with serum cotinine $\geq 0.05$ ng/mL	No. of nonsmokers in population (millions)*	No. of nonsmokers with serum cotinine $\geq 0.05$ ng/mL (millions)	(95% CI†)
$\geq 3$	40.1	218	88	(76–99)
3–19	50.2	64	32	(28–37)
3–11	53.6	36	19	(17–22)
12–19	46.5	28	13	(11–16)
$\geq 20$	36.7	156	57	(50–64)
20–39	42.8	52	22	(20–25)
40–59	35.4	60	21	(18–24)
$\geq 60$	31.6	44	14	(11–17)

\* Totals do not sum exactly because of rounding.

† Confidence interval.

exposure among children and youths. Similarly, among nonsmoking adults, the prevalence of exposure decreased with age so that there were approximately 21–22 million exposed persons in each of the 20–39 year and 40–59 year age groups and approximately 14 million exposed persons in the  $\geq 60$  year age group.

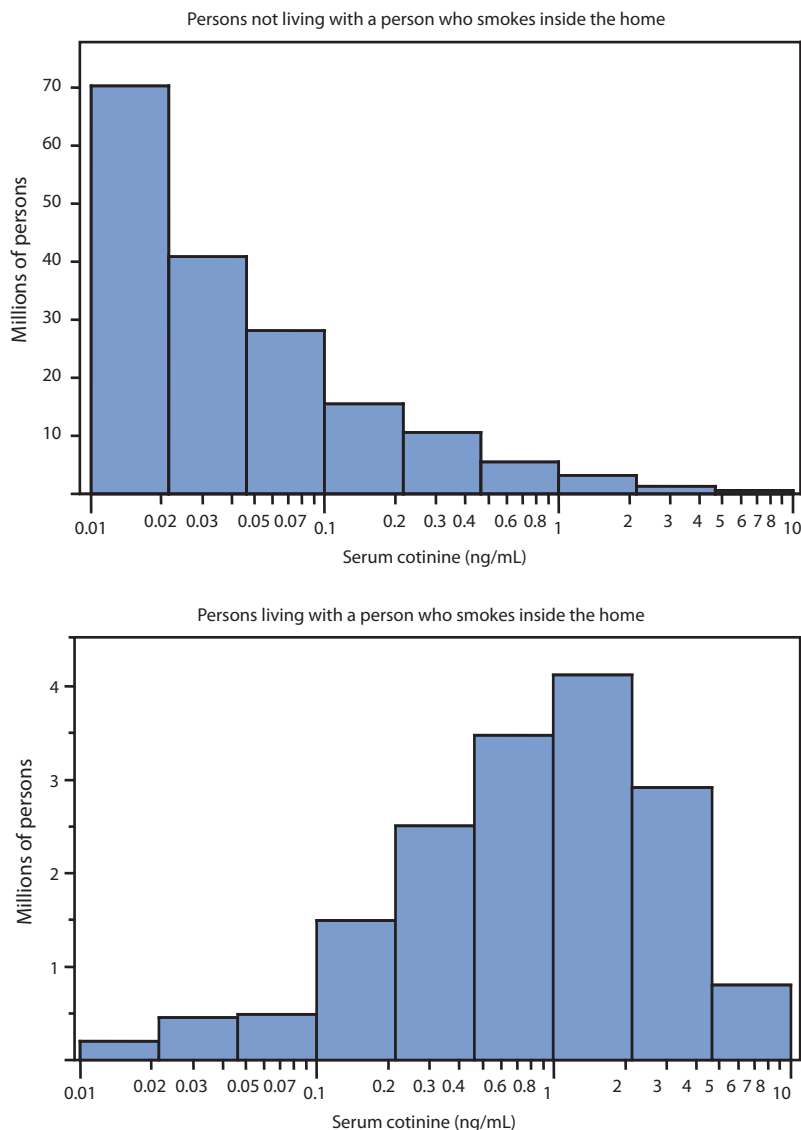
Children and nonsmoking youths were more likely than nonsmoking adults to live with someone who smoked inside the home. During 2007–2008, 18.2% (CI = 11.2%–25.3%) of children aged 3–11 years and 17.1% (CI = 12.7%–21.4%) of youths aged 12–19 years lived with someone who smoked inside the home, compared with 5.4% (CI = 3.8%–7.0%) of adults aged  $\geq 20$  years. The majority (96.0%; CI = 93.3%–98.6%) of nonsmokers who lived with someone who smoked inside the home had cotinine levels  $\geq 0.05$  ng/mL (Figure). Among nonsmoking children and youths living with someone who smoked

inside the home, 98.3% (CI = 95.5%–99.3%) had serum cotinine  $\geq 0.05$  ng/mL, compared with 39.9% (CI = 34.3%–45.4%) among those not living with someone who smoked inside the home ( $p < 0.05$ ). For nonsmoking adults, the corresponding prevalences were 93.4% (CI = 89.2%–97.5%) and 33.4% (CI = 29.1%–37.8%), respectively ( $p < 0.05$ ).

## Conclusions and Comment

This is the first reported analysis of 2007–2008 cotinine levels among the full U.S. nonsmoking population aged  $\geq 3$  years. The results confirm that secondhand smoke exposure in the United States is far less prevalent at 40% than during 1988–1991, when 88% of the nonsmoking population age  $\geq 4$  years had serum cotinine levels  $\geq 0.05$  ng/mL (2). This decline is attributable to a number of factors, including decreased smoking prevalence, increases in

**FIGURE. Serum cotinine levels among nonsmoking persons aged  $\geq 3$  years — National Health and Nutrition Examination Survey, United States, 2007–2008**



the number of local and state laws prohibiting smoking in indoor workplaces and public places, increases in voluntary smoking restrictions in workplaces and homes, and changes in public attitudes regarding social acceptability of smoking near nonsmokers and children (1). Although prevalence of exposure has dropped for children and non-Hispanic blacks, groups that traditionally have had higher-than-average exposure levels (1–4), disparities remain. Further, this report shows that millions of nonsmokers in the United States remain exposed to secondhand smoke, including nearly all of those who live with someone who smokes inside the home.

### Key Points

- Despite progress in protecting nonsmokers from secondhand smoke, approximately 88 million nonsmokers (including 32 million children and youths) in the United States were exposed to secondhand smoke during 2007–2008.
- Children are more likely than nonsmoking adults to live with someone who smokes inside the home and more likely to be exposed to secondhand smoke.
- The vast majority of nonsmokers who live with persons who smoke inside the home are exposed to secondhand smoke.
- Exposure to secondhand smoke causes heart disease and lung cancer in nonsmoking adults and sudden infant death syndrome, acute respiratory infections, middle ear disease, exacerbated asthma, respiratory symptoms, and decreased lung function in children.
- No risk-free level of secondhand smoke exposure exists.
- The only way to protect nonsmokers fully is to eliminate smoking in indoor spaces, including workplaces, public places (e.g., restaurants and bars), and private places (e.g., homes and vehicles) through smoke-free laws and policies and through decreased smoking prevalence.
- Additional information is available at <http://www.cdc.gov/vitalsigns>.

Workplaces and homes usually are the most important sources of secondhand smoke exposure among adults because these are the settings where they typically spend the most time (1). The number of state, local, and voluntary smoke-free policies has greatly increased in recent years and has helped to protect nonsmokers from the toxicants in secondhand smoke. Nonetheless, currently only 24 states and the District of Columbia have comprehensive smoke-free laws covering workplaces, restaurants, and bars<sup>†</sup>; complete statewide bans are needed in the remaining 26 states because only 47% of the national population is covered by comprehensive state or local

<sup>†</sup> Additional information available at <http://apps.nccd.cdc.gov/statesystem>.

laws.<sup>§</sup> Smoke-free policies have been shown to greatly reduce the probability and amount of exposure to secondhand smoke in workplaces and public places, as well as adverse health events.<sup>¶</sup> Workplace smoking restrictions lead to smoking reductions and cessation among workers.<sup>\*\*</sup> However, smoke-free policies do not eliminate secondhand smoke exposure from all sources. As workplaces and public places increasingly are made smoke-free, private settings such as homes and vehicles are becoming relatively larger sources of overall exposure (1).

The home is the major source of secondhand smoke exposure for children (1). During 1988–1994, fewer than 1% of children aged 4–16 years living with persons who smoked inside the home had cotinine levels <0.05 ng/mL (5). The findings in this report demonstrate that currently approximately 1.7% of nonsmoking children and youths (aged 3–19 years) living with someone who smoked inside the home had cotinine levels <0.05 ng/mL. Thus, among children living with persons who smoked inside the home, the likelihood of exposure has not changed appreciably during the past 20 years. The stall in the decline of adult smoking prevalence and the persistence of smoking in homes likely are impeding progress toward full protection of children and other nonsmokers from secondhand smoke exposure. Based on evidence that providing parents with information about the harms of secondhand smoke reduces children's exposure, the American Academy of Pediatrics and the U.S. Public Health Service recommend that clinicians ask parents about their smoking, advise them about the harms of secondhand smoke, and offer encouragement and help in quitting according to clinical care guidelines (6,7).

Previous studies have noted that non-Hispanic black nonsmokers tend to have higher cotinine levels than nonsmokers of other race/ethnicity groups (1,2). The reasons for this difference are not known, but some evidence suggests that slower metabolism or clearance of cotinine might result in blacks having higher cotinine levels for a given amount of exposure (8). Other possible reasons relate to levels

of protection from exposure at home, in vehicles, and in public places or workplaces.

The findings in this report are subject to at least two limitations. First, nonsmoking status was defined based on self-report and cotinine levels. Self-reports might be inaccurate; similarly, any cotinine cutpoint might misclassify some persons. The optimal cotinine cutpoint might vary by race/ethnicity and age group, and is dependent upon background levels of secondhand smoke (1,8). This analysis used the 10 ng/mL cutpoint to be consistent with previous analyses (1–4). Using self-report and cotinine levels in combination should have minimized misclassification. Second, the sample size was insufficient to allow calculation of trends for all race/ethnicity groups. Smoking prevalence varies widely across and within race/ethnicity groups (9) and by region (10); secondhand smoke exposure rates are similarly variable (1). Also, variability in secondhand smoke exposure across population subgroups might have contributed to the observed fluctuation in prevalence during the study period because NHANES is not designed to have the same regional distribution in every cycle.

*Healthy People 2010* objective 27-10 is to reduce the percentage of the nonsmoking population exposed to secondhand smoke (i.e., those with serum cotinine levels  $\geq 0.05$  ng/mL) to  $\leq 56\%$ .<sup>††</sup> This target has been met, but disparities in exposure persist. Nonsmokers who live and work in places lacking smoke-free laws or policies continue to be exposed to secondhand smoke (1). The only way to protect nonsmokers fully is to eliminate smoking in indoor spaces (1).

Several federal government initiatives are currently addressing this issue. For example, in 2010, funds from the American Recovery and Reinvestment Act were made available to all 50 states, the District of Columbia, seven U.S. territories, and 21 communities to address tobacco control. As part of this Communities Putting Prevention to Work Initiative, grantees that do not already have comprehensive smoke-free policies covering workplaces and public places are working toward adopting such policies. The U.S. Department of Housing and Urban Development issued a notice<sup>§§</sup> encouraging public housing authorities to implement no-smoking policies

<sup>§</sup> Additional information available at <http://www.no-smoke.org/pdf/SummaryUSPopList.pdf>.

<sup>¶</sup> Additional information available at <http://www.iom.edu/reports/2009/secondhand-smoke-exposure-and-cardiovascular-effects-making-sense-of-the-evidence.aspx>.

<sup>\*\*</sup> Additional information available at <http://www.iarc.fr/en/publications/pdfs-online/prev/handbook13/handbook13.pdf>.

<sup>††</sup> Additional information available at <http://wonder.cdc.gov/data/2010>.

<sup>§§</sup> Available at <http://www.hud.gov/offices/pih/publications/notices/09/pih2009-21.pdf>.

in 2009. The U.S. Environmental Protection Agency conducts a national campaign that educates and encourages parents to make their homes smoke-free to protect their children's health.<sup>¶¶</sup> Continued efforts to reduce secondhand smoke exposure in all settings are needed to ensure that all nonsmokers are protected from this hazard.

<sup>¶¶</sup> Additional information available at <http://www.epa.gov/smokefree>.

#### Reported by

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#### Acknowledgments

This report is based, in part, on contributions by M Eischen, D Homa, PhD, A MacNeil, MPH, G Promoff, MA, D Shelton, MPH, A Trosclair, MS, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

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## Announcement

### Sickle Cell Awareness Month — September, 2010

September is Sickle Cell Awareness Month. This year marks the 100th anniversary of the seminal case report published in the *Archives of Internal Medicine* (November 1910) by James B. Herrick titled “Peculiar Elongated and Sickle-Shaped Red Blood Corpuscles in a Case of Severe Anemia.”

Sickle cell disease is an inherited blood disorder that affects an estimated 70,000 to 100,000 persons in multiple racial and ethnic populations in the United States (1). In the United States, one in 500 persons in the black population is born with the disease. Other populations affected include Hispanics, persons of Mediterranean and Middle Eastern descent, and Asians. In addition, approximately 2 million persons in the United States have the sickle cell trait. Sickle cell disease is inherited in an autosomal recessive pattern. A person with one copy of the mutated gene for hemoglobin is commonly referred to as having the sickle cell trait. The trait typically is asymptomatic, and persons with the trait commonly are unaware of their carrier status. However, these persons might pass the gene on to their children.

No data system exists that can be used to determine the actual prevalence of sickle cell disease in the United States. CDC, in partnership with the National Institutes of Health, is developing a pilot surveillance project that will help determine more about how many persons have the disease and how it affects them. The Registry and Surveillance System for Hemoglobinopathies (RuSH) is funding the project in six states: California, Florida, Georgia, North Carolina, Michigan, and Pennsylvania.

In recognition of Sickle Cell Awareness Month and commemoration of the 100th anniversary of the seminal case report, CDC is sponsoring activities to increase knowledge and awareness of the disease, including a symposium on September 13, 2010, in Atlanta, Georgia. Additional information regarding sickle cell disease and the symposium is available at <http://www.cdc.gov/sicklecell>.

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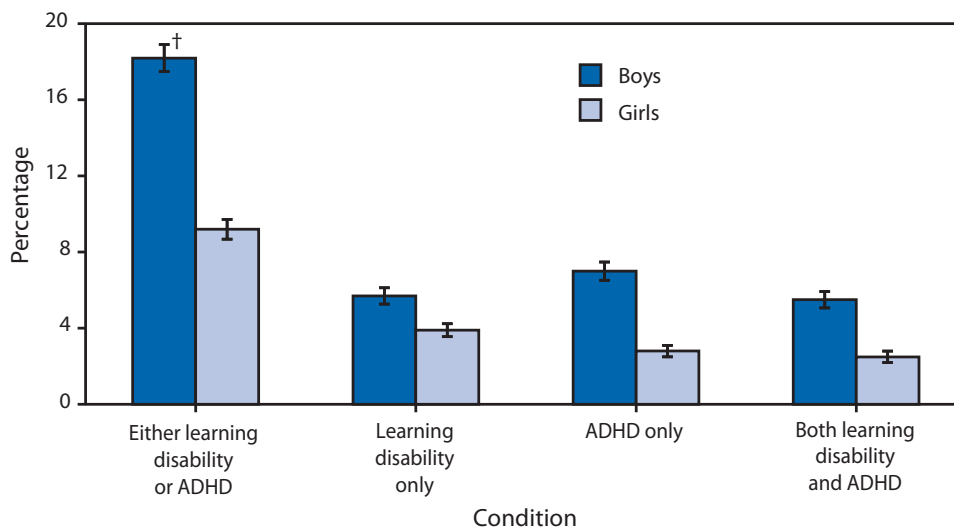
## Errata: Vol. 59, No. RR-8

In the *MMWR Recommendations and Reports* “Prevention and Control of Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2010,” multiple errors occurred. On page 3, in the second column, the fifth sentence of the first full paragraph should read, “However, randomized **placebo**-controlled trials cannot be performed ethically in populations for which vaccination already is recommended, and in this context, observational studies that assess outcomes associated with laboratory-confirmed influenza infection also can provide important vaccine or antiviral safety and effectiveness data.” On page 10, in the second column, the sixth sentence of the paragraph headed “Evaluating Influenza Vaccine Efficacy and Effectiveness Studies” should read, “Randomized **placebo**-controlled trials that measure laboratory-confirmed influenza virus infections as the outcome are the most persuasive evidence of vaccine efficacy, but such trials cannot be conducted ethically among groups recommended to receive vaccine annually.” On page 34, the first footnote for Figure 3 should read, “Reprinted with permission. American Academy of Pediatrics, Committee on Infectious Diseases. Policy statement: recommendations for prevention and control of influenza in children, 2010–2011. Available at <http://pediatrics.aappublications.org/cgi/reprint/peds.2010-2216v1>.”

## QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

## Percentage of Youths Aged 5–17 Years Ever Diagnosed as Having a Learning Disability and/or Attention Deficit Hyperactivity Disorder (ADHD),\* by Sex — National Health Interview Survey, United States, 2006–2009



\* Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. population. One child aged <18 years was randomly selected per family; a parent or other knowledgeable adult provided information for each child. Prevalences of learning disability and attention deficit hyperactivity disorder (ADHD) are based on questions that asked, "Has a representative from a school or a health professional ever told you that (the sample child) had a learning disability?" and "Has a doctor or health professional ever told you that (the sample child) had ...attention deficit hyperactivity disorder (ADHD) or attention deficit disorder (ADD)?" respectively. Unknowns with respect to learning disability and ADHD are excluded from the denominators.

† 95% confidence interval.

Among youths aged 5–17 years, during 2006–2009, boys were twice as likely as girls (18.2% versus 9.2%) to have been diagnosed with either a learning disability or attention deficit hyperactivity disorder (ADHD). Approximately 5.7% of boys had a learning disability without ADHD, compared with 3.9% of girls, 7.0% of boys had ADHD without a learning disability compared with 2.8% of girls, and 5.5% of boys had both a learning disability and ADHD compared with 2.5% of girls.

SOURCE: National Health Interview Survey, 2006–2009. Available at <http://www.cdc.gov/nchs/nhis.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 September 4, 2010 (35th week)\*

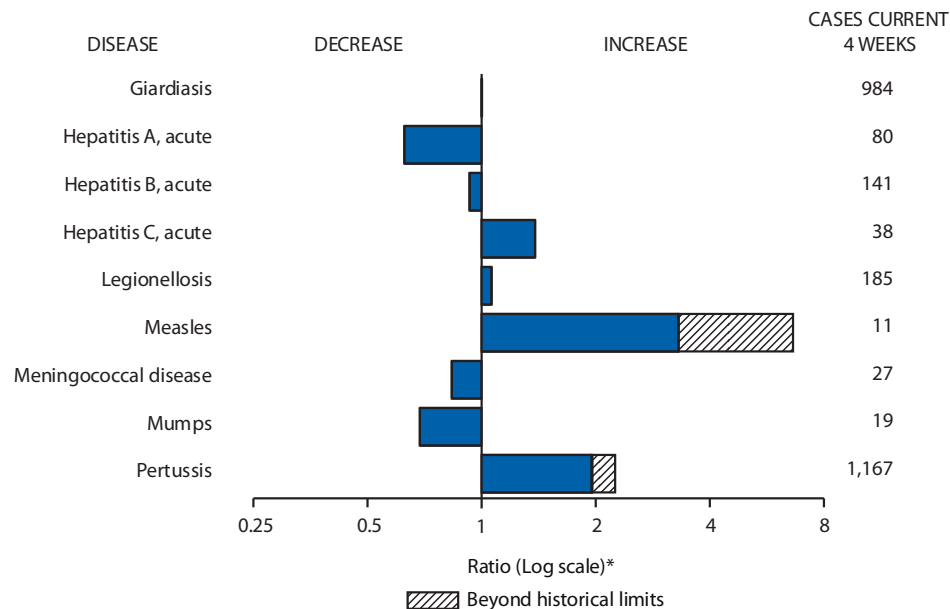
Disease	Current week	Cum 2010	5-year weekly average <sup>†</sup>	Total cases reported for previous years					States reporting cases during current week (No.)
				2009	2008	2007	2006	2005	
Anthrax	—	—	0	1	—	1	1	—	
Botulism, total	—	55	3	118	145	144	165	135	
foodborne	—	5	1	10	17	32	20	19	
infant	—	38	2	83	109	85	97	85	
other (wound and unspecified)	—	12	1	25	19	27	48	31	
Brucellosis	1	82	2	115	80	131	121	120	CA (1)
Chancroid	—	31	0	28	25	23	33	17	
Cholera	—	2	0	10	5	7	9	8	
Cyclosporiasis <sup>§</sup>	—	128	3	141	139	93	137	543	
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases <sup>§,¶</sup> :									
California serogroup virus disease	—	21	4	55	62	55	67	80	
Eastern equine encephalitis virus disease	—	9	1	4	4	4	8	21	
Powassan virus disease	—	2	0	6	2	7	1	1	
St. Louis encephalitis virus disease	—	3	1	12	13	9	10	13	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	9	0	35	30	22	29	9	
nonsertotype b	1	128	3	236	244	199	175	135	OH (1)
unknown serotype	2	154	2	178	163	180	179	217	FL (2)
Hansen disease <sup>§</sup>	—	29	1	103	80	101	66	87	
Hantavirus pulmonary syndrome <sup>§</sup>	—	14	1	20	18	32	40	26	
Hemolytic uremic syndrome, postdiarrheal <sup>§</sup>	4	123	8	242	330	292	288	221	NY (1), TN (1), CA (2)
HIV infection, pediatric (age <13 yrs) <sup>††</sup>	—	—	1	—	—	—	—	380	
Influenza-associated pediatric mortality <sup>§,§§</sup>	—	56	1	358	90	77	43	45	
Listeriosis <sup>¶¶</sup>	10	512	22	851	759	808	884	896	NY (3), PA (1), OH (1), FL (1), TX (2), OR (1), CA (1)
Measles <sup>¶¶</sup>	—	48	1	71	140	43	55	66	
Meningococcal disease, invasive <sup>***</sup> :									
A, C, Y, and W-135	1	174	4	301	330	325	318	297	FL (1)
serogroup B	—	77	2	174	188	167	193	156	
other serogroup	—	7	0	23	38	35	32	27	
unknown serogroup	4	266	7	482	616	550	651	765	OH (2), MD (1), KY (1)
Mumps	3	2,321	15	1,991	454	800	6,584	314	NY (3)
Novel influenza A virus infections <sup>†††</sup>	—	1	0	43,774	2	4	NN	NN	
Plague	—	1	0	8	3	7	17	8	
Poliomyelitis, paralytic	—	—	—	1	—	—	—	1	
Polio virus Infection, nonparalytic <sup>§</sup>	—	—	—	—	—	—	NN	NN	
Psittacosis <sup>§</sup>	—	4	0	9	8	12	21	16	
Q fever, total <sup>§,§§§</sup>	2	78	3	114	120	171	169	136	
acute	2	59	1	94	106	—	—	—	FL (1), CA (1)
chronic	—	19	0	20	14	—	—	—	
Rabies, human	—	—	0	4	2	1	3	2	
Rubella <sup>¶¶¶</sup>	—	5	0	3	16	12	11	11	
Rubella, congenital syndrome	—	—	—	2	—	—	1	1	
SARS-CoV <sup>§,****</sup>	—	—	—	—	—	—	—	—	
Smallpox <sup>§</sup>	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome <sup>§</sup>	2	120	1	161	157	132	125	129	NY (1), VA (1)
Syphilis, congenital (age <1 yr) <sup>††††</sup>	—	135	8	423	431	430	349	329	
Tetanus	—	4	1	18	19	28	41	27	
Toxic-shock syndrome (staphylococcal) <sup>§</sup>	1	53	2	74	71	92	101	90	OH (1)
Trichinellosis	—	2	0	13	39	5	15	16	
Tularemia	1	65	3	93	123	137	95	154	CA (1)
Typhoid fever	4	252	12	397	449	434	353	324	NY (1), PA (1), CA (2)
Vancomycin-intermediate <i>Staphylococcus aureus</i> <sup>§</sup>	—	63	1	78	63	37	6	2	
Vancomycin-resistant <i>Staphylococcus aureus</i> <sup>§</sup>	—	1	—	1	—	2	1	3	
Vibriosis (noncholera <i>Vibrio</i> species infections) <sup>§</sup>	12	459	15	789	588	549	NN	NN	MD (1), GA (1), FL (5), TX (1), OR (1), CA (3)
Viral hemorrhagic fever <sup>§§§§</sup>	—	1	—	NN	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

**TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending September 4, 2010 (35th week)\***

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable Cum: Cumulative year-to-date counts.  
 \* Incidence data for reporting years 2009 and 2010 are provisional, whereas data for 2005 through 2008 are finalized.  
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at <http://www.cdc.gov/ncphi/diss/nndss/phs/files/5yearweeklyaverage.pdf>.  
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the domestic arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/ncphi/diss/nndss/phs/infdis.htm>.  
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.  
 \*\* Data for *H. influenzae* (all ages, all serotypes) are available in Table II.  
 †† Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.  
 ††† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since April 26, 2009, a total of 286 influenza-associated pediatric deaths associated with 2009 influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 281 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 133 influenza-associated pediatric deaths occurring during the 2008–09 influenza season have been reported.  
 ¶¶ No measles cases were reported for the current week.  
 \*\*\* 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, three cases of novel influenza A virus infections, unrelated to the 2009 pandemic influenza A (H1N1) virus, were reported to CDC. The one case of novel influenza A virus infection reported to CDC during 2010 was identified as swine influenza A (H3N2) virus and is unrelated to pandemic influenza A (H1N1) virus. Total case count for 2009 was provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).  
 ††††† In 2009, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.  
 ¶¶¶ No rubella cases were reported for the current week.  
 \*\*\*\* Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.  
 ††††† Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 †††††† There was one case of viral hemorrhagic fever reported during week 12. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals September 4, 2010, with historical data**



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

**Notifiable Disease Data Team and 122 Cities Mortality Data Team**  
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 Deborah A. Adams      Rosaline Dhara  
 Willie J. Anderson      Pearl C. Sharp  
 Michael S. Wodajo      Lenee Blanton

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	<i>Chlamydia trachomatis</i> infection					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
<b>United States</b>	11,373	22,745	26,167	771,941	849,520	144	122	264	4,785	4,797
<b>New England</b>	687	740	1,396	26,135	27,291	2	8	58	300	307
Connecticut	276	220	736	6,617	7,809	—	0	52	52	38
Maine†	—	50	75	1,640	1,625	1	1	7	58	34
Massachusetts	339	396	638	13,321	13,100	—	3	15	91	124
New Hampshire	52	40	116	1,571	1,445	—	1	5	40	58
Rhode Island†	—	65	116	2,162	2,509	—	0	8	9	7
Vermont†	20	24	63	824	803	1	1	9	50	46
<b>Mid. Atlantic</b>	3,074	3,192	4,619	113,235	106,183	21	15	37	541	554
New Jersey	449	456	698	16,750	16,652	—	0	3	—	40
New York (Upstate)	899	674	2,530	22,922	20,433	11	3	16	141	137
New York City	1,134	1,194	2,144	42,239	39,495	—	1	5	50	64
Pennsylvania	592	882	1,091	31,324	29,603	10	9	26	350	313
<b>E.N. Central</b>	968	3,515	4,413	115,610	137,057	33	30	97	1,242	1,169
Illinois	18	851	1,322	24,129	41,865	—	3	15	136	110
Indiana	—	345	786	12,343	16,145	—	4	10	133	199
Michigan	638	891	1,417	32,611	31,478	2	6	13	223	185
Ohio	144	959	1,077	32,663	33,249	18	7	24	311	278
Wisconsin	168	404	494	13,864	14,320	13	10	44	439	397
<b>W.N. Central</b>	260	1,333	1,592	44,670	48,470	37	23	59	856	705
Iowa	8	184	293	6,582	6,607	—	4	20	214	154
Kansas	19	187	235	6,334	7,446	4	2	9	100	69
Minnesota	—	274	337	9,076	9,794	—	2	30	98	179
Missouri	161	489	606	16,379	17,729	20	4	23	231	135
Nebraska†	66	95	237	3,244	3,695	13	2	15	132	69
North Dakota	—	34	93	1,083	1,149	—	0	18	16	7
South Dakota	6	60	82	1,972	2,050	—	2	8	65	92
<b>S. Atlantic</b>	2,401	4,472	5,681	151,423	173,013	32	19	51	691	717
Delaware	83	86	156	2,830	3,192	—	0	2	5	6
District of Columbia	—	99	177	3,199	4,802	—	0	1	2	5
Florida	704	1,400	1,656	49,776	50,632	19	8	24	262	247
Georgia	317	395	1,323	11,341	27,780	9	5	31	207	250
Maryland†	—	448	1,031	14,425	15,328	1	1	3	26	31
North Carolina	—	797	1,562	28,269	28,806	—	1	12	53	76
South Carolina†	560	516	693	18,205	18,637	2	1	8	56	43
Virginia†	684	594	902	20,928	21,341	1	2	8	69	49
West Virginia	53	70	137	2,450	2,495	—	0	2	11	10
<b>E.S. Central</b>	1,215	1,712	2,410	58,819	64,609	7	4	13	174	145
Alabama†	518	474	661	17,134	18,600	—	1	8	70	45
Kentucky	264	296	642	10,563	9,056	2	1	6	56	40
Mississippi	433	389	780	12,622	16,441	—	0	3	7	14
Tennessee†	—	570	732	18,500	20,512	5	1	5	41	46
<b>W.S. Central</b>	1,092	2,905	4,578	99,911	111,666	7	8	39	234	352
Arkansas†	—	240	402	7,042	9,796	—	1	4	22	36
Louisiana	—	1	1,055	2,922	20,113	—	1	5	28	37
Oklahoma	—	262	1,376	10,606	10,108	6	1	9	61	78
Texas†	1,092	2,233	3,201	79,341	71,649	1	4	30	123	201
<b>Mountain</b>	247	1,449	2,081	45,968	52,859	2	10	22	348	385
Arizona	—	464	713	13,195	17,613	—	0	3	23	25
Colorado	—	382	709	11,902	12,080	—	2	9	89	105
Idaho†	—	63	191	1,985	2,499	2	2	6	60	58
Montana†	42	58	75	2,031	2,048	—	1	4	33	40
Nevada†	—	177	337	6,381	7,049	—	0	2	14	15
New Mexico†	194	166	453	5,223	6,107	—	2	8	69	101
Utah	11	117	175	3,994	4,183	—	1	4	47	26
Wyoming†	—	38	70	1,257	1,280	—	0	2	13	15
<b>Pacific</b>	1,429	3,454	5,350	116,170	128,372	3	12	27	399	463
Alaska	—	107	147	3,907	3,623	—	0	1	2	5
California	1,429	2,745	4,406	93,950	98,423	3	8	19	229	261
Hawaii	—	112	158	3,759	4,175	—	0	0	—	1
Oregon	—	0	468	1,367	7,219	—	3	8	110	142
Washington	—	394	497	13,187	14,932	—	2	8	58	54
<b>Territories</b>										
American Samoa	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	5	31	179	263	—	0	0	—	—
Puerto Rico	85	95	265	3,598	5,272	N	0	0	N	N
U.S. Virgin Islands	—	9	29	323	364	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	Dengue Virus Infection									
	Dengue Fever <sup>†</sup>					Dengue Hemorrhagic Fever <sup>‡</sup>				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max			
<b>United States</b>	—	2	21	232	NN	—	0	1	2	NN
<b>New England</b>	—	0	1	2	NN	—	0	0	—	NN
Connecticut	—	0	0	—	NN	—	0	0	—	NN
Maine <sup>¶</sup>	—	0	1	1	NN	—	0	0	—	NN
Massachusetts	—	0	0	—	NN	—	0	0	—	NN
New Hampshire	—	0	0	—	NN	—	0	0	—	NN
Rhode Island <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
Vermont <sup>¶</sup>	—	0	1	1	NN	—	0	0	—	NN
<b>Mid. Atlantic</b>	—	0	7	60	NN	—	0	0	—	NN
New Jersey	—	0	0	—	NN	—	0	0	—	NN
New York (Upstate)	—	0	0	—	NN	—	0	0	—	NN
New York City	—	0	5	50	NN	—	0	0	—	NN
Pennsylvania	—	0	2	10	NN	—	0	0	—	NN
<b>E.N. Central</b>	—	0	2	22	NN	—	0	0	—	NN
Illinois	—	0	0	—	NN	—	0	0	—	NN
Indiana	—	0	2	7	NN	—	0	0	—	NN
Michigan	—	0	1	4	NN	—	0	0	—	NN
Ohio	—	0	2	8	NN	—	0	0	—	NN
Wisconsin	—	0	1	3	NN	—	0	0	—	NN
<b>W.N. Central</b>	—	0	3	13	NN	—	0	0	—	NN
Iowa	—	0	1	1	NN	—	0	0	—	NN
Kansas	—	0	0	—	NN	—	0	0	—	NN
Minnesota	—	0	2	10	NN	—	0	0	—	NN
Missouri	—	0	1	2	NN	—	0	0	—	NN
Nebraska <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
North Dakota	—	0	0	—	NN	—	0	0	—	NN
South Dakota	—	0	0	—	NN	—	0	0	—	NN
<b>S. Atlantic</b>	—	0	14	116	NN	—	0	1	1	NN
Delaware	—	0	0	—	NN	—	0	0	—	NN
District of Columbia	—	0	0	—	NN	—	0	0	—	NN
Florida	—	0	13	99	NN	—	0	1	1	NN
Georgia	—	0	2	6	NN	—	0	0	—	NN
Maryland <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
North Carolina	—	0	1	1	NN	—	0	0	—	NN
South Carolina <sup>¶</sup>	—	0	3	8	NN	—	0	0	—	NN
Virginia <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
West Virginia	—	0	1	2	NN	—	0	0	—	NN
<b>E.S. Central</b>	—	0	1	1	NN	—	0	0	—	NN
Alabama <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
Kentucky	—	0	0	—	NN	—	0	0	—	NN
Mississippi	—	0	0	—	NN	—	0	0	—	NN
Tennessee <sup>¶</sup>	—	0	1	1	NN	—	0	0	—	NN
<b>W.S. Central</b>	—	0	1	1	NN	—	0	1	1	NN
Arkansas <sup>¶</sup>	—	0	0	—	NN	—	0	1	1	NN
Louisiana	—	0	0	—	NN	—	0	0	—	NN
Oklahoma	—	0	1	1	NN	—	0	0	—	NN
Texas <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
<b>Mountain</b>	—	0	1	8	NN	—	0	0	—	NN
Arizona	—	0	1	2	NN	—	0	0	—	NN
Colorado	—	0	0	—	NN	—	0	0	—	NN
Idaho <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
Montana <sup>¶</sup>	—	0	1	2	NN	—	0	0	—	NN
Nevada <sup>¶</sup>	—	0	1	3	NN	—	0	0	—	NN
New Mexico <sup>¶</sup>	—	0	1	1	NN	—	0	0	—	NN
Utah	—	0	0	—	NN	—	0	0	—	NN
Wyoming <sup>¶</sup>	—	0	0	—	NN	—	0	0	—	NN
<b>Pacific</b>	—	0	2	9	NN	—	0	0	—	NN
Alaska	—	0	0	—	NN	—	0	0	—	NN
California	—	0	1	4	NN	—	0	0	—	NN
Hawaii	—	0	0	—	NN	—	0	0	—	NN
Oregon	—	0	0	—	NN	—	0	0	—	NN
Washington	—	0	2	5	NN	—	0	0	—	NN
<b>Territories</b>										
American Samoa	—	0	0	—	NN	—	0	0	—	NN
C.N.M.I.	—	—	—	—	NN	—	—	—	—	NN
Guam	—	0	0	—	NN	—	0	0	—	NN
Puerto Rico	—	17	83	1,114	NN	—	0	3	27	NN
U.S. Virgin Islands	—	0	0	—	NN	—	0	0	—	NN

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage.

‡ 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).

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	<i>Ehrlichia chaffeensis</i>					<i>Anaplasma phagocytophilum</i>					Undetermined				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	4	12	181	433	685	11	14	309	437	668	1	2	35	71	139
<b>New England</b>	—	0	3	3	36	—	1	17	50	202	—	0	2	6	2
Connecticut	—	0	0	—	—	—	0	13	18	2	—	0	2	4	—
Maine <sup>§</sup>	—	0	1	2	3	—	0	2	13	12	—	0	0	—	—
Massachusetts	—	0	0	—	9	—	0	4	—	82	—	0	0	—	—
New Hampshire	—	0	1	1	3	—	0	3	8	15	—	0	1	2	1
Rhode Island <sup>§</sup>	—	0	2	—	20	—	0	7	11	91	—	0	0	—	1
Vermont <sup>§</sup>	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	1	1	15	33	122	10	3	17	136	204	—	0	2	3	40
New Jersey	—	0	6	—	74	—	0	2	1	60	—	0	0	—	—
New York (Upstate)	1	1	15	18	30	10	3	17	133	139	—	0	1	3	4
New York City	—	0	3	14	7	—	0	1	2	4	—	0	0	—	1
Pennsylvania	—	0	5	1	11	—	0	1	—	1	—	0	2	—	35
<b>E.N. Central</b>	—	0	4	21	73	—	2	27	183	235	1	1	4	41	59
Illinois	—	0	2	9	32	—	0	0	—	6	—	0	2	3	3
Indiana	—	0	0	—	—	—	0	0	—	—	1	0	3	23	32
Michigan	—	0	1	1	4	—	0	0	—	—	—	0	1	2	—
Ohio	—	0	3	5	10	—	0	1	1	1	—	0	0	—	2
Wisconsin	—	0	3	6	27	—	2	27	182	228	—	0	3	13	22
<b>W.N. Central</b>	1	2	12	105	129	—	0	261	8	7	—	0	30	11	16
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	1	6	6	—	0	0	—	1	—	0	0	—	—
Minnesota	—	0	6	—	1	—	0	261	—	3	—	0	30	—	3
Missouri	1	1	12	98	120	—	0	3	8	2	—	0	3	11	13
Nebraska <sup>§</sup>	—	0	1	1	2	—	0	1	—	1	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	2	4	19	187	190	1	0	7	43	14	—	0	1	3	2
Delaware	—	0	3	16	15	—	0	1	4	2	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	1	0	2	8	8	—	0	1	2	3	—	0	0	—	—
Georgia	—	0	4	15	17	—	0	1	1	1	—	0	1	1	—
Maryland <sup>§</sup>	—	0	3	18	33	—	0	2	11	3	—	0	1	2	—
North Carolina	—	1	13	69	48	—	0	4	16	3	—	0	0	—	—
South Carolina <sup>§</sup>	—	0	2	3	8	—	0	0	—	—	—	0	0	—	—
Virginia <sup>§</sup>	1	1	13	58	60	1	0	2	9	2	—	0	0	—	2
West Virginia	—	0	0	—	1	—	0	0	—	—	—	0	1	—	—
<b>E.S. Central</b>	—	1	10	66	104	—	0	2	15	3	—	0	2	6	20
Alabama <sup>§</sup>	—	0	3	10	6	—	0	2	6	1	—	0	0	—	—
Kentucky	—	0	2	10	9	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	2	6	—	0	1	1	—	—	0	0	—	—
Tennessee <sup>§</sup>	—	1	10	44	83	—	0	2	8	2	—	0	2	6	20
<b>W.S. Central</b>	—	0	141	17	28	—	0	23	2	1	—	0	1	1	—
Arkansas <sup>§</sup>	—	0	34	2	4	—	0	6	—	—	—	0	0	—	—
Louisiana	—	0	1	1	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	105	11	23	—	0	16	2	1	—	0	0	—	—
Texas <sup>§</sup>	—	0	2	3	1	—	0	1	—	—	—	0	1	1	—
<b>Mountain</b>	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	—	0	1	1	3	—	0	0	—	2	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	1	3	—	0	0	—	2	—	0	1	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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.  
 \* Incidence data for reporting years 2009 and 2010 are provisional.  
 † Cumulative total *E. ewingii* cases reported for year 2010 = 10.  
 § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).





TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009
<b>United States</b>	39	61	111	1,905	2,172	196	438	2,336	16,955	28,578	20	24	89	873	960
<b>New England</b>	—	3	10	116	145	8	124	363	4,591	10,086	—	1	4	44	42
Connecticut	—	0	3	23	40	—	40	179	1,624	3,478	—	0	1	1	5
Maine†	—	0	1	7	6	7	12	76	416	570	—	0	1	5	2
Massachusetts	—	1	7	67	73	—	41	127	1,460	4,426	—	1	3	30	26
New Hampshire	—	0	3	7	10	1	22	58	821	1,103	—	0	1	2	3
Rhode Island†	—	0	3	5	10	—	1	11	35	194	—	0	1	4	3
Vermont†	—	0	2	7	6	—	4	26	235	315	—	0	1	2	3
<b>Mid. Atlantic</b>	15	16	44	463	791	132	190	635	8,422	12,360	2	7	17	230	274
New Jersey	—	2	13	47	146	—	44	167	2,028	4,155	—	0	4	1	72
New York (Upstate)	9	5	19	162	236	74	55	577	2,043	2,797	1	1	4	48	36
New York City	—	2	12	72	158	—	0	37	9	790	—	4	12	143	125
Pennsylvania	6	6	16	182	251	58	73	352	4,342	4,618	1	1	3	38	41
<b>E.N. Central</b>	8	12	33	439	454	3	22	118	1,133	2,483	—	2	9	90	133
Illinois	—	2	11	73	78	—	0	9	52	119	—	1	7	29	56
Indiana	4	2	6	65	38	—	1	7	59	69	—	0	2	7	20
Michigan	—	3	18	101	94	—	1	14	76	77	—	0	4	19	20
Ohio	4	5	12	157	190	3	1	5	25	31	—	0	5	31	29
Wisconsin	—	1	11	43	54	—	18	104	921	2,187	—	0	1	4	8
<b>W.N. Central</b>	1	2	19	78	82	—	3	1,395	91	190	2	1	11	45	44
Iowa	—	0	3	9	19	—	0	10	66	99	—	0	1	8	10
Kansas	—	0	2	6	5	—	0	1	6	16	—	0	2	7	6
Minnesota	—	0	16	23	8	—	0	1,380	—	68	—	0	11	3	13
Missouri	—	0	4	24	39	—	0	1	1	3	1	0	3	12	9
Nebraska†	1	0	2	8	9	—	0	2	9	3	1	0	2	13	5
North Dakota	—	0	1	4	1	—	0	15	8	—	—	0	1	—	—
South Dakota	—	0	1	4	1	—	0	1	1	1	—	0	2	2	1
<b>S. Atlantic</b>	10	11	25	349	335	46	60	156	2,467	3,152	7	6	36	242	254
Delaware	—	0	3	12	12	2	12	31	478	773	—	0	1	2	3
District of Columbia	—	0	4	12	14	—	0	4	18	46	—	0	3	7	10
Florida	6	4	10	124	108	2	2	11	57	45	2	2	7	88	69
Georgia	—	1	4	31	32	—	0	2	8	36	—	0	2	3	57
Maryland†	2	3	12	72	88	5	28	73	1,029	1,571	4	1	19	58	55
North Carolina	—	1	7	36	39	—	1	9	65	74	—	0	13	33	19
South Carolina†	1	0	2	9	6	—	1	3	26	25	—	0	1	3	3
Virginia†	1	1	6	44	32	37	14	79	708	510	1	1	5	47	36
West Virginia	—	0	3	9	4	—	0	33	78	72	—	0	2	1	2
<b>E.S. Central</b>	—	2	10	90	90	—	1	4	31	24	—	0	3	20	28
Alabama†	—	0	2	9	11	—	0	1	—	2	—	0	1	3	8
Kentucky	—	0	4	19	36	—	0	1	2	1	—	0	3	5	8
Mississippi	—	0	3	8	4	—	0	0	—	—	—	0	2	2	3
Tennessee†	—	1	6	54	39	—	1	4	29	21	—	0	2	10	9
<b>W.S. Central</b>	1	3	14	83	72	1	2	44	46	128	—	1	31	53	44
Arkansas†	—	0	2	11	5	—	0	0	—	—	—	0	1	1	3
Louisiana	—	0	3	5	7	—	0	0	—	—	—	0	1	1	5
Oklahoma	1	0	4	11	3	—	0	2	—	—	—	0	1	4	1
Texas†	—	2	10	56	57	1	2	42	46	128	—	1	30	47	35
<b>Mountain</b>	1	3	10	107	84	—	0	3	15	47	—	1	3	40	41
Arizona	1	1	5	35	31	—	0	1	3	4	—	0	2	18	7
Colorado	—	1	5	24	12	—	0	1	2	1	—	0	1	12	23
Idaho†	—	0	1	3	3	—	0	1	5	13	—	0	1	1	2
Montana†	—	0	1	4	5	—	0	0	—	3	—	0	1	2	5
Nevada†	—	0	2	18	10	—	0	1	—	12	—	0	1	3	—
New Mexico†	—	0	2	6	3	—	0	1	3	4	—	0	1	1	—
Utah	—	0	3	13	19	—	0	1	2	8	—	0	1	3	4
Wyoming†	—	0	2	4	1	—	0	1	—	2	—	0	0	—	—
<b>Pacific</b>	3	5	19	180	119	6	5	10	159	108	9	3	19	109	100
Alaska	—	0	2	2	1	—	0	1	4	5	—	0	1	2	2
California	3	3	19	153	92	5	3	9	110	68	9	2	13	78	75
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	1	1
Oregon	—	0	3	9	10	1	1	3	38	30	—	0	1	7	9
Washington	—	0	4	15	15	—	0	3	7	5	—	0	5	21	13
<b>Territories</b>															
American Samoa	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	1	1	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

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



TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	Meningococcal disease, invasive†					Pertussis					Rabies, animal				
	All groups														
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	5	16	43	524	667	258	291	1,756	11,024	10,621	47	72	147	2,357	3,638
<b>New England</b>	—	0	2	13	24	—	8	17	256	480	4	4	24	163	240
Connecticut	—	0	2	2	3	—	1	7	63	35	—	1	22	59	101
Maine <sup>§</sup>	—	0	1	3	3	—	0	5	25	70	1	1	4	42	38
Massachusetts	—	0	1	3	12	—	4	10	135	279	—	0	0	—	—
New Hampshire	—	0	1	—	1	—	0	3	9	61	—	0	5	10	25
Rhode Island <sup>§</sup>	—	0	0	—	4	—	0	8	19	26	—	0	5	14	34
Vermont <sup>§</sup>	—	0	1	5	1	—	0	1	5	9	3	1	5	38	42
<b>Mid. Atlantic</b>	—	1	4	44	75	36	21	62	821	826	15	17	41	735	422
New Jersey	—	0	2	9	13	—	3	8	68	170	—	0	0	—	—
New York (Upstate)	—	0	3	9	16	11	7	27	307	131	9	9	22	367	310
New York City	—	0	2	11	13	—	0	11	44	59	—	1	12	105	12
Pennsylvania	—	0	2	15	33	25	8	38	402	466	6	5	24	263	100
<b>E.N. Central</b>	2	3	8	92	116	54	68	128	2,785	2,179	3	2	27	189	187
Illinois	—	0	4	17	31	—	11	27	433	497	—	1	11	96	69
Indiana	—	0	3	21	24	—	9	26	364	248	—	0	0	—	25
Michigan	—	0	2	13	18	11	22	45	772	529	1	1	5	53	54
Ohio	2	1	2	23	26	42	20	69	987	774	2	0	12	40	39
Wisconsin	—	0	2	18	17	1	5	12	229	131	—	0	0	—	—
<b>W.N. Central</b>	—	1	6	38	52	96	26	627	1,200	1,604	6	5	16	188	285
Iowa	—	0	3	8	7	—	6	24	261	159	—	0	2	7	25
Kansas	—	0	2	6	9	—	3	9	98	179	—	1	4	47	60
Minnesota	—	0	2	2	10	89	0	601	425	336	2	1	9	26	40
Missouri	—	0	3	16	18	2	8	25	242	777	2	1	6	56	48
Nebraska <sup>§</sup>	—	0	2	5	5	3	2	10	119	109	2	1	4	42	67
North Dakota	—	0	1	1	1	2	0	30	32	17	—	0	7	10	4
South Dakota	—	0	2	—	2	—	1	5	23	27	—	0	2	—	41
<b>S. Atlantic</b>	2	3	7	102	122	20	26	74	978	1,186	17	22	88	732	1,539
Delaware	—	0	1	1	2	—	0	4	9	10	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	1	4	4	—	0	0	—	—
Florida	1	1	5	45	40	13	5	28	219	381	—	0	75	75	161
Georgia	—	0	2	9	23	2	3	16	145	185	—	0	13	—	289
Maryland <sup>§</sup>	1	0	1	5	7	2	2	8	76	102	—	6	15	220	280
North Carolina	—	0	2	14	23	—	1	32	124	149	—	0	15	—	346
South Carolina <sup>§</sup>	—	0	1	9	11	—	5	19	239	195	—	0	0	—	—
Virginia <sup>§</sup>	—	0	2	17	11	3	5	15	129	136	16	10	26	384	379
West Virginia	—	0	2	2	5	—	0	7	33	24	1	2	6	53	84
<b>E.S. Central</b>	1	0	4	27	23	3	14	25	496	619	2	3	8	129	107
Alabama <sup>§</sup>	—	0	2	5	6	—	4	8	145	241	—	0	4	36	—
Kentucky	1	0	2	12	4	—	4	13	162	186	1	0	4	15	36
Mississippi	—	0	1	3	3	—	1	6	44	51	—	0	3	15	4
Tennessee <sup>§</sup>	—	0	2	7	10	3	4	10	145	141	1	1	4	63	67
<b>W.S. Central</b>	—	1	9	58	60	36	57	753	1,874	2,169	—	1	40	58	592
Arkansas <sup>§</sup>	—	0	2	5	5	3	4	29	114	256	—	0	10	20	28
Louisiana	—	0	4	12	11	—	1	4	20	125	—	0	0	—	—
Oklahoma	—	0	7	14	6	3	0	41	31	36	—	0	30	38	21
Texas <sup>§</sup>	—	0	7	27	38	30	49	681	1,709	1,752	—	0	30	—	543
<b>Mountain</b>	—	1	6	42	49	9	21	41	727	675	—	1	8	43	78
Arizona	—	0	2	11	12	1	6	14	238	162	—	0	5	—	—
Colorado	—	0	4	13	14	—	3	13	125	177	—	0	0	—	—
Idaho <sup>§</sup>	—	0	1	5	6	7	2	19	120	60	—	0	2	5	3
Montana <sup>§</sup>	—	0	1	1	5	—	1	8	33	23	—	0	4	10	24
Nevada <sup>§</sup>	—	0	1	8	4	1	0	7	19	19	—	0	1	3	5
New Mexico <sup>§</sup>	—	0	1	3	3	—	1	6	54	48	—	0	3	9	20
Utah	—	0	1	1	1	—	4	10	133	165	—	0	2	2	7
Wyoming <sup>§</sup>	—	0	1	—	4	—	0	1	5	21	—	0	3	14	19
<b>Pacific</b>	—	3	16	108	146	4	34	186	1,887	883	—	3	12	120	188
Alaska	—	0	2	1	6	—	0	6	25	32	—	0	2	11	10
California	—	2	13	70	93	—	22	163	1,393	428	—	3	12	99	167
Hawaii	—	0	1	1	5	—	0	5	25	30	—	0	0	—	—
Oregon	—	1	3	24	29	4	6	15	238	198	—	0	2	10	11
Washington	—	0	7	12	13	—	4	24	206	195	—	0	0	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	—	—	0	0	—	1	—	1	3	32	28
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) <sup>†</sup>					Shigellosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	803	887	1,579	29,271	31,420	56	80	198	2,895	3,069	198	254	527	8,804	11,125
<b>New England</b>	2	29	335	1,467	1,720	2	3	37	136	187	—	5	43	213	268
Connecticut	—	0	318	318	430	—	0	37	37	67	—	0	36	36	43
Maine <sup>§</sup>	1	2	7	79	94	—	0	2	11	14	—	0	2	5	2
Massachusetts	—	21	47	807	833	—	2	8	59	64	—	4	15	156	185
New Hampshire	—	3	10	119	216	—	0	2	17	24	—	0	2	6	16
Rhode Island <sup>§</sup>	—	2	17	97	95	—	0	26	2	—	—	0	3	9	17
Vermont <sup>§</sup>	1	1	5	47	52	2	0	2	10	18	—	0	1	1	5
<b>Mid. Atlantic</b>	92	96	202	3,507	3,771	6	8	26	335	298	29	34	66	1,126	2,137
New Jersey	—	15	42	445	804	—	1	4	36	77	—	6	17	200	465
New York (Upstate)	43	24	78	949	866	2	3	15	133	92	10	4	19	151	155
New York City	6	25	55	874	863	—	1	5	48	42	1	7	14	203	321
Pennsylvania	43	29	73	1,239	1,238	4	2	13	118	87	18	17	35	572	1,196
<b>E.N. Central</b>	48	82	230	3,399	3,725	7	12	35	476	548	6	26	235	1,168	2,037
Illinois	—	26	111	1,126	1,046	—	2	8	76	130	—	9	228	639	471
Indiana	—	10	53	367	443	—	1	8	67	71	—	1	5	31	54
Michigan	13	15	41	600	707	—	3	16	114	98	—	4	9	159	169
Ohio	35	24	47	943	1,025	7	2	11	111	100	6	6	23	229	931
Wisconsin	—	10	40	363	504	—	3	8	108	149	—	4	14	110	412
<b>W.N. Central</b>	46	45	94	1,654	1,925	7	10	39	433	542	12	48	88	1,657	654
Iowa	2	7	36	357	308	—	2	15	118	124	—	1	5	39	45
Kansas	12	7	20	301	289	1	1	6	48	46	3	4	14	184	160
Minnesota	—	5	32	178	417	—	1	14	31	141	—	0	6	14	53
Missouri	25	12	43	541	445	3	3	27	169	98	8	42	75	1,389	367
Nebraska <sup>§</sup>	5	4	13	167	275	3	1	6	50	69	1	0	4	26	22
North Dakota	2	0	39	27	35	—	0	7	—	4	—	0	5	—	3
South Dakota	—	2	6	83	156	—	0	5	17	60	—	0	2	5	4
<b>S. Atlantic</b>	406	266	532	8,533	8,297	14	13	30	458	444	67	40	85	1,544	1,712
Delaware	4	3	10	109	76	—	0	2	4	11	—	2	10	36	75
District of Columbia	1	2	4	52	65	—	0	1	5	2	—	0	4	20	18
Florida	225	126	277	3,617	3,507	10	4	13	155	110	47	13	49	687	303
Georgia	56	40	117	1,440	1,540	—	1	15	69	50	15	12	25	465	451
Maryland <sup>§</sup>	46	15	46	667	523	3	2	6	59	59	1	3	8	81	305
North Carolina	—	31	144	1,024	1,173	—	1	7	44	76	—	2	17	115	320
South Carolina <sup>§</sup>	45	20	76	820	582	—	0	3	16	23	—	1	5	46	92
Virginia <sup>§</sup>	29	18	68	680	674	1	2	15	92	95	4	2	15	93	142
West Virginia	—	3	16	124	157	—	0	5	14	18	—	0	2	1	6
<b>E.S. Central</b>	17	51	118	1,867	2,034	3	4	11	161	154	2	12	40	459	593
Alabama <sup>§</sup>	—	14	40	444	558	—	0	4	33	38	—	3	10	96	109
Kentucky	6	8	29	343	336	—	1	6	36	55	—	4	28	179	143
Mississippi	—	13	44	512	604	—	0	2	11	6	—	1	3	27	33
Tennessee <sup>§</sup>	11	14	43	568	536	3	2	8	81	55	2	4	11	157	308
<b>W.S. Central</b>	49	113	547	3,066	3,542	8	5	68	171	201	48	46	251	1,526	2,097
Arkansas <sup>§</sup>	15	10	36	417	404	2	1	5	38	26	2	1	9	37	236
Louisiana	—	19	44	641	745	—	0	3	8	19	—	3	10	137	145
Oklahoma	25	10	46	379	419	2	0	27	15	21	7	6	96	193	186
Texas <sup>§</sup>	9	62	477	1,629	1,974	4	3	41	110	135	39	35	144	1,159	1,530
<b>Mountain</b>	5	48	99	1,729	2,140	3	9	27	368	398	3	15	39	462	817
Arizona	2	18	41	555	709	—	1	5	40	47	3	8	25	244	592
Colorado	—	11	23	394	452	—	2	18	140	126	—	2	6	75	64
Idaho <sup>§</sup>	2	3	9	106	130	3	1	7	49	57	—	0	3	18	6
Montana <sup>§</sup>	1	2	7	66	84	—	0	5	28	26	—	0	1	5	11
Nevada <sup>§</sup>	—	4	20	193	187	—	0	5	20	21	—	1	7	21	48
New Mexico <sup>§</sup>	—	5	13	181	273	—	1	4	28	26	—	2	8	75	80
Utah	—	5	18	204	235	—	1	11	52	85	—	0	4	24	15
Wyoming <sup>§</sup>	—	1	9	30	70	—	0	2	11	10	—	0	2	—	1
<b>Pacific</b>	138	115	299	4,049	4,266	6	10	46	357	297	31	20	64	649	810
Alaska	—	1	5	62	53	—	0	1	1	1	—	0	2	1	2
California	130	84	227	3,048	3,167	6	5	35	158	160	30	16	51	534	644
Hawaii	5	4	62	112	237	—	0	4	14	4	1	0	3	11	29
Oregon	3	8	48	379	315	—	1	11	63	46	—	1	4	36	38
Washington	—	15	61	448	494	—	3	19	121	86	—	2	22	67	97
<b>Territories</b>															
American Samoa	—	1	1	2	—	—	0	0	—	—	—	0	1	1	3
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	4	9	—	0	0	—	—	—	0	3	1	5
Puerto Rico	1	6	39	131	363	—	0	0	—	—	—	0	1	—	10
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

<sup>†</sup> Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	Spotted Fever Rickettsiosis (including RMSF) <sup>†</sup>									
	Confirmed					Probable				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
<b>United States</b>	2	2	14	107	116	14	15	421	926	1,058
<b>New England</b>	—	0	0	—	2	—	0	1	1	9
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine <sup>§</sup>	—	0	0	—	—	—	0	1	1	4
Massachusetts	—	0	0	—	1	—	0	1	—	5
New Hampshire	—	0	0	—	—	—	0	1	—	—
Rhode Island <sup>§</sup>	—	0	0	—	—	—	0	0	—	—
Vermont <sup>§</sup>	—	0	0	—	1	—	0	0	—	—
<b>Mid. Atlantic</b>	1	0	2	14	9	—	1	5	39	78
New Jersey	—	0	0	—	2	—	0	3	—	50
New York (Upstate)	—	0	1	1	—	—	0	3	10	11
New York City	—	0	1	1	—	—	0	4	19	6
Pennsylvania	1	0	2	12	7	—	0	1	10	11
<b>E.N. Central</b>	—	0	1	4	8	1	0	8	60	74
Illinois	—	0	1	2	1	—	0	5	19	45
Indiana	—	0	1	2	3	1	0	5	32	8
Michigan	—	0	1	—	3	—	0	2	3	1
Ohio	—	0	0	—	—	—	0	2	5	16
Wisconsin	—	0	0	—	1	—	0	1	1	4
<b>W.N. Central</b>	1	0	3	13	16	3	2	19	196	225
Iowa	—	0	0	—	1	—	0	1	3	4
Kansas	—	0	1	2	1	—	0	0	—	—
Minnesota	—	0	1	—	1	—	0	1	—	1
Missouri	1	0	3	10	6	3	2	18	188	216
Nebraska <sup>§</sup>	—	0	1	1	7	—	0	1	4	4
North Dakota	—	0	0	—	—	—	0	1	1	—
South Dakota	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	—	1	10	54	55	6	5	59	325	317
Delaware	—	0	1	1	—	—	0	2	14	15
District of Columbia	—	0	0	—	—	—	0	1	—	—
Florida	—	0	1	2	—	—	0	1	7	4
Georgia	—	0	6	33	45	—	0	0	—	—
Maryland <sup>§</sup>	—	0	1	2	2	—	0	4	28	32
North Carolina	—	0	3	11	5	—	1	48	178	203
South Carolina <sup>§</sup>	—	0	1	1	3	—	0	2	10	15
Virginia <sup>§</sup>	—	0	2	4	—	6	1	11	88	46
West Virginia	—	0	0	—	—	—	0	1	—	2
<b>E.S. Central</b>	—	0	3	12	7	3	3	28	248	214
Alabama <sup>§</sup>	—	0	1	2	3	—	1	8	47	50
Kentucky	—	0	2	6	1	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	1	3	9
Tennessee <sup>§</sup>	—	0	2	4	3	3	3	20	198	155
<b>W.S. Central</b>	—	0	3	1	6	1	1	408	49	118
Arkansas <sup>§</sup>	—	0	1	—	—	—	0	110	20	62
Louisiana	—	0	0	—	—	—	0	1	2	2
Oklahoma	—	0	2	—	5	1	0	287	17	39
Texas <sup>§</sup>	—	0	1	1	1	—	0	11	10	15
<b>Mountain</b>	—	0	2	2	12	—	0	2	7	23
Arizona	—	0	2	—	6	—	0	1	2	11
Colorado	—	0	0	—	1	—	0	0	—	—
Idaho <sup>§</sup>	—	0	0	—	—	—	0	1	2	1
Montana <sup>§</sup>	—	0	1	2	4	—	0	1	1	6
Nevada <sup>§</sup>	—	0	0	—	—	—	0	0	—	1
New Mexico <sup>§</sup>	—	0	0	—	—	—	0	1	1	1
Utah	—	0	0	—	—	—	0	1	1	1
Wyoming <sup>§</sup>	—	0	0	—	1	—	0	0	—	2
<b>Pacific</b>	—	0	2	7	1	—	0	1	1	—
Alaska	N	0	0	N	N	N	0	0	N	N
California	—	0	2	6	1	—	0	0	—	—
Hawaii	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	1	1	—	—	0	1	1	—
Washington	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>										
American Samoa	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

<sup>†</sup> 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.

<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\*

Reporting area	<i>Streptococcus pneumoniae</i> , <sup>†</sup> invasive disease														
	All ages					Age <5					Syphilis, primary and secondary				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	58	188	492	9,987	2,097	4	50	156	1,560	1,601	87	235	413	7,703	9,568
<b>New England</b>	—	7	100	564	38	—	1	24	74	50	3	7	22	291	224
Connecticut	—	0	93	255	—	—	0	22	24	—	1	1	10	58	42
Maine <sup>§</sup>	—	1	6	86	10	—	0	2	7	4	—	0	3	16	2
Massachusetts	—	0	5	53	3	—	1	4	35	35	1	5	14	173	157
New Hampshire	—	0	7	59	—	—	0	2	3	8	1	0	1	14	13
Rhode Island <sup>§</sup>	—	0	34	53	14	—	0	2	2	1	—	0	4	28	10
Vermont <sup>§</sup>	—	1	6	58	11	—	0	1	3	2	—	0	2	2	—
<b>Mid. Atlantic</b>	3	13	54	857	127	—	7	48	245	207	28	33	45	1,154	1,225
New Jersey	—	1	8	76	—	—	1	5	39	33	2	4	12	152	160
New York (Upstate)	—	3	12	114	51	—	3	19	83	93	2	2	11	94	84
New York City	—	4	25	322	8	—	1	24	83	68	19	18	31	666	751
Pennsylvania	3	6	22	345	68	—	0	5	40	13	5	7	16	242	230
<b>E.N. Central</b>	9	31	98	2,022	477	—	8	18	254	268	—	27	46	869	1,041
Illinois	—	1	7	70	—	—	2	5	63	41	—	12	23	307	506
Indiana	—	7	23	413	187	—	1	6	35	56	—	3	13	116	106
Michigan	4	7	27	477	19	—	2	6	57	50	—	3	12	145	162
Ohio	4	14	49	835	271	—	2	6	68	92	—	8	13	274	234
Wisconsin	1	5	22	227	—	—	1	4	31	29	—	1	3	27	33
<b>W.N. Central</b>	1	8	182	584	138	—	2	12	104	134	4	5	13	194	217
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	9	16
Kansas	1	1	7	72	47	—	0	2	11	15	—	0	3	11	20
Minnesota	—	0	179	287	34	—	0	10	44	60	—	1	9	71	50
Missouri	—	2	9	81	48	—	0	3	28	37	4	3	8	98	123
Nebraska <sup>§</sup>	—	1	7	91	—	—	0	2	12	10	—	0	1	5	5
North Dakota	—	0	11	39	7	—	0	1	2	4	—	0	1	—	3
South Dakota	—	0	3	14	2	—	0	2	7	8	—	0	0	—	—
<b>S. Atlantic</b>	31	40	144	2,331	943	1	12	28	392	377	26	56	218	1,857	2,293
Delaware	2	0	3	27	15	—	0	2	—	—	—	0	2	4	22
District of Columbia	—	0	4	21	17	—	0	2	7	3	—	2	8	89	125
Florida	18	18	89	1,073	550	1	3	18	146	134	2	19	32	659	715
Georgia	2	10	28	381	271	—	4	12	105	95	3	11	167	364	539
Maryland <sup>§</sup>	4	5	25	336	4	—	1	6	39	59	—	6	11	190	197
North Carolina	—	0	0	—	—	—	0	0	—	—	5	8	31	252	386
South Carolina <sup>§</sup>	5	5	25	363	—	—	1	4	40	34	6	2	7	99	88
Virginia <sup>§</sup>	—	0	4	41	—	—	1	4	39	34	10	4	22	197	217
West Virginia	—	1	21	89	86	—	0	4	16	18	—	0	2	3	4
<b>E.S. Central</b>	2	17	50	874	202	—	2	8	83	98	10	18	39	602	795
Alabama <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	2	5	12	161	314
Kentucky	—	2	16	132	55	—	0	2	10	7	4	2	13	90	46
Mississippi	—	1	6	41	34	—	0	2	8	17	4	5	17	148	146
Tennessee <sup>§</sup>	2	12	44	701	113	—	2	7	65	74	—	6	17	203	289
<b>W.S. Central</b>	11	17	90	1,278	85	3	6	41	205	237	11	35	71	1,049	1,944
Arkansas <sup>§</sup>	1	2	9	119	41	—	0	3	11	32	—	4	14	107	156
Louisiana	—	1	8	56	44	—	0	3	17	17	—	2	23	64	567
Oklahoma	1	0	5	36	—	1	1	5	36	40	—	1	6	52	61
Texas <sup>§</sup>	9	13	82	1,067	—	2	3	34	141	148	11	25	42	826	1,160
<b>Mountain</b>	1	20	82	1,266	84	—	5	12	175	207	—	9	20	291	364
Arizona	1	7	51	588	—	—	2	7	77	93	—	3	7	92	172
Colorado	—	6	20	372	—	—	1	4	48	30	—	2	5	76	66
Idaho <sup>§</sup>	—	0	2	11	—	—	0	2	5	7	—	0	1	2	3
Montana <sup>§</sup>	—	0	2	13	—	—	0	1	1	—	—	0	1	1	—
Nevada <sup>§</sup>	—	1	4	54	34	—	0	1	5	7	—	1	10	70	63
New Mexico <sup>§</sup>	—	2	9	114	—	—	0	4	14	24	—	1	4	30	37
Utah	—	2	9	105	41	—	1	4	22	45	—	0	4	20	20
Wyoming <sup>§</sup>	—	0	1	9	9	—	0	1	3	1	—	0	0	—	3
<b>Pacific</b>	—	4	14	211	3	—	0	7	28	23	5	40	64	1,396	1,465
Alaska	—	1	9	80	—	—	0	5	18	14	—	0	1	1	—
California	—	2	12	131	—	—	0	2	10	—	5	36	59	1,233	1,298
Hawaii	—	0	1	—	3	—	0	1	—	9	—	0	3	24	24
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	5	6	41
Washington	—	0	0	—	—	—	0	0	—	—	—	3	10	132	102
<b>Territories</b>															
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	—	—	10	3	16	158	144
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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\* Incidence data for reporting years 2009 and 2010 are provisional.

<sup>†</sup> 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).<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

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**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 4, 2010, and September 5, 2009 (35th week)\***

Reporting area	Varicella (chickenpox) <sup>§</sup>					West Nile virus disease <sup>†</sup>									
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Neuroinvasive				Nonneuroinvasive <sup>¶</sup>					
		Med	Max			Current week	Med	Max	Cum 2010	Cum 2009	Current week	Med	Max	Cum 2010	Cum 2009
<b>United States</b>	94	325	545	9,622	14,949	—	0	40	144	295	—	0	29	114	273
<b>New England</b>	—	15	36	457	734	—	0	1	3	—	—	0	2	2	—
Connecticut	—	6	20	212	355	—	0	1	2	—	—	0	2	2	—
Maine <sup>§</sup>	—	3	15	130	131	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	3	—	0	1	1	—	—	0	0	—	—
New Hampshire	—	2	8	85	145	—	0	0	—	—	—	0	0	—	—
Rhode Island <sup>§</sup>	—	1	12	18	24	—	0	0	—	—	—	0	0	—	—
Vermont <sup>§</sup>	—	0	10	12	76	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	15	33	66	1,090	1,456	—	0	9	32	4	—	0	4	10	1
New Jersey	—	9	30	394	301	—	0	2	3	3	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	16	1	—	0	4	8	1
New York City	—	0	0	—	—	—	0	3	12	—	—	0	2	2	—
Pennsylvania	15	22	52	696	1,155	—	0	1	1	—	—	0	0	—	—
<b>E.N. Central</b>	25	108	176	3,245	4,655	—	0	3	5	8	—	0	3	5	4
Illinois	6	26	49	840	1,112	—	0	1	1	5	—	0	0	—	—
Indiana <sup>§</sup>	4	6	35	303	347	—	0	0	—	2	—	0	2	2	2
Michigan	3	35	62	983	1,325	—	0	2	3	—	—	0	1	1	—
Ohio	12	28	56	899	1,435	—	0	1	1	—	—	0	1	1	2
Wisconsin	—	7	24	220	436	—	0	0	—	1	—	0	1	1	—
<b>W.N. Central</b>	11	13	40	423	985	—	0	3	10	22	—	0	8	28	59
Iowa	N	0	0	N	N	—	0	0	—	—	—	0	1	1	5
Kansas <sup>§</sup>	—	4	18	96	416	—	0	1	—	4	—	0	1	2	7
Minnesota	—	0	0	—	—	—	0	1	3	1	—	0	1	—	1
Missouri	8	7	23	275	472	—	0	1	2	3	—	0	1	—	—
Nebraska <sup>§</sup>	N	0	0	N	N	—	0	1	4	8	—	0	5	9	33
North Dakota	3	0	26	31	57	—	0	0	—	—	—	0	1	4	1
South Dakota	—	0	7	21	40	—	0	1	1	6	—	0	3	12	12
<b>S. Atlantic</b>	13	37	99	1,482	1,874	—	0	3	8	11	—	0	2	4	2
Delaware <sup>§</sup>	—	0	4	17	11	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	4	15	26	—	0	0	—	2	—	0	0	—	—
Florida <sup>§</sup>	8	15	57	737	925	—	0	2	2	1	—	0	1	—	1
Georgia	N	0	0	N	N	—	0	1	3	2	—	0	1	3	—
Maryland <sup>§</sup>	N	0	0	N	N	—	0	1	3	—	—	0	1	1	1
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina <sup>§</sup>	—	0	35	75	93	—	0	0	—	3	—	0	0	—	—
Virginia <sup>§</sup>	—	11	34	337	511	—	0	1	—	3	—	0	0	—	—
West Virginia	5	8	26	301	308	—	0	0	—	—	—	0	0	—	—
<b>E.S. Central</b>	1	6	28	200	390	—	0	5	2	26	—	0	3	5	20
Alabama <sup>§</sup>	1	6	27	193	387	—	0	1	1	—	—	0	1	2	—
Kentucky	N	0	0	N	N	—	0	1	—	2	—	0	0	—	—
Mississippi	—	0	2	7	3	—	0	3	1	22	—	0	2	3	16
Tennessee <sup>§</sup>	N	0	0	N	N	—	0	2	—	2	—	0	1	—	4
<b>W.S. Central</b>	20	58	285	1,963	3,783	—	0	12	13	95	—	0	2	3	29
Arkansas <sup>§</sup>	—	3	32	122	383	—	0	2	2	6	—	0	0	—	—
Louisiana	—	1	8	40	107	—	0	2	5	9	—	0	1	2	9
Oklahoma	N	0	0	N	N	—	0	2	—	4	—	0	0	—	2
Texas <sup>§</sup>	20	49	272	1,801	3,293	—	0	12	6	76	—	0	2	1	18
<b>Mountain</b>	9	22	37	727	986	—	0	12	52	68	—	0	13	41	104
Arizona	—	0	0	—	—	—	0	10	48	12	—	0	9	29	5
Colorado <sup>§</sup>	9	8	20	293	366	—	0	7	1	30	—	0	7	9	58
Idaho <sup>§</sup>	N	0	0	N	N	—	0	2	—	9	—	0	4	—	23
Montana <sup>§</sup>	—	3	17	153	122	—	0	0	—	2	—	0	1	—	2
Nevada <sup>§</sup>	N	0	0	N	N	—	0	0	—	7	—	0	0	—	5
New Mexico <sup>§</sup>	—	2	7	76	96	—	0	1	2	5	—	0	1	1	2
Utah	—	6	22	192	402	—	0	1	—	—	—	0	0	—	1
Wyoming <sup>§</sup>	—	0	3	13	—	—	0	1	1	3	—	0	2	2	8
<b>Pacific</b>	—	1	5	35	86	—	0	12	19	61	—	0	4	16	54
Alaska	—	0	5	29	52	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	8	19	38	—	0	4	16	33
Hawaii	—	0	2	6	34	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	1	—	1	—	0	1	—	9
Washington	N	0	0	N	N	—	0	6	—	22	—	0	0	—	12
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	3	12	15	—	0	0	—	—	—	0	0	—	—
Puerto Rico	8	5	30	188	402	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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\* Incidence data for reporting years 2009 and 2010 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

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

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





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