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Interim Results: State-Specific Seasonal Influenza Vaccination Coverage — United States, August 2009–January 2010

The advent of the 2009 influenza A (H1N1) pandemic in April 2009 made the 2009–10 influenza season highly unusual. Public awareness of the potential seriousness of influenza was heightened by media coverage of pandemic-associated hospitalizations and deaths, especially among younger persons. In the fall, the distribution of two separate influenza vaccines began, with distinct, although overlapping, recommendations from the Advisory Committee on Immunization Practices (ACIP) (*1,2*). In addition, 2009–10 was the first full season in which ACIP's recommendation to vaccinate all children aged 5–18 years (*2*) was implemented. To provide preliminary state-specific estimates of seasonal influenza vaccination coverage, CDC analyzed Behavioral Risk Factor Surveillance System (BRFSS) and National 2009 H1N1 Flu Survey (NHFS) data collected during October 2009–February 2010. By January 31, estimated state seasonal influenza vaccination coverage among persons aged ≥6 months ranged from 30.3% to 54.5% (median: 40.6%). Median coverage was 41.2% for children aged 6 months–17 years, 38.3% for adults aged 18–49 years with high-risk conditions, 28.8% for adults aged 18–49 years without high-risk conditions, 45.5% for adults aged 50–64 years, and 69.3% for adults aged ≥65 years. These results, compared with the previous season (*3*), suggest large increases in coverage for children and a moderate increase for adults aged 18–49 years without high-risk conditions. Health departments should identify best practices that lead to higher vaccination coverage and should support effective vaccination services (e.g., school-located vaccination programs and office-based protocols, such as reminder/recall and standing orders).

CDC used data collected during October 2009–February 2010 from two separate surveys, BRFSS and NHFS. BRFSS respondents in 50 states, the District of Columbia, and two territories were asked if they (or their children, in 43 states) had been vaccinated for the "seasonal flu" in the past 12 months, and if so, in which month.* NHFS respondents aged ≥18 years were asked whether they (or their children) had received "seasonal flu vaccination" since August, and if so, in which month.† Similar questions were asked about "H1N1 flu" vaccination in both surveys (*4*). The Council of American Survey and Research Organizations (CASRO) NHFS response rates were 35% for landline and 27% for cellular telephones; cooperation rates were 45% and 57%, respectively. The median state CASRO BRFSS response and cooperation rates were 54% and 76%, respectively.

* Respondents were asked, "Now I will ask you questions about seasonal flu. A flu shot is an influenza vaccine injected into your arm. During the past 12 months, have you had a seasonal flu shot? During what month and year did you receive your most recent seasonal flu shot? The seasonal flu vaccine sprayed in the nose is also called FluMist. During the past 12 months, have you had a seasonal flu vaccine that was sprayed in your nose? During what month and year did you receive your most recent seasonal flu vaccine that was sprayed in your nose?" Additional information about BRFSS is available at http://www.cdc.gov/brfss.

† Respondents were asked, "Since August 2009, have you had a seasonal flu vaccination? There are two types of seasonal flu vaccinations. One is a shot and the other is a spray, mist or drop in the nose. During what month did you receive your most recent seasonal flu vaccine? Was your most recent seasonal flu vaccine a shot or the spray in the nose? The seasonal flu vaccine can be given either as a shot or a nasal spray, also called FluMist." The landline sample was augmented with a sample of children aged <18 years identified during screening for the National Immunization Survey. Additional information about NHFS is available at http://www.cdc.gov/nis/h1n1_introduction.htm and http://www.cdc.gov/nis/data/h1n1_flu_survey.pdf.

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To improve the precision of state-level estimates from each survey, CDC first combined the monthly data collected during October 2009–February 2010 and estimated the cumulative proportion of persons vaccinated with at least 1 dose during August–January by using the Kaplan-Meier survival analysis procedure. To improve precision for subgroups within states, particularly children, CDC then combined the estimates from BRFSS and NHFS (*5*).[§] The 2009–10 BRFSS survey included 18,368 children and 152,128 adults; the NHFS included 60,786 children and 31,135 adults. CDC performed Pearson correlations among children and adults to determine if state-specific seasonal coverage was associated with state-specific H1N1 coverage or with coverage during past seasons. For comparison to estimated national vaccination coverage for the 2008–09 influenza season, overall, and by month, CDC analyzed the BRFSS adult and child data available from 19 states that fully participated in a special early survey conducted January–February 2009 (*3*). Student t-tests were used to determine statistical difference between groups.

Among children aged 6 months–17 years, estimated national 2009–10 seasonal coverage was 40.0% (16 percentage points higher than in 2008–09) (*3*). State-specific 2009–10 coverage for children ranged from 23.6% (Nevada) to 67.2% (Hawaii) (U.S. median: 41.2%); coverage among adults aged ≥18 years ranged from 32.4% (Nevada) to 52.5% (Minnesota) (U.S. median: 40.6%) (Table 1). State-specific child and adult (age ≥18 years) coverages were correlated positively (r = 0.68), with a wider range of coverage among state-specific child levels compared with adult levels (Figure 1). Seasonal state coverage

[§] Combined estimates were weighted averages of the BRFSS and NHFS estimates, with weights being determined by the effective sample sizes. The effective sample sizes take into account the design of each survey and are determined as the unweighted sample size divided by the design effect. The design effect is the ratio of the variance of a survey estimate to the variance had the survey design used a simple random sample; surveys with large design effects are less efficient. CDC estimated state and age-group–specific design effects based on estimated proportions vaccinated each month, using data from each survey from October 2009 through February 2010. Among states, the median design effects for children were 1.9 for NHFS and 1.3 for BRFSS, with the BRFSS estimate receiving a median of 34% of the weight in the combined average estimate. For adults, median design effects were 1.2 for NHFS and 1.5 for BRFSS, with BRFSS estimates receiving a median of 80% of the weight. The NHFS estimate was used alone when no data were available from BRFSS.

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TABLE 1. Estimated seasonal influenza vaccination coverage among children and adults,* by U.S. Department of Health and Human Services (HHS) region, state, and selected age and risk subgroups — United States, Behavioral Risk Factor Surveillance System (BRFSS) and National 2009 H1N1 Flu Survey (NHFS), end of January 2010†

	Unweighted sample size	All persons aged ≥6 mos		Children aged 6 mos–17 yrs		Persons aged ≥18 yrs		Persons aged 18–49 yrs at high risk§		Persons aged 18–49 yrs not at high risk		All persons aged 50–64 yrs		All persons aged ≥65 yrs	
HHS region and state/area	No.¶	%	(95% CI**)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
All states combined	**262,417**	**39.7**	**(±0.6)**	**40.0**	**(±1.4)**	**39.6**	**(±0.6)**	**36.2**	**(±1.5)**	**27.6**	**(±0.9)**	**45.0**	**(±1.3)**	**68.0**	**(±0.9)**
Region 1	**25,533**	**48.0**	**(±1.8)**	**55.7**	**(±5.1)**	**45.4**	**(±1.7)**	**44.6**	**(±4.3)**	**31.6**	**(±2.5)**	**51.1**	**(±2.8)**	**72.9**	**(±2.6)**
Connecticut††	4,534	42.6	(±3.3)	46.2	(±5.7)	41.3	(±4.1)	39.8	(±10.5)§§	27.2	(±6.0)	47.8	(±7.4)	69.1	(±6.6)
Maine¶¶	5,313	48.1	(±2.6)	57.2	(±7.5)	46.2	(±2.7)	43.7	(±7.4)	34.3	(±6.5)	48.0	(±3.9)	73.2	(±4.2)
Massachusetts¶¶***	6,347	51.5	(±3.4)	61.6	(±9.4)	47.5	(±3.0)	47.1	(±7.0)	32.4	(±4.2)	54.1	(±4.7)	76.4	(±4.2)
New Hampshire	3,892	47.0	(±3.2)	49.7	(±6.9)	46.2	(±3.6)	43.6	(±10.8)§§	34.7	(±5.4)	53.0	(±5.5)	69.3	(±5.0)
Rhode island	3,156	50.3	(±3.9)	57.0	(±10.8)§§	48.5	(±4.0)	52.3	(±8.0)	33.9	(±4.7)	52.9	(±6.1)	73.1	(±5.8)
Vermont***	2,291	41.0	(±3.6)	46.8	(±7.4)	39.8	(±4.0)	36.7	(±16.5)§§	30.3	(±8.4)	41.0	(±6.8)	66.9	(±6.7)
Region 2	**11,180**	**39.3**	**(±2.0)**	**41.3**	**(±5.4)**	**38.6**	**(±2.1)**	**39.0**	**(±5.2)**	**28.7**	**(±3.5)**	**42.5**	**(±3.6)**	**66.1**	**(±3.5)**
New Jersey***	5,683	37.7	(±2.6)	42.7	(±7.5)	36.1	(±2.4)	31.0	(±4.8)	24.9	(±3.1)	39.7	(±4.0)	62.8	(±4.4)
New York	5,497	40.0	(±2.7)	40.6	(±7.1)	39.8	(±2.8)	42.6	(±7.3)	30.3	(±4.9)	43.7	(±4.9)	67.6	(±4.7)
Region 3	**27,045**	**42.8**	**(±1.3)**	**45.9**	**(±3.6)**	**42.0**	**(±1.4)**	**40.6**	**(±3.6)**	**28.1**	**(±2.0)**	**47.0**	**(±2.2)**	**70.8**	**(±2.1)**
Delaware***	3,805	42.3	(±3.3)	42.9	(±6.6)	42.2	(±3.8)	40.6	(±11.0)§§	34.3	(±11.2)§§	52.4	(±7.2)	67.4	(±5.4)
District of Columbia***	2,843	40.0	(±5.1)	34.8	(±15.5)§§	41.4	(±5.0)	38.9	(±13.7)§§	36.0	(±8.3)	40.6	(±6.8)	63.3	(±8.0)
Maryland¶¶	5,672	44.3	(±2.6)	51.0	(±6.9)	42.3	(±2.7)	43.2	(±7.4)	28.4	(±4.0)	48.6	(±4.1)	69.7	(±4.6)
Pennsylvania¶¶	6,776	42.2	(±2.3)	47.8	(±6.5)	40.6	(±2.3)	38.2	(±5.4)	24.8	(±3.2)	45.7	(±3.8)	70.4	(±3.5)
Virginia***	4,138	43.0	(±2.5)	40.8	(±6.0)	43.5	(±2.7)	43.7	(±8.4)	31.7	(±4.2)	46.8	(±4.6)	73.6	(±4.1)
West Virginia	3,811	43.3	(±2.8)	41.2	(±9.8)	43.8	(±2.4)	36.3	(±7.7)	29.1	(±4.1)	51.9	(±3.9)	68.5	(±3.6)
Region 4	**46,594**	**36.9**	**(±1.2)**	**36.8**	**(±3.4)**	**37.0**	**(±1.2)**	**29.4**	**(±3.1)**	**25.3**	**(±1.8)**	**39.9**	**(±1.8)**	**66.1**	**(±1.7)**
Alabama††	4,903	35.6	(±2.7)	33.5	(±6.3)	36.4	(±2.9)	39.1	(±8.8)	21.8	(±4.3)	39.8	(±5.0)	65.0	(±4.4)
Florida¶¶	10,721	31.6	(±2.0)	26.4	(±4.3)	33.0	(±2.2)	22.1	(±7.2)	19.4	(±3.7)	33.7	(±3.7)	64.3	(±3.1)
Georgia	4,039	34.4	(±3.5)	30.8	(±7.1)	35.4	(±4.0)	27.3	(±7.7)	27.7	(±6.3)	41.3	(±5.5)	60.6	(±5.1)
Kentucky	5,525	41.3	(±2.7)	37.1	(±5.6)	42.3	(±3.1)	39.2	(±9.4)	30.3	(±5.4)	47.3	(±4.5)	69.0	(±4.3)
Mississippi	6,443	35.1	(±3.0)	31.7	(±10.4)§§	36.0	(±2.6)	21.2	(±4.2)	26.8	(±4.3)	37.9	(±3.9)	66.3	(±3.9)
North Carolina¶¶***	5,270	45.8	(±4.4)	59.8	(±14.9)§§	40.9	(±2.9)	33.9	(±7.9)	29.8	(±4.1)	44.2	(±4.7)	71.6	(±4.8)
South Carolina	5,616	37.2	(±2.6)	32.6	(±6.0)	38.8	(±2.9)	33.6	(±8.6)	28.3	(±4.2)	39.9	(±4.6)	68.0	(±4.2)
Tennessee	4,077	42.1	(±3.1)	44.5	(±8.9)	41.5	(±3.2)	34.8	(±7.0)	28.8	(±4.1)	46.1	(±4.8)	69.5	(±4.6)
Region 5	**29,931**	**39.8**	**(±1.2)**	**38.2**	**(±3.1)**	**40.3**	**(±1.2)**	**40.6**	**(±3.4)**	**28.1**	**(±1.9)**	**43.8**	**(±1.9)**	**68.4**	**(±1.9)**
Illinois	4,841	39.0	(±2.9)	39.1	(±6.9)	39.0	(±3.1)	36.3	(±9.9)	28.7	(±4.9)	41.4	(±5.0)	67.6	(±4.9)
Indiana	6,376	40.9	(±3.1)	46.2	(±9.7)	39.2	(±2.5)	29.9	(±7.6)	26.5	(±3.9)	48.2	(±4.4)	67.3	(±4.1)
Michigan††	5,371	36.0	(±2.6)	32.4	(±5.9)	37.2	(±2.8)	43.3	(±6.2)	23.0	(±4.0)	41.3	(±4.0)	66.9	(±4.2)
Minnesota	4,638	51.9	(±3.4)	49.2	(±5.5)	52.5	(±3.9)	63.4	(±7.1)	41.5	(±6.6)	55.3	(±4.9)	74.1	(±4.6)
Ohio	5,847	37.7	(±2.5)	35.3	(±6.1)	38.8	(±2.4)	41.3	(±4.9)	26.3	(±3.0)	41.3	(±3.5)	64.9	(±4.0)
Wisconsin	2,858	39.9	(±3.0)	37.0	(±7.6)	40.6	(±3.3)	33.4	(±11.4)§§	27.0	(±5.7)	41.7	(±5.3)	74.3	(±5.1)
Region 6	**28,054**	**40.7**	**(±1.6)**	**43.7**	**(±3.5)**	**39.9**	**(±1.8)**	**34.7**	**(±4.8)**	**28.7**	**(±2.3)**	**45.8**	**(±3.1)**	**70.3**	**(±2.6)**
Arkansas¶¶***	3,524	49.4	(±6.0)	65.3	(±15.8)§§	41.0	(±3.7)	36.6	(±12.3)§§	31.9	(±6.6)	44.5	(±5.7)	66.6	(±4.9)
Louisiana	4,630	40.6	(±2.7)	42.2	(±5.2)	40.1	(±3.1)	35.1	(±7.8)	29.7	(±4.9)	39.8	(±4.1)	70.6	(±5.9)
New Mexico	5,536	45.7	(±3.3)	49.9	(±8.1)	44.3	(±3.5)	47.1	(±7.3)	31.7	(±4.7)	45.0	(±5.6)	78.6	(±6.2)
Oklahoma	3,976	40.4	(±3.0)	37.2	(±6.8)	41.6	(±3.3)	26.7	(±6.3)	29.5	(±4.7)	47.8	(±6.6)	69.6	(±5.5)
Texas	10,388	39.4	(±2.2)	40.5	(±4.7)	39.1	(±2.5)	34.5	(±6.9)	27.9	(±3.2)	46.7	(±4.4)	70.1	(±3.6)
Region 7	**26,376**	**42.8**	**(±1.6)**	**38.8**	**(±3.1)**	**44.1**	**(±1.8)**	**42.6**	**(±6.8)**	**31.5**	**(±3.1)**	**45.9**	**(±3.1)**	**71.9**	**(±2.8)**
Iowa	4,571	48.8	(±2.7)	44.1	(±5.8)	50.2	(±3.1)	38.3	(±9.1)	38.9	(±4.9)	51.3	(±5.1)	76.0	(±4.4)
Kansas¶¶	9,421	41.7	(±2.0)	38.3	(±3.8)	43.5	(±2.4)	33.1	(±7.2)	33.2	(±4.0)	47.4	(±3.1)	71.6	(±3.0)
Missouri††	3,511	38.7	(±3.1)	34.4	(±6.8)	39.7	(±3.4)	44.2	(±13.5)§§	25.0	(±5.8)	41.8	(±5.9)	69.4	(±5.3)
Nebraska	8,873	47.8	(±3.1)	42.9	(±7.7)	49.7	(±3.1)	58.3	(±6.8)	40.0	(±5.5)	48.8	(±3.5)	74.1	(±3.5)
Region 8	**26,380**	**41.8**	**(±1.9)**	**40.4**	**(±5.6)**	**42.3**	**(±1.5)**	**46.5**	**(±5.2)**	**31.0**	**(±2.9)**	**48.9**	**(±2.2)**	**70.4**	**(±2.4)**
Colorado***	5,387	42.6	(±3.3)	42.9	(±11.3)§§	42.4	(±2.7)	48.9	(±8.9)	31.4	(±5.3)	48.0	(±3.7)	73.7	(±4.1)
Montana¶¶††	4,808	37.5	(±2.5)	31.6	(±5.3)	39.4	(±2.8)	44.6	(±7.1)	27.3	(±4.6)	42.6	(±4.3)	61.3	(±4.7)
North Dakota	3,646	44.3	(±3.0)	45.5	(±7.4)	44.0	(±3.2)	39.8	(±9.6)	33.5	(±4.4)	45.5	(±4.6)	69.8	(±4.8)
South Dakota	4,016	52.7	(±3.5)	54.0	(±8.2)	52.3	(±3.9)	47.4	(±9.6)	43.1	(±6.1)	53.4	(±6.5)	74.8	(±4.5)
Utah	3,853	38.5	(±3.7)	36.5	(±8.6)	39.7	(±3.0)	47.4	(±11.7)§§	27.3	(±4.3)	54.0	(±4.6)	66.0	(±5.2)
Wyoming	4,670	39.6	(±2.4)	39.6	(±6.0)	39.7	(±2.5)	29.9	(±8.4)	28.8	(±4.3)	44.4	(±4.0)	69.6	(±3.5)
Region 9	**20,455**	**37.2**	**(±2.3)**	**35.3**	**(±4.1)**	**37.9**	**(±2.8)**	**29.7**	**(±5.5)**	**25.7**	**(±3.3)**	**50.1**	**(±7.3)**	**64.1**	**(±3.9)**
Arizona††	3,600	40.6	(±4.7)	41.3	(±12.0)§§	40.4	(±4.8)	43.4	(±10.8)§§	29.3	(±7.3)	40.6	(±8.2)	68.4	(±7.1)
California	7,225	36.4	(±2.9)	33.7	(±4.8)	37.5	(±3.5)	26.7	(±6.8)	25.2	(±4.0)	52.6	(±9.3)	63.3	(±4.9)
Hawaii¶¶	5,400	54.5	(±3.5)	67.2	(±8.3)	47.6	(±3.0)	38.3	(±8.6)	33.8	(±5.3)	56.3	(±4.6)	75.1	(±4.1)
Nevada¶¶††	4,230	30.3	(±3.0)	23.6	(±5.2)	32.4	(±3.6)	32.6	(±9.3)	20.2	(±4.8)	38.1	(±5.7)	59.6	(±5.3)

TABLE 1. (*Continued*) Estimated seasonal influenza vaccination coverage among children and adults,* by U.S. Department of Health and Human Services (HHS) region, state, and selected age and risk subgroups — United States, Behavioral Risk Factor Surveillance System (BRFSS) and National 2009 H1N1 Flu Survey (NHFS), end of January 2010†

	Unweighted sample size	All persons aged ≥6 mos		Children aged 6 mos–17 yrs		Persons aged ≥18 yrs		Persons aged 18–49 yrs at high risk§		Persons aged 18–49 yrs not at high risk		All persons aged 50–64 yrs		All persons aged ≥65 yrs	
HHS region and state/area	No.¶	%	(95% CI**)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Region 10	**20,869**	**38.6**	**(±1.5)**	**38.8**	**(±4.4)**	**38.5**	**(±1.4)**	**38.9**	**(±4.0)**	**25.7**	**(±2.1)**	**43.2**	**(±2.2)**	**68.7**	**(±2.3)**
Alaska	2,585	36.6	(±4.8)	35.0	(±8.4)	37.2	(±5.8)	32.7	(±11.5)§§	26.2	(±7.1)	46.2	(±9.4)	81.6	(±8.9)
Idaho	4,003	33.8	(±2.6)	30.5	(±6.0)	35.1	(±2.8)	28.4	(±8.7)	24.6	(±4.2)	42.1	(±4.6)	59.3	(±5.0)
Oregon	4,527	38.3	(±2.8)	34.7	(±6.7)	39.2	(±3.0)	34.0	(±7.3)	27.8	(±4.7)	42.1	(±4.9)	67.6	(±5.3)
Washington††	9,754	40.0	(±2.3)	43.9	(±7.4)	38.9	(±1.9)	44.6	(±5.8)	24.6	(±2.7)	43.7	(±2.6)	70.1	(±2.6)
Median†††	*4,670*	*40.6*		*41.2*		*40.6*		*38.3*		*28.8*		*45.5*		*69.3*	
Range†††	*2,291–10,721*	*30.3–54.5*		*23.6–67.2*		*32.4–52.5*		*21.2–63.4*		*19.4–43.1*		*33.7–56.3*		*59.3–78.6*	
U.S. territories§§§	**2,623**	11.3	(±3.1)	—†††	—†††	11.3	(±3.1)	—†††	—†††	—†††	—†††	10.0	(±3.3)	20.6	(±4.9)
Guam¶¶¶	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	1,710	11.1	(±3.1)	—****	—****	11.1	(±3.1)	—****	—****	—****	—****	9.7	(±3.3)	20.3	(±5.1)
U.S. Virgin Islands	913	—	—	—	—	19.7	(±4.3)	—****	—****	12.7	(±6.9)	24.1	(±5.9)	37.5	(±9.6)

* Coverage estimates are for persons with reported vaccination during August 2009–January 2010 who were interviewed during October 2009–February 2010.
† Percentages are weighted to the U.S. population.
§ High risk includes asthma, other lung problems, diabetes, heart disease, kidney problems, anemia, or weakened immune system caused by a chronic illness or by medicines taken for a chronic illness.
¶ Respondents with missing vaccination information were excluded; the missing rates are 7.5% for BRFSS and 2.8% for NHFS.
** Confidence interval.
†† Estimates for adults with high-risk conditions were significantly higher compared with adults with no high-risk conditions in the following states: Connecticut, Alabama, Michigan, Missouri, Colorado, Montana, Utah, Arizona, Nevada, and Washington.
§§ Estimates might be unreliable because confidence interval half-width is >10.
¶¶ Child estimates were significantly higher than adult estimates in the following states: Maine, Massachusetts, Maryland, Pennsylvania, Florida, North Carolina, Arkansas, Kansas, Montana, Hawaii, and Nevada.
*** BRFSS data were not collected for children in Massachusetts, Vermont, New Jersey, District of Columbia, Virginia, North Carolina, Arkansas, and Colorado. BRFSS data were not collected for adults aged 18–49 years not at high risk in Vermont and Delaware.
††† Excludes U.S. territories.
§§§ Estimates for U.S. territories are from BRFSS only.
¶¶¶ Guam did not collect BRFSS data in 2009 and 2010.
**** Estimates might be unreliable; relative standard error >0.30.

also correlated positively with 2009 H1N1 state coverage (*5*) among children (r = 0.72) and adults (r = 0.72). Among adults, state coverage in 2009–10 was correlated positively with coverage in 2007–08 (r = 0.81) (CDC, unpublished data, 2010).

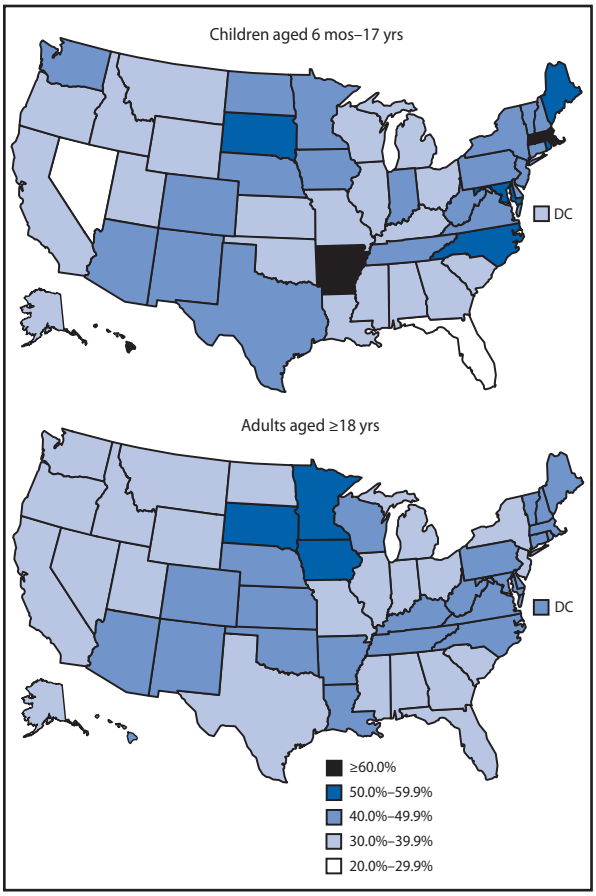
Among adults aged 18–49 years, national seasonal vaccination coverage was higher for persons with high-risk conditions (36.2%) than without high-risk conditions (27.6%). This difference also was statistically significant in 10 states (Table 1). Coverage ranged from 21.2% (Mississippi) to 63.4% (Minnesota) for the high-risk group, and for the persons not at high risk, 19.4% (Florida) to 43.1% (South Dakota). Seasonal coverage for adults aged 18–49 years with high-risk conditions was similar to coverage in 2008–09. Among younger adults without such conditions, coverage was 30% higher in 2009–10 than in 2008–09 (20.8%) (*3*; CDC, unpublished data, 2010).

National seasonal influenza vaccination coverage was 45.0% for adults aged 50–64 years and 68.0% for adults aged ≥65 years, similar to previous seasons. Coverage ranged from 33.7% (Florida) to 56.3% (Hawaii) for adults aged 50–64 years and from 59.3% (Idaho) to 78.6% (New Mexico) for adults aged ≥65 years (Table 1).

Among all persons aged ≥6 months, coverage was higher among non-Hispanic whites (42.5%) compared with non-Hispanic blacks (32.2%) and Hispanics (33.6%) (Table 2), and was similar to Asians (41.7%; 95% confidence interval [CI] = 38.1–45.3) and American Indians/Alaska Natives (40.1%; CI = 35.7–44.5). Among adults, blacks (31.1%; CI = 29.1–33.1) and Hispanics (30.9%; CI = 28.2–33.6) had lower coverage than whites (43.0%; CI = 42.4–43.6). Among children, coverage among blacks was lowest (32.7%; CI = 29.5–35.9), followed by Hispanics (39.3%; CI = 36.0–42.6) and whites (40.3%; CI = 38.9–41.7).

Coverage for persons aged ≥6 months was higher during September and October and lower in November compared with 2008–09 (Figure 2). One or more seasonal doses reportedly were administered to 29.1 million children (CI = 28.1–30.0 million) and 89.7 million adults (CI = 88.3–91.2 million), for an estimated 118.8 million vaccinees (CI = 117.1–120.5 million) during August 2009–January 2010.

FIGURE 1. Estimates of child and adult state-specific cumulative seasonal influenza vaccination coverage* — Behavioral Risk Factor Surveillance System (BRFSS) and National H1N1 Flu Survey (NHFS) combined, 50 U.S. states and the District of Columbia, end of January 2010



*Coverage estimates are for persons with reported vaccination during August 2009–January 2010 who were interviewed during October 2009–February 2010.

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Editorial Note

Seasonal influenza vaccination during 2009–10 occurred under unique circumstances. In October 2009, the distribution of influenza A (H1N1) 2009 monovalent vaccine was added to the ongoing distribution of the seasonal influenza vaccine that started in August. The populations recommended for 2009 H1N1 vaccination were different from, but overlapped, those recommended for seasonal vaccination (*1,2*). For this unusual season, coverage for seasonal vaccination of children aged 6 months–17 years (40%) was higher than coverage estimates for the previous season (24% from BRFSS [*3*] and 30% from NHIS [CDC, unpublished data, 2009]). Coverage for healthy adults aged 18–49 years also was moderately higher (*3*). These higher coverage levels for 2009–10 might reflect increased awareness of the seriousness of influenza associated with the H1N1 pandemic. Influenza activity due to 2009 H1N1 virus increased during summer and early fall, when only seasonal vaccine was available, and was associated with a threefold higher levels of hospitalizations and deaths among persons aged <65 years compared with previous seasons (*6*).¶ Higher coverage in children also might reflect the first full year of expansion of ACIP recommendations for all children aged 6 months–18 years to receive annual influenza vaccination (*2*). Nevertheless, despite increased attention to influenza during the fall, no significant increase in coverage occurred among those aged 18–49 years with high-risk conditions, underscoring the challenges associated with increasing coverage in this group.

Seasonal vaccination coverage varied widely among states, particularly among children. The strong positive correlations between 2009–10 seasonal state levels with both current 2009 H1N1 vaccine coverage and with previous season coverage suggests that certain factors that differ among states (e.g., medical-care delivery infrastructure, population norms, and effectiveness of state and local immunization programs) might explain at least part of the state-level variation in vaccination levels. Increased coverage in September likely reflects the early availability of vaccine supplies, coupled with increased demand, compared with previous seasons.

The lower seasonal influenza vaccination coverage for Hispanics and blacks observed during 2009–10 compared with whites among persons aged ≥6 months also has been observed in previous seasons among adults (*3*). The reasons for racial/ethnic disparities and their variations by state are multifactorial. Broad use of interventions to systematize offering of vaccination (e.g., routine offering of vaccine to all patients) is one important component of efforts to reduce these disparities (*7*).

The estimate of 119 million persons in the United States receiving at least 1 dose of seasonal vaccine

¶ Additional information available at http://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm.

TABLE 2. Estimated seasonal influenza vaccination coverage among persons aged ≥6 months,* by U.S. Department of Health and Human Services (HHS) region, state, and racial/ethnic group — United States, Behavioral Risk Factor Surveillance System (BRFSS) and National 2009 H1N1 Flu Survey (NHFS), end of January 2010[†]

HHS region and state/area	Non-Hispanic white persons aged ≥6 mos			Non-Hispanic black persons aged ≥6 mos			Hispanic persons aged ≥6 mos			Persons of other race/ethnicity aged ≥6 mos		
	No.[§¶]	%	(95% CI**)	No.	%	(95% CI)	No.	%	(95% CI)	No.	%	(95% CI)
All states combined	**201,361**	**42.5[BHO]**	**(±0.6)**	**21,864**	**32.2[WO]**	**(±1.9)**	**20,082**	**33.6[WO]**	**(±2.3)**	**17,445**	**40.0[WBH]**	**(±2.4)**
Region 1	**22,185**	**48.8**	**(±2.0)**	**767**	**45.2**	**(±8.6)**	**1,252**	**42.7**	**(±6.4)**	**1,146**	**46.9**	**(±6.4)**
Connecticut	3,653	44.9	(±4.0)	268	34.8	(±14.2)[††]	327	35.8	(±9.6)	255	38.4	(±13.4)[††]
Maine	5,014	48.3	(±2.7)	—[§§]	—[§§]	—[§§]	79	47.3	(±18.5)[††]	151	35.8	(±13.6)[††]
Massachusetts[¶¶]	5,076	51.8	(±3.9)	313	55.6	(±12.8)[††]	505	47.1	(±10.4)[††]	401	49.2	(±9.3)
New Hampshire	3,651	46.3[O]	(±3.4)	—[§§]	—[§§]	—[§§]	59	39.4[O]	(±18.8)[††]	124	71.6[WH]	(±15.7)[††]
Rhode Island	2,655	52.4[B]	(±4.0)	118	25.9[WHO]	(±12.3)[††]	248	47.4[B]	(±17.5)[††]	118	46.8[B]	(±16.7)[††]
Vermont[¶¶]	2,136	41.2	(±3.7)	—[§§]	—[§§]	—[§§]	34	—[§§]	—[§§]	97	38.6	(±18.4)[††]
Region 2	**8,115**	**42.2[BH]**	**(±2.1)**	**1,151**	**29.1[WO]**	**(±6.1)**	**1,112**	**34.1[WO]**	**(±6.4)**	**686**	**45.4[BH]**	**(±9.2)**
New Jersey[¶¶]	4,103	43.0[BHO]	(±2.6)	595	28.6[W]	(±8.0)	557	26.9[W]	(±7.4)	384	34.0[W]	(±7.3)
New York	4,012	41.8[B]	(±2.9)	556	29.3[WO]	(±8.0)	555	37.3	(±8.6)	302	50.7[B]	(±13.1)[††]
Region 3	**20,372**	**45.4[B]**	**(±1.6)**	**3,940**	**34.0[W]**	**(±4.0)**	**1,130**	**38.7**	**(±6.7)**	**1,441**	**40.5**	**(±7.0)**
Delaware	2,881	44.6[B]	(±4.1)	480	32.2[W]	(±8.2)	187	49.1	(±15.8)[††]	251	42.5	(±14.5)[††]
District of Columbia[¶¶]	1,307	54.0[BH]	(±8.5)	1,156	31.7[W]	(±5.8)	181	34.2[W]	(±10.6)[††]	175	45.6	(±14.2)[††]
Maryland	3,890	47.8[B]	(±2.9)	1,117	37.2[W]	(±6.4)	227	39.6	(±10.8)[††]	398	49.4	(±11.1)[††]
Pennsylvania	5,603	43.4	(±2.6)	597	35.6	(±10.3)[††]	290	42.5	(±13.2)[††]	233	32.2	(±15.9)[††]
Virginia[¶¶]	3,110	48.0[BH]	(±3.2)	518	29.7[W]	(±7.0)	195	33.4[W]	(±11.8)[††]	282	40.6	(±11.1)[††]
West Virginia	3,581	43.8	(±2.9)	72	34.9	(±15.0)[††]	50	—[§§]	—[§§]	102	39.9	(±19.0)[††]
Region 4	**34,229**	**41.4[BHO]**	**(±1.4)**	**8,404**	**28.9[W]**	**(±3.0)**	**1,874**	**25.4[WO]**	**(±4.8)**	**1,671**	**33.4[WH]**	**(±5.3)**
Alabama	3,419	38.9[B]	(±3.5)	1,174	27.4[W]	(±5.2)	124	35.4	(±16.6)[††]	152	32.4	(±15.3)[††]
Florida	8,474	35.8[H]	(±2.2)	898	28.3	(±8.9)	859	22.7[W]	(±6.7)	374	26.0	(±9.7)
Georgia	2,703	39.7[BH]	(±4.1)	901	28.0[W]	(±7.0)	220	23.2[W]	(±11.5)[††]	194	28.7	(±12.2)[††]
Kentucky	4,579	40.8	(±3.3)	569	47.7	(±14.0)[††]	107	40.3	(±20.7)[††]	194	40.2	(±13.5)[††]
Mississippi	4,056	42.6[B]	(±3.6)	2,093	23.7[W]	(±3.9)	117	32.8	(±14.5)[††]	128	29.8	(±16.7)[††]
North Carolina[¶¶]	3,992	50.8[B]	(±5.7)	768	32.8[W]	(±6.8)	218	40.2	(±12.5)[††]	272	42.4	(±14.1)[††]
South Carolina	3,703	43.0[BH]	(±3.7)	1,476	25.4[WO]	(±5.2)	132	24.4[W]	(±14.1)[††]	213	39.3[B]	(±12.6)[††]
Tennessee	3,303	45.3[B]	(±3.9)	525	31.0[W]	(±8.1)	97	—[§§]	—[§§]	144	48.5	(±18.1)[††]
Region 5	**24,022**	**41.6[BO]**	**(±1.3)**	**2,978**	**30.1[W]**	**(±5.0)**	**1,391**	**38.5**	**(±7.2)**	**1,351**	**34.4[W]**	**(±5.2)**
Illinois	3,444	42.4[BO]	(±3.3)	610	29.4[W]	(±11.4)[††]	510	37.0	(±11.6)[††]	267	30.4[W]	(±10.9)[††]
Indiana	5,026	40.9	(±2.6)	727	42.8	(±13.0)[††]	365	41.2	(±14.8)[††]	191	34.2	(±13.6)[††]
Michigan	4,068	38.1	(±2.8)	822	27.4	(±10.4)[††]	141	32.7	(±14.6)[††]	292	29.2	(±9.2)
Minnesota	4,147	53.9[B]	(±3.7)	126	29.7[W]	(±12.6)[††]	133	47.1	(±19.3)[††]	222	43.7	(±13.8)[††]
Ohio	4,887	39.3[B]	(±2.5)	525	27.9[W]	(±6.7)	123	38.6	(±13.9)[††]	268	33.6	(±10.6)[††]
Wisconsin	2,450	39.7	(±3.8)	168	33.0	(±12.0)[††]	119	46.9	(±20.2)[††]	111	45.6	(±18.0)[††]
Region 6	**17,519**	**43.1[B]**	**(±1.9)**	**2,750**	**34.4[WO]**	**(±4.6)**	**5,616**	**38.6**	**(±4.7)**	**1,971**	**43.7[B]**	**(±7.0)**
Arkansas[¶¶]	2,767	53.1[B]	(±7.1)	434	32.1[WO]	(±9.5)	145	44.5	(±16.1)[††]	146	54.5[B]	(±14.2)[††]
Louisiana	3,211	43.5[B]	(±3.2)	1,113	34.0[W]	(±5.2)	135	45.0	(±13.6)[††]	158	45.0	(±20.3)[††]
New Mexico	2,904	42.6[O]	(±4.1)	88	54.3	(±15.6)[††]	1,977	45.0[O]	(±6.1)	537	58.2[WH]	(±9.6)
Oklahoma	2,824	42.8[H]	(±3.7)	257	33.4	(±12.4)[††]	290	30.8[W]	(±10.8)[††]	598	37.2	(±7.6)
Texas	5,813	41.3	(±2.8)	858	34.8	(±7.5)	3,069	38.0	(±5.4)	532	42.7	(±11.7)[††]
Region 7	**23,355**	**43.7[HO]**	**(±1.9)**	**815**	**40.9**	**(±9.7)**	**1,204**	**36.3[W]**	**(±6.6)**	**921**	**35.2[W]**	**(±6.7)**
Iowa	4,176	51.0[BH]	(±3.0)	83	22.0[W]	(±11.3)[††]	182	24.6[W]	(±9.6)	112	41.2	(±16.0)[††]
Kansas	8,091	43.4[B]	(±2.1)	365	33.8[W]	(±8.1)	525	34.1	(±9.4)	416	36.4	(±8.1)
Missouri	2,963	38.2	(±3.9)	266	43.2	(±14.0)[††]	110	40.5	(±16.7)[††]	165	33.1	(±13.2)[††]
Nebraska	8,125	48.5[O]	(±2.5)	101	54.4[O]	(±17.1)[††]	387	45.1	(±16.0)[††]	228	31.0[WB]	(±11.8)[††]
Region 8	**22,870**	**42.8[B]**	**(±1.8)**	**202**	**30.6[W]**	**(±10.7)[††]**	**1,486**	**38.4**	**(±6.3)**	**1,701**	**40.7**	**(±5.9)**
Colorado[¶¶]	4,328	43.6[B]	(±3.3)	96	26.0[WHO]	(±12.9)[††]	713	41.6[B]	(±8.2)	223	44.8[B]	(±11.8)[††]
Montana	4,131	38.2	(±2.8)	—[§§]	—[§§]	—[§§]	102	—[§§]	—[§§]	545	32.9	(±6.8)
North Dakota	3,323	44.9	(±3.2)	—[§§]	—[§§]	—[§§]	61	33.6	(±19.5)[††]	214	39.7	(±21.6)[††]
South Dakota	3,464	54.3	(±4.0)	—[§§]	—[§§]	—[§§]	69	37.4	(±17.8)[††]	447	47.4	(±10.1)[††]
Utah	3,450	39.8	(±3.8)	—[§§]	—[§§]	—[§§]	250	30.6	(±11.1)[††]	119	33.8	(±12.3)[††]
Wyoming	4,174	39.8	(±3.0)	—[§§]	—[§§]	—[§§]	291	30.8	(±11.7)[††]	153	45.2	(±20.5)[††]
Region 9	**11,503**	**40.7[H]**	**(±3.0)**	**594**	**42.2**	**(±11.2)[††]**	**3,751**	**30.4[WO]**	**(±5.2)**	**4,535**	**40.2[H]**	**(±5.1)**
Arizona	2,547	42.3	(±5.3)	86	28.4[O]	(±16.1)[††]	655	35.1[O]	(±10.4)[††]	298	54.7[BH]	(±14.0)[††]
California	4,233	40.6[H]	(±3.8)	274	45.0[H]	(±13.4)[††]	1,999	30.1[WB]	(±6.0)	710	36.8	(±6.3)
Hawaii	1,675	49.8[O]	(±4.7)	57	63.4	(±24.8)[††]	455	51.0	(±10.5)[††]	3,175	56.4[W]	(±4.1)
Nevada	3,048	35.5[BH]	(±3.4)	177	22.1[W]	(±10.2)[††]	642	20.5[W]	(±8.4)	352	31.4	(±10.2)[††]

TABLE 2. (*Continued*) Estimated seasonal influenza vaccination coverage among persons aged ≥6 months,* by U.S. Department of Health and Human Services (HHS) region, state, and racial/ethnic group — United States, Behavioral Risk Factor Surveillance System (BRFSS) and National 2009 H1N1 Flu Survey (NHFS), end of January 2010†

HHS region and state/area	Non-Hispanic white persons aged ≥6 mos			Non-Hispanic black persons aged ≥6 mos			Hispanic persons aged ≥6 mos			Persons of other race/ethnicity aged ≥6 mos		
	No.§¶	%	(95% CI**)	No.	%	(95% CI)	No.	%	(95% CI)	No.	%	(95% CI)
Region 10	**17,191**	**38.9**	**(±1.6)**	**263**	**30.2**	**(±11.1)††**	**1,266**	**36.3**	**(±6.4)**	**2,022**	**40.1**	**(±5.1)**
Alaska	1,760	39.3	(±6.3)	59	—§§	—§§	110	30.9	(±15.5)††	645	34.6	(±9.0)
Idaho	3,541	33.4	(±2.7)	—§§	—§§	—§§	257	32.2	(±12.7)††	156	46.3	(±14.8)††
Oregon	3,727	38.9	(±3.2)	39	—§§	—§§	269	40.7	(±13.7)††	469	32.7	(±7.7)
Washington	8,163	40.4	(±2.3)	141	35.7	(±15.6)††	630	34.7	(±8.2)	752	43.5	(±7.7)
*Median****	*3,653*	*42.8*		*499*	*32.2*		*248*	*37.3*		*233*	*39.9*	
*Range****	*1,307–8,474*	*33.4–54.3*		*57–2,093*	*22.0–63.4*		*59–3,069*	*20.5–51.0*		*97–3,175*	*26.0–71.6*	
U.S. territories†††	**185**	**31.6^{BH}**	**(±8.0)**	**559**	**14.5^{W}**	**(±3.9)**	**1,775**	**10.9^{W}**	**(±2.9)**	**38**	**—§§**	**—§§**
Guam§§§	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—§§	—§§	—§§	—§§	—§§	—§§	1,684	10.8	(±3.1)	—§§	—§§	—§§
U.S. Virgin Islands¶¶¶	185	31.6^{B}	(±8.0)	559	14.5^{W}	(±3.9)	91	—§§	—§§	38	—§§	—§§

NOTE: Superscripted letters indicate that the value was significantly different (p<0.05) than the value for another race/ethnic group (W = non-Hispanic white, B = non-Hispanic black, H = Hispanic, O = other race/ethnicity).

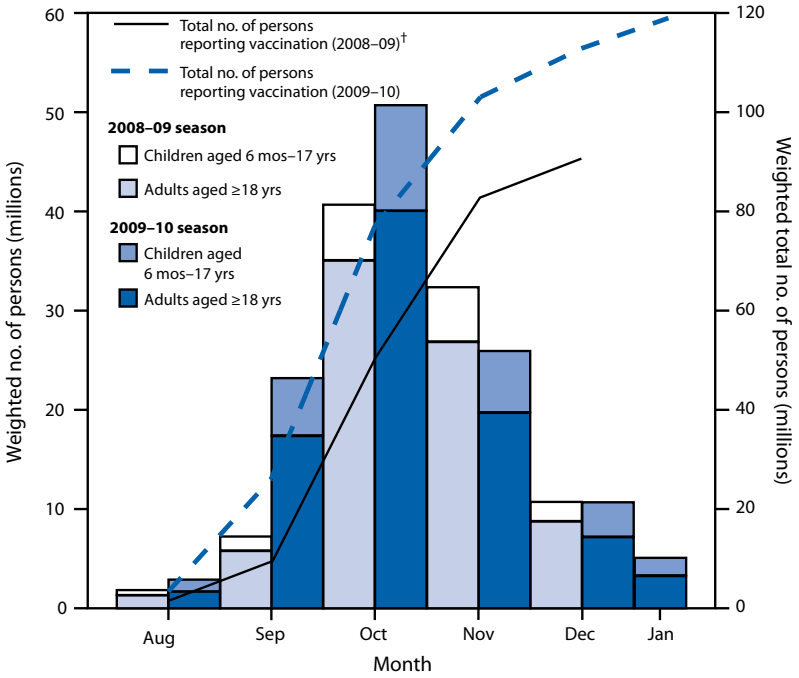
* Coverage estimates are for persons with reported vaccination during August 2009–January 2010 who were interviewed during October 2009–February 2010.
† Percentages are weighted to the U.S. population.
§ Respondents with missing vaccination information were excluded; the missing rates are 7.5% from BRFSS and 2.8% from NHFS.
¶ Unweighted sample size.
** Confidence interval.
†† Estimates might be unreliable because confidence interval half-width is >10.
§§ Estimates might be unreliable because relative standard error >0.30.
¶¶ Includes adult data from BRFSS, but no child BRFSS data were collected.
*** Excludes U.S. territories.
††† Estimates for U.S territories are from BRFSS only
§§§ Guam did not collect BRFSS data in 2009 and 2010.
¶¶¶ Estimates are limited to persons aged ≥18 years.

certainly is an overestimate because only 114–115 million doses were distributed in the United States. The actual number of first doses available to be administered to the surveyed population was even lower because of unused doses, a second dose administered to children aged <9 years, and institutional use of doses (e.g., military and long-term care facilities not surveyed by BRFSS). The overestimate based on the surveys likely was caused by nonresponse bias, which has been observed for telephone surveys conducted during previous seasons, and recall bias for self-report or parental report of vaccination.

The findings in this report are subject to at least six other limitations. First, misclassification of H1N1 for seasonal vaccine, unique to this season, might have contributed to some overreporting. However, the high seasonal vaccination coverage in September before 2009 H1N1 vaccine was available suggests that survey respondents generally were able to distinguish between the two types of influenza vaccinations. Second, both BRFSS and NHFS are telephone-based surveys and thus do not include persons without telephone service. Also, BRFSS is limited to households with landlines. Third, response rates for both surveys were low (5), which increases the risk for nonresponse bias. Fourth, for these surveys, self-reported vaccination status is not validated with medical records and is subject to respondents' recall bias. Fifth, combining BRFSS and NHFS estimates increased the sample to approximately 260,000 persons, but differences in survey methods (e.g., different sampling frame, survey questions, operations, response rates, and weighting) might lead to different levels of bias that are averaged in the combined estimates of this report (5). Given all of these factors combined, the net bias (estimated coverage minus actual coverage) range likely is 10%–15%.** This range was probably higher than in previous seasons due, in part, to higher media coverage of the pandemic. Nevertheless, because demand for seasonal influenza vaccination in 2009–10 remained strong even after vaccine was in short supply in some places, a higher proportion of available doses likely were used this season compared with previous seasons. Finally, the 2008–09 BRFSS child coverage data slightly underestimated coverage

** Before estimating the net overreporting bias observed, subtractions from the amount of doses distributed were made for estimates of 6 million unused doses and for additional coverage not included in this report (e.g., an estimate of 2 million second doses to children aged <9 years and approximately 2 million doses administered to persons in the military and nursing homes).

FIGURE 2. Estimated monthly number of persons reporting vaccination for seasonal influenza — Behavioral Risk Factor Surveillance System (BRFSS) and National 2009 H1N1 Flu Survey (NHFS) combined, United States, 2008–09* and 2009–10 influenza seasons



* Based on data from 19 states reporting, weighted to the U.S. population. Survey was conducted to measure vaccination during August–December only.

† For persons aged ≥6 months, 95% confidence intervals for the monthly estimates of the two seasons do not overlap.

through January and were based on only 19 states reporting (*3*). However, 2008–09 estimates of overall coverage levels and distribution by month matched those of the 2007–08 season.

Even with increased demand for vaccination this season, influenza vaccination levels were well below *Healthy People 2010* targets of 60% for noninstitutionalized adults aged 18–64 years with high-risk conditions and 90% for adults aged ≥65 years (objectives 14-29a and 14-29c) (*8*). School-located vaccination was implemented in many communities for 2009 H1N1 vaccination (CDC, unpublished data, 2010), and the experience acquired might lead to greater use of this strategy in fall 2010, and thereby contribute to ongoing gains in influenza vaccination.

Acknowledgments

The findings in this report are based, in part, on contributions by KR Copeland, N Ganesh, M Stanislawski, and N Davis, National Opinion Research Center, Chicago, Illinois; state BRFSS coordinators; the Div of Behavioral Science, Office of Surveillance, Epidemiology, and Laboratory Svcs; and the H1N1 Vaccine Coverage Monitoring Team, CDC.

What is already known on this topic?

The 2009–10 influenza season was highly unusual because 1) public awareness of the potential seriousness of influenza was heightened by media coverage of H1N1 pandemic–associated hospitalizations and deaths, especially among younger persons; 2) in the fall, the distribution of two separate influenza vaccines began, with distinct, although overlapping, recommendations from the Advisory Committee on Immunization Practices (ACIP); and 3) it was the first full season in which ACIP's recommendation to vaccinate all children aged 5–18 years was implemented.

What is added by this report?

Compared with the previous influenza season, 2009–10 saw a 67% relative increase in estimated coverage for children and a 30% relative increase for adults aged 18–49 years without high-risk conditions.

What are the implications for public health practice?

Health departments should identify strategies that increase coverage (e.g., school-located vaccination programs and office-based protocols, such as reminder/recall and standing orders) and other community interventions to supplement the routine vaccination services provided by health-care providers.

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Licensure of a High-Dose Inactivated Influenza Vaccine for Persons Aged ≥65 Years (Fluzone High-Dose) and Guidance for Use — United States, 2010

Persons aged ≥65 years are at greater risk for hospitalization and death from seasonal influenza compared with other age groups (*1,2*), and they respond to vaccination with lower antibody titers to influenza hemagglutinin (an established correlate of protection against influenza) compared with younger adults (*3*). On December 23, 2009, the Food and Drug Administration (FDA) licensed an injectable inactivated trivalent influenza vaccine (Fluzone High-Dose, Sanofi-Pasteur) that contains an increased amount of influenza virus hemagglutinin antigen compared with other inactivated influenza vaccines such as Fluzone. Fluzone High-Dose is licensed as a single dose for use among persons aged ≥65 years and will be available beginning with the 2010–11 influenza season. The Advisory Committee on Immunization Practices (ACIP) reviewed data from prelicensure clinical trials on the safety and immunogenicity of Fluzone High-Dose and expressed no preference for the new vaccine over other inactivated trivalent influenza vaccines (*4*). This report summarizes the FDA-approved indications for Fluzone High-Dose and provides guidance from ACIP for its use.

Standard dose inactivated trivalent influenza vaccines contain a total of 45 μg (15 μg of each of the three recommended strains) of influenza virus hemagglutinin antigen per 0.5mL dose (*5*). In contrast, Fluzone High-Dose is formulated to contain a total of 180 μg (60 μg of each strain) of influenza virus hemagglutinin antigen in each 0.5mL dose. Like other inactivated influenza vaccines, Fluzone High-Dose is administered as an intramuscular injection (*6*). Fluzone High-Dose is available as a single-dose prefilled syringe formulation and is distinguished from Fluzone by a gray syringe plunger rod. As with other 2010–11 influenza vaccines, Fluzone High-Dose will contain antigens of the three recommended virus strains: A/California/7/2009 (H1N1)-like, A/Perth/16/2009 (H3N2)-like, and B/Brisbane/60/2008-like (*7*).

Immunogenicity data from three studies among persons aged ≥65 years indicated that, compared with standard dose Fluzone, preparations of Fluzone High-Dose elicited significantly higher hemagglutination inhibition (HI) titers against all three influenza virus strains that were included in seasonal influenza vaccines recommended during the study period (*8–10*). In one study, prespecified criteria for superiority, defined as when the lower 95% confidence limit of 1) a ratio of geometric mean HI titers is >1.5 for at least two strains and 2) the difference in fourfold rise of HI titers is >10% for at least two strains, were demonstrated for persons aged ≥65 years who received Fluzone High-Dose compared with Fluzone for influenza A(H1N1) and influenza A(H3N2) antigens. Prespecified criteria for noninferiority to Fluzone were demonstrated for the influenza B antigen (*6,9*). Whether the higher postvaccination immune responses observed among Fluzone High-Dose vaccine recipients will result in greater protection against influenza illness is unknown.

Solicited injection site reactions and systemic adverse events were more frequent after vaccination with Fluzone High-Dose compared with standard Fluzone, but typically were mild and transient (*8–10*). In the largest study, 915 (36%) of 2,572 persons who received Fluzone High-Dose, compared with 306 (24%) of 1,275 persons who received Fluzone, reported injection site pain ≤7 days after vaccine administration. In the same study, significantly more Fluzone High-Dose recipients (1.1%) reported moderate (>100.4°F–≤102.2°F [>38°C–≤39°C]) to severe (>102.2°F [>39°C]) fever, compared with Fluzone recipients (0.3%)(*9*).

ACIP Guidance for Use of Fluzone High-Dose

Fluzone High-Dose may be used for persons aged ≥65 years. All persons aged ≥6 months are recommended for annual influenza vaccination beginning with the 2010–11 influenza season. ACIP has not expressed a preference for any specific licensed inactivated trivalent influenza vaccine, including Fluzone High-Dose, for use in persons aged ≥65 years (*4*). Data demonstrating greater protection against influenza illness after vaccination with Fluzone High-Dose are needed to evaluate whether Fluzone High-Dose is a more effective vaccine for persons aged ≥65 years. A

3-year postlicensure study of the vaccine effectiveness of Fluzone High-Dose compared with standard dose inactivated influenza vaccine (Fluzone) was begun in 2009 and should be completed in 2012. As with other inactivated influenza vaccines, Fluzone High-Dose should not be administered to anyone with a known hypersensitivity to egg proteins or influenza vaccine. Adverse events after receipt of any vaccine should be reported to the Vaccine Adverse Event Reporting System at http://vaers.hhs.gov.

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CDC Grand Rounds: Current Opportunities in Tobacco Control

Tobacco use is the world's leading single preventable cause of death. Worldwide tobacco-related deaths now exceed 5 million a year. Left unchecked, the number is expected to exceed 8 million a year by 2030, and 80% of those tobacco-related deaths will occur in low- and middle-income countries (*1,2*). In the United States, tobacco use is the single leading preventable cause of disease, disability, and death. Each year, 443,000 U.S. residents die from cigarette smoking and exposure to secondhand smoke, and another 8.6 million have a serious illness caused by smoking (*3*). In 2008, 20.6% (approximately 46 million) of U.S. adults were current smokers (*4*). Smoking costs the United States $96 billion in medical costs and $97 billion in lost productivity annually (*3*). A particular concern is that progress in reducing smoking rates among young persons and adults has stalled. After a substantial decline from 1997 (36.4%) to 2003 (21.9%), the decline in smoking rates among high school students slowed and remained relatively unchanged from 2003 (21.9%) to 2007 (20.0%).* Adult smoking prevalence declined steadily from 1965 (42.4%) through the 1980s; however, the decline in smoking rates among adults began to slow in the 1990s and remained relatively unchanged from 2004 (20.9%) to 2008 (20.6%) (*4*). By achieving a modest decline in smoking prevalence worldwide (from 25% to 20%) through further use of tobacco control measures, 100 million deaths can be prevented by 2020 (*1*).

The World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), signed by 168 countries, went into effect in February 2005.† The treaty commits countries to protect the public's health by adopting various measures to reduce demand for tobacco. Those measures include increased pricing of tobacco products, protection from exposure to tobacco smoke, and efforts to educate the public and consumers about the health risks associated with tobacco use. They also include regulation of product contents, packaging, and advertising. To support that effort, the WHO MPOWER§ policy package outlines objectives and interventions countries can adopt to reduce the supply of and demand for tobacco products to combat global tobacco use (*2*).

In 2007, the Institute of Medicine (IOM) presented a blueprint for action to "reduce smoking so substantially that it is no longer a public health problem for our nation." IOM called for a two-pronged strategy to include 1) strengthening and fully implementing traditional evidence-based tobacco control measures, and 2) changing the regulatory landscape to permit federal regulation of tobacco product content, design, marketing, and distribution (*5*). Traditional evidence-based interventions that have had the most success include price increases, smoke-free policies that prohibit smoking in all indoor areas of workplaces and public places, aggressive media campaigns, access to cessation services, comprehensive advertising bans, and graphic warning labels on tobacco products.

Increasing the price of cigarettes discourages initiation among youths, prompts quit attempts, and reduces average cigarette consumption among those who continue to smoke (*5*). As tobacco prices go up, for example, consumption of tobacco products goes down (Figure 1). Evidence from the United States indicates that a 10% increase in the price reduces cigarette consumption by about 4% (*6*). Cigarette excise taxes increase cigarette prices, thereby reducing cigarette use and smoking-related death and disease. In 2009, the federal government, 14 states, and the District of Columbia (DC) increased cigarette excise taxes. On December 31, 2009, cigarette excise taxes among all states ranged from $0.07 a pack in South

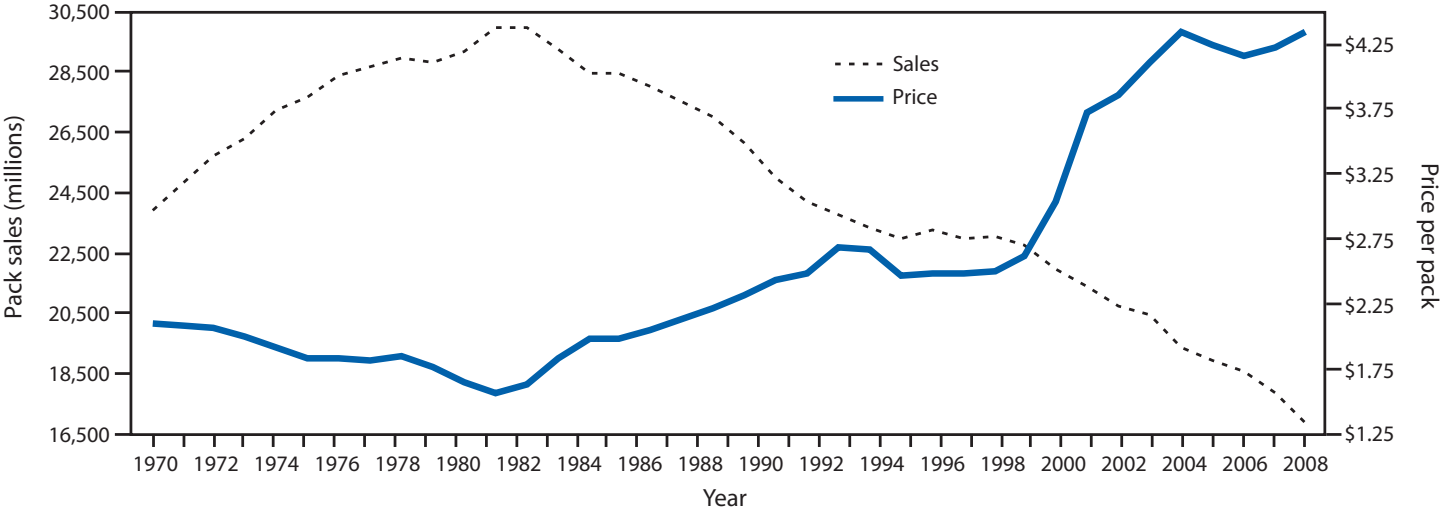
* CDC. Youth Risk Behavior Survey, 1991–2007. Available at http://www.cdc.gov/healthyyouth/yrbs/pdf/yrbs07_us_tobacco_use_trend.pdf.

† Additional information available at http://www.who.int/fctc/en.

§ MPOWER is an acronym derived from key elements of the policy package: Monitor tobacco use and prevention policies; Protect people from tobacco smoke; Offer help to quit tobacco use; Warn about the dangers of tobacco; Enforce bans on tobacco advertising, promotion, and sponsorship; and Raise taxes on tobacco. Additional information available at http://www.who.int/entity/tobacco/mpower/mpower_english.pdf.

This is the first report in a new series of occasional MMWR *reports entitled CDC Grand Rounds. These reports are based on grand rounds presentations at CDC on high-profile issues in public health science, practice, and policy. Information regarding CDC Grand Rounds is available at http://www.cdc.gov/about/grand-rounds.*

FIGURE 1. Cigarette sales and average price per pack* — United States, 1970–2008



SOURCE: Chaloupka FJ. The economics of tobacco taxation. Chicago, IL: ImpacTEEN, University of Illinois at Chicago; 2009. Available at http://www.impacteen.org/generalarea_PDFs/Chaloupka_TobaccoTaxes_AK_041609.pdf.
* Adjusted to February 2009 dollars.

Carolina to $3.46 a pack in Rhode Island, with a national mean of $1.34 per pack (*7*). Although many countries have moderate taxes on tobacco products that comprise more than 30% of the sales price, inflation led to a decrease in the effect taxes had on the affordability of cigarettes over time (*8*).

Strong smoke-free policies substantially improve indoor air quality, reduce negative health outcomes among nonsmokers, decrease consumption, encourage smokers to quit, change social norms regarding the acceptability of smoking, and reduce the risk for cardiovascular disease (*9*). In 2007, only 11 countries had national laws prohibiting smoking in public places: Botswana, France, Iran, Ireland, Italy, New Zealand, Niger, Norway, Sweden, United Kingdom, and Uruguay (Figure 2) (*8*). Although on December 31, 2009, a total of 21 U.S. states and DC had comprehensive smoke-free laws in effect that prohibit smoking in workplaces, restaurants, bars, and other public places, about half of U.S. residents are not protected by comprehensive state or local smoke-free laws, and 12 states preempt local communities from passing smoke-free policies.¶

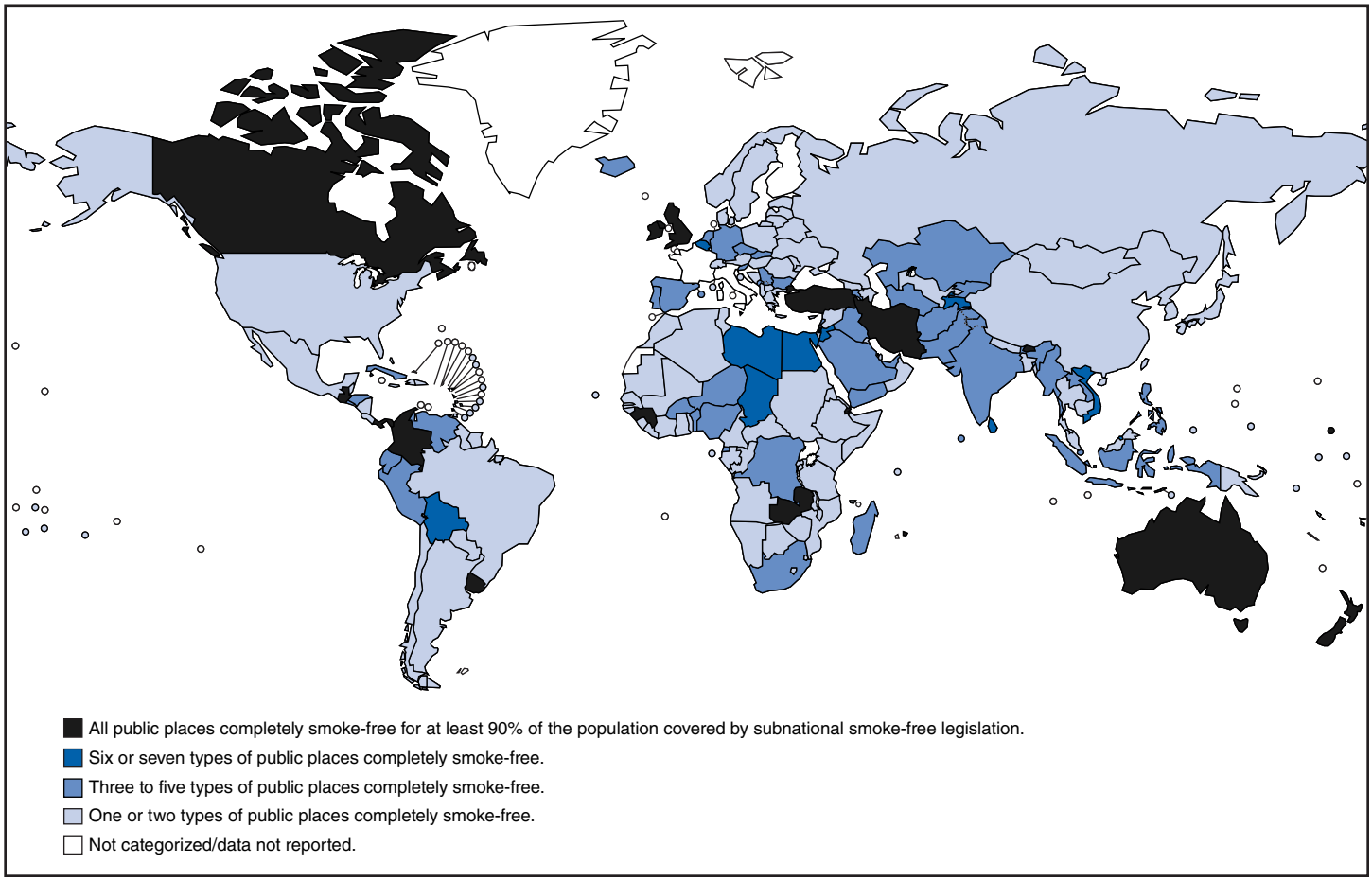
Sustained media campaigns, combined with other interventions, increase negative attitudes about smoking and the tobacco industry, decrease the likelihood of tobacco initiation among youth, and promote smoking cessation (*6,10*). Prominently displaying health warnings on tobacco packaging also has been effective in getting smokers to consider quitting. In Brazil, more than half of smokers surveyed said they changed their opinion about the health consequences of smoking and close to 70% said they wanted to quit as a result of new graphic warning labels (*2*).

The more states spend on comprehensive tobacco control programs, the greater the reductions in smoking, and the longer states invest in such programs, the greater the impact (*10*). States that invest heavily in comprehensive tobacco control have seen cigarette sales drop more than twice as much as the United States as a whole, and youth and adult smoking prevalence declines faster as spending for tobacco control programs increases (*10–12*). States that have sustained and coordinated tobacco control programs, such as Maine, New York, and Washington, have seen 45% to 60% reductions in youth smoking (*10*).

Full implementation of these traditional evidence-based strategies is essential to end the tobacco use epidemic in the United States. In 2002, after approximately a decade of unchanging smoking rates among adults and youths, New York City implemented a multipronged and comprehensive effort to reduce tobacco use that included 1) increasing tobacco taxes, 2) establishing a strong smoke-free policy, 3) implementing aggressive media campaigns, 4) providing free cessation services to smokers, and 5) rigorously evaluating the results. As a result of this effort, which combined multiple interventions, youth smoking

¶ CDC. State Tobacco Activities Tracking and Evaluation (STATE) System. Available at http://www.cdc.gov/tobacco/statesystem.

FIGURE 2. Countries with smoke-free public places* — worldwide, 2008



SOURCE: World Health Organization. WHO report on the global tobacco epidemic, 2009: implementing smoke-free environments. Geneva, Switzerland: WHO; 2009. Available at http://www.who.int/tobacco/mpower/en.
* Includes health-care facilities, universities and other educational facilities, government facilities, indoor offices, restaurants, pubs and bars, and public transport.

rates were reduced by about 50% and adult smoking rates decreased from 21.6% in 2002 to 15.8% in 2008 (*13*).** The decline in adult smoking prevalence since 2002 is greater than that in the United States overall and represents 350,000 fewer smokers in New York City (Figure 3).

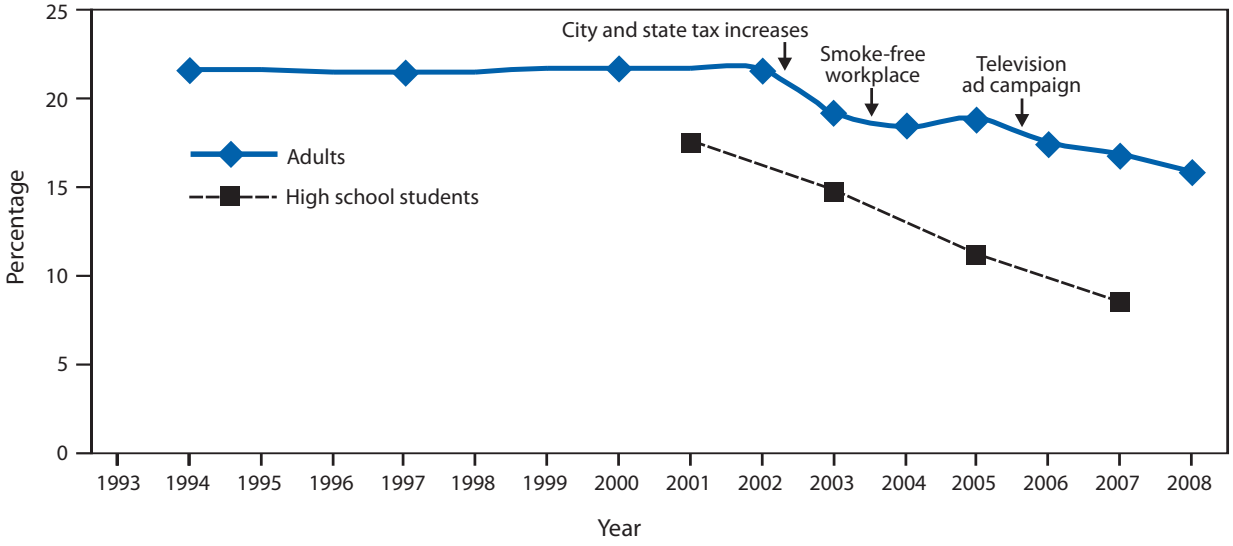
If all U.S. states annually funded comprehensive tobacco control programs at the levels CDC recommended in 2007 (between $9 and $18 per capita; or $3.7 billion nationally), in 5 years, an estimated 5 million fewer persons would smoke, and hundreds of thousands of premature tobacco-related deaths would be prevented (*10*). Approximately 15% of the $25.4 billion states received in 2009 from the Master Settlement Agreement†† and excise tax revenue would be needed to fully fund state tobacco control programs at CDC-recommended levels. However, less than 3% of this tobacco-generated revenue was dedicated to tobacco use prevention, and half the states were funded at less than 20% of CDC-recommended levels (*14*).

In addition to implementing and sustaining interventions, continued or enhanced high quality surveillance for exposure and disease is essential for monitoring progress and shortfalls and for ensuring that interventions have their desired effects. In 1999, WHO, CDC, and the Canadian Public Health Association developed the Global Tobacco

** New York City Department of Health and Mental Hygiene data. Additional information available at http://www.nyc.gov/html/doh/html/pr2009/pr023-09.shtml (adult data) and http://www.nyc.gov/html/doh/html/pr2008/pr001-08.shtml (youth data).

†† In 1998, major U.S. cigarette manufacturers settled litigation brought against them through a master agreement with 46 states. Full text of the agreement is available at http://ag.ca.gov/tobacco/pdf/1msa.pdf.

FIGURE 3. Percentage of current smokers among adults, 1994–2008, and high school students, 2001–2007 — New York City



SOURCES: CDC. Decline in smoking prevalence—New York City, 2002–2006. MMWR 2007;56:604–8. New York City Department of Health and Mental Hygiene.
* Because of small sample sizes, data were grouped into 3-year averages during 1993–2001.

Surveillance System (GTSS), the only worldwide surveillance effort tracking tobacco use among youth and adults. Global youth surveys have been completed in 163 countries. The Global Adult Tobacco Survey (GATS) is initially being implemented in 14 countries. Funding for GATS is provided by the Bloomberg Initiative to Reduce Tobacco Use. The Bill and Melinda Gates Foundation is providing funding for GATS in China and the African region.

In 2003, WHO created the Tobacco Laboratory Network of government, academic, and independent laboratories worldwide to strengthen national and regional capacity for testing and research of the contents and emissions of tobacco products, in accordance with Article 9 of the WHO FCTC. The Network's stated goals are to establish global capacity to test tobacco products for regulatory compliance, to research and develop harmonized standards for contents and emissions testing, to share tobacco research and testing standards and results, to inform risk assessment activities related to the use of tobacco products, and to develop harmonized reporting of results so that data can be transformed into meaningful trend information that can be compared across countries and over time.

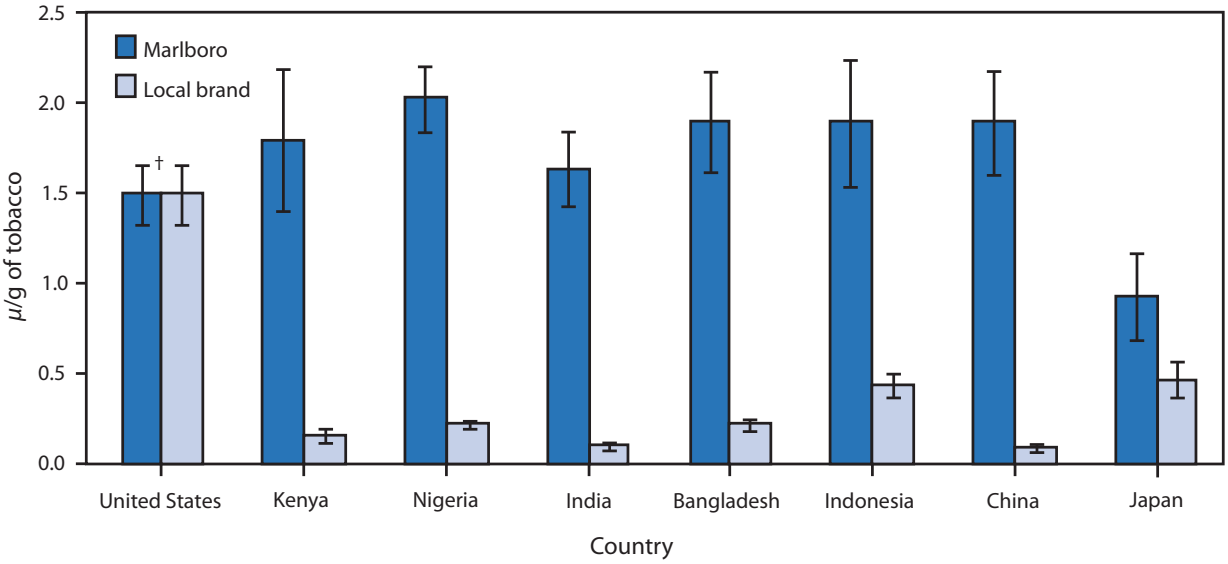
Until enactment of the Family Smoking Prevention and Tobacco Control Act (Tobacco Control Act) [§§] on June 22, 2009, the United States had no product standards for cigarettes or other tobacco products. Without standards, the tobacco industry could make unregulated changes to highly engineered products that appeal to youths and help maintain addiction (*5*). The design of a tobacco product substantially influences the levels of toxic chemicals it emits, as seen through the differences in levels of tobacco-specific nitrosamines that result from the use of different types of cigarettes in different countries (Figure 4) (*15*).

The Tobacco Control Act granted the Food and Drug Administration (FDA) authority to regulate tobacco products so that, without FDA's approval, existing products cannot be altered substantially and new products cannot be introduced. Additionally, the Tobacco Control Act prohibits the use of certain flavors, such as candy, fruit, and spices, in cigarettes. It also establishes a Tobacco Products Scientific Advisory Committee that will make reports and recommendations to FDA on the public health effects of menthol flavoring in cigarettes and the use of dissolvable tobacco products, and provide advice on other critical issues.

Under the Tobacco Control Act, FDA has authority to adopt tobacco product standards to protect the public's health, review and authorize the marketing of new and modified risk tobacco products, and regulate advertising and promotion of tobacco products. Information on ingredients in tobacco products and tobacco smoke must be submitted to FDA, which

[§§] Family Smoking Prevention and Tobacco Control Act. Pub. L. No. 111-31 (June 22, 2009). Available at http://www.gpo.gov/fdsys/pkg/PLAW-111publ31/content-detail.html.

FIGURE 4. Comparison of carcinogenic nitrosamine content of Marlboro and local* brand cigarettes — eight countries, 2000–2001



SOURCE: Ashley DL, Beeson MD, Johnson DR, et al. Tobacco-specific nitrosamines in tobacco from U.S. brand and non-U.S. brand cigarettes. Nicotine Tob Res 2003;5:323–31.
* Comparable, locally popular brand not distributed internationally.
† 95% confidence interval.

then uses this information as it implements various provisions of the Tobacco Control Act, such as when adopting a tobacco product standard. Additionally, as required by law, FDA will reissue a rule originally published in 1996, which establishes restrictions on youth access, and on advertising and promotion practices that are particularly attractive to youths. The rule prohibits the sale of cigarettes and smokeless tobacco to persons aged <18 years and imposes specific marketing, labeling, and advertising requirements.

Provisions of the Tobacco Control Act go into effect at different times. The prohibition against using characterizing flavors in cigarettes went into effect on September 22, 2009. The reissued regulation aimed at reducing access to and appeal of tobacco products to young persons will go into effect on June 22, 2010. Also on June 22, 2010, tobacco product manufacturers may no longer use the terms "light," "low," and "mild" in product labels, labeling, or advertising, and warning statements for smokeless tobacco products will be revised and strengthened. By late 2012, health warnings on cigarette packages and in advertising will include color graphics depicting the negative health consequences of smoking. FDA will use its enforcement authority to ensure that these important public health actions are followed.

The regulation of tobacco products is an important and critical component of an overall comprehensive tobacco prevention and control strategy that will not replace, but will strengthen, existing tobacco control efforts. Tobacco regulation offers opportunities for FDA to work as a partner in tobacco prevention and control, including through collaboration with CDC and other agencies providing expertise in surveillance, research, product design, and evaluation, and state tobacco control programs. In the future, continual evaluation of FDA-established product standards will be needed to measure their effect on the public's health. Effective product standards should protect the public's health by reducing risks to the population as a whole, increasing the likelihood that smokers will quit smoking, and increasing the likelihood that nonsmokers will not start smoking. Monitoring of these new tobacco prevention and control measures and their impact will require expansion of existing surveillance efforts.

Reported by

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Announcement

National Drinking Water Week — May 2–8, 2010

The United States has one of the safest public drinking water supplies in the world (*1*). Tap water not only provides water for daily activities such as drinking, bathing, and cooking, but it also benefits the entire community by providing water to serve businesses, schools, and hospitals, and to promote dental health (*2*). May 2–8, 2010, is National Drinking Water Week, an annual observance whose theme "Only Tap Water Delivers" underscores the many services provided by public drinking water systems in the United States (*3*).

Disinfection and treatment practices, as well as the environmental regulation of water pollutants, have substantially improved domestic water quality over the past century and led to a dramatic decrease in the incidence of waterborne diseases such as cholera (*4,5*). Despite these improvements, sources of drinking water still can become contaminated and lead to adverse health effects (*6*).

New challenges to the U.S. water supply include aging drinking water infrastructure, climate change impacts on water availability and quality, chemical contamination of water sources, emerging pathogens (e.g., *Cryptosporidium*), and the development of new ways to obtain and use water. National Drinking Water Week is a time to highlight the importance of safe drinking water and recognize that protecting and reinvesting in water infrastructure is crucial to the health of persons living in the United States.

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1. US Environmental Protection Agency. Drinking water and health: what you need to know. Available at http://www.epa.gov/safewater/dwh/index.html. Accessed April 22, 2010.
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5. CDC. Summary of notifiable diseases—United States, 2006. MMWR 2008;55:17.
6. US Environmental Protection Agency. Drinking water contaminants. Available at http://www.epa.gov/safewater/contaminants/index.html. Accessed April 22, 2010.

Errata

Vol. 59, No. RR-2

In "Use of a Reduced (4-Dose) Vaccine Schedule for Postexposure Prophylaxis to Prevent Human Rabies: Recommendations of the Advisory Committee on Immunization Practices," errors occurred in the references on page 8. The references below should read as follows:

9. CDC. Rabies prevention—United States, 1984. **MMWR 1984;**33:393–408.
10. CDC. Rabies prevention—United States, 1991: recommendations of the Immunization Practices Advisory Committee (ACIP). **MMWR 1991;**40(No. RR-3).
11. CDC. Human rabies prevention—United States, 1999: recommendations of the Advisory Committee on Immunization Practices (ACIP). **MMWR 1999;**48(No. RR-1).
22. Manickama R, **Basheer MD, Jayakumar R.** Post-exposure prophylaxis (PEP) of rabies-infected Indian street dogs. **Vaccine 2008;**26:6564–8.
27. CDC. Recommendations of the Advisory Committee on Immunization Practices (ACIP): use of vaccines and immune globulins for persons with altered immunocompetence. **MMWR 1993;**42(No. RR-4).
28. CDC. General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). **MMWR 2006;55**(No. RR-15).

Vol. 59, No. 14

In "TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2010, and April 11, 2009 (14th week)," on page 444, data for Varicella (chickenpox) and West Nile virus disease were incorrect. The correct data are presented on the next page.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2010, and April 11, 2009 (14th week)*

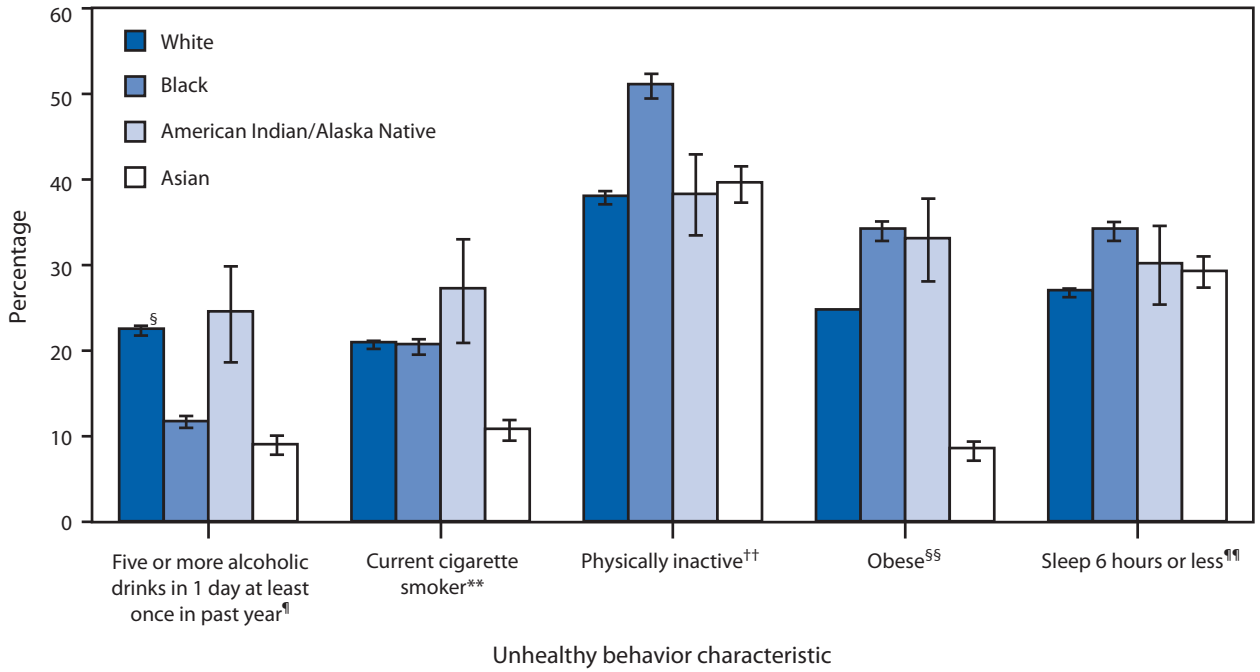
Reporting area	Varicella (chickenpox)§					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive¶				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2010	Cum 2009	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2010	Cum 2009	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2010	Cum 2009
United States	164	284	634	3,919	7,117	—	1	46	2	—	—	0	49	—	—
New England	1	15	33	165	254	—	0	0	—	—	—	0	0	—	—
Connecticut	—	7	23	43	150	—	0	0	—	—	—	0	0	—	—
Maine§	1	2	15	69	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	2	—	2	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	3	10	38	66	—	0	0	—	—	—	0	0	—	—
Rhode Island§	—	0	2	3	4	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	4	12	32	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	18	23	56	291	576	—	0	2	—	—	—	0	1	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Pennsylvania	18	23	56	291	576	—	0	0	—	—	—	0	0	—	—
E.N. Central	62	108	205	1,592	2,608	—	0	4	—	—	—	0	3	—	—
Illinois	6	25	56	391	662	—	0	3	—	—	—	0	0	—	—
Indiana§	5	7	30	180	161	—	0	1	—	—	—	0	1	—	—
Michigan	14	36	84	499	748	—	0	1	—	—	—	0	0	—	—
Ohio	37	29	85	453	843	—	0	0	—	—	—	0	2	—	—
Wisconsin	—	7	57	69	194	—	0	1	—	—	—	0	0	—	—
W.N. Central	9	10	40	161	443	—	0	5	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Kansas§	6	3	19	56	111	—	0	1	—	—	—	0	2	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
Missouri	3	6	30	88	290	—	0	2	—	—	—	0	1	—	—
Nebraska§	N	0	0	N	N	—	0	2	—	—	—	0	6	—	—
North Dakota	—	0	26	15	36	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	2	6	—	0	3	—	—	—	0	2	—	—
S. Atlantic	8	24	77	508	828	—	0	4	—	—	—	0	2	—	—
Delaware§	—	0	2	2	2	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	1	10	—	0	1	—	—	—	0	0	—	—
Florida§	—	14	57	264	499	—	0	1	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Maryland§	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina§	—	0	34	43	130	—	0	2	—	—	—	0	0	—	—
Virginia§	5	0	10	87	28	—	0	2	—	—	—	0	0	—	—
West Virginia	3	8	25	111	159	—	0	0	—	—	—	0	0	—	—
E.S. Central	3	6	29	64	200	—	0	6	2	—	—	0	4	—	—
Alabama§	3	6	27	64	198	—	0	0	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	—	2	—	0	5	2	—	—	0	4	—	—
Tennessee§	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
W.S. Central	46	68	261	779	1,557	—	0	19	—	—	—	0	6	—	—
Arkansas§	8	0	23	34	41	—	0	1	—	—	—	0	0	—	—
Louisiana	—	0	7	19	21	—	0	2	—	—	—	0	4	—	—
Oklahoma	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Texas§	38	67	245	726	1,495	—	0	16	—	—	—	0	4	—	—
Mountain	17	19	62	352	606	—	0	12	—	—	—	0	17	—	—
Arizona	—	0	0	—	—	—	0	4	—	—	—	0	2	—	—
Colorado§	16	8	22	127	216	—	0	7	—	—	—	0	14	—	—
Idaho§	N	0	0	N	N	—	0	3	—	—	—	0	5	—	—
Montana§	1	0	17	73	83	—	0	1	—	—	—	0	1	—	—
Nevada§	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New Mexico§	—	0	12	24	86	—	0	2	—	—	—	0	1	—	—
Utah	—	7	32	127	221	—	0	1	—	—	—	0	1	—	—
Wyoming§	—	0	1	1	—	—	0	1	—	—	—	0	2	—	—
Pacific	—	1	5	7	45	—	0	12	—	—	—	0	12	—	—
Alaska	—	0	4	7	26	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	8	—	—	—	0	6	—	—
Hawaii	—	0	4	—	19	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	6	—	—	—	0	3	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	1	7	30	59	156	—	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. 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/epo/dphsi/phs/infdis.htm.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Prevalence of Selected Unhealthy Behavior Characteristics Among Adults Aged ≥18 Years, by Race* — National Health Interview Survey, United States, 2005–2007†



* Racial categories include persons who indicated a single race only.
† Estimates are age adjusted using the projected 2000 U.S. population as the standard population and using three age groups: 18–44 years, 45–64 years, and ≥65 years. Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. adult population. Denominators for each percentage exclude persons with unknown health behavior characteristics.
§ 95% confidence interval.
¶ The question regarding consumption of five or more drinks in 1 day at least once in the past year was asked of only current drinkers; however, estimates reflect percentage of all adults who engaged in this behavior.
** Smoked at least 100 cigarettes in lifetime and currently smoked.
†† Never engage in any light, moderate, or vigorous leisure-time physical activity.
§§ Defined as a body mass index (weight [kg] / height [m^2]) ≥30.
¶¶ Usual number of hours of sleep in a 24-hour period.

The percentage of adults with selected unhealthy behavior characteristics varied by race during 2005–2007. Asian adults had the lowest prevalence rate of consuming five or more drinks in a single day, currently smoking cigarettes, and obesity. Black adults had the highest prevalence rate of physical inactivity and one of the lowest prevalence rates of consuming five or more drinks in a single day. American Indian/Alaska Native adults were most likely to be current cigarette smokers compared with other racial groups. Overall, physical inactivity was the most prevalent unhealthy behavior.

SOURCE: Schoenborn CA, Adams PF. Health behaviors of adults—United States, 2005–2007. Vital Hlth Stat 2010;10(245). Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_245.pdf.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 24, 2010 (16th week)*

Disease	Current week	Cum 2010	5-year weekly average†	Total cases reported for previous years 2009	2008	2007	2006	2005	States reporting cases during current week (No.)
Anthrax	—	—	—	1	—	1	1	—	
Botulism, total	—	12	2	104	145	144	165	135	
foodborne	—	—	0	12	17	32	20	19	
infant	—	11	1	68	109	85	97	85	
other (wound and unspecified)	—	1	1	24	19	27	48	31	
Brucellosis	1	23	2	116	80	131	121	120	CA (1)
Chancroid	—	13	1	34	25	23	33	17	
Cholera	—	—	0	9	5	7	9	8	
Cyclosporiasis§	1	20	6	132	139	93	137	543	FL (1)
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup virus disease	—	—	0	54	62	55	67	80	
Eastern equine encephalitis virus disease	—	—	—	4	4	4	8	21	
Powassan virus disease	—	—	0	6	2	7	1	1	
St. Louis encephalitis virus disease	—	—	0	12	13	9	10	13	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	1	6	0	30	30	22	29	9	CO (1)
nonserotype b	2	56	4	233	244	199	175	135	AL (1), WA (1)
unknown serotype	5	76	4	218	163	180	179	217	OH (1), MN (1), GA (2), AZ (1)
Hansen disease§	2	14	1	76	80	101	66	87	CA (2)
Hantavirus pulmonary syndrome§	—	1	0	14	18	32	40	26	
Hemolytic uremic syndrome, postdiarrheal§	3	33	3	244	330	292	288	221	TX (1), CA (2)
HIV infection, pediatric (age <13 yrs)††	—	—	1	—	—	—	—	380	
Influenza-associated pediatric mortality§,§§	—	47	2	360	90	77	43	45	
Listeriosis	8	142	11	804	759	808	884	896	NY (2), AZ (1), NV (1), CA (4)
Measles¶¶	1	13	2	66	140	43	55	66	CA (1)
Meningococcal disease, invasive***:									
A, C, Y, and W-135	1	79	7	298	330	325	318	297	FL (1)
serogroup B	—	32	3	150	188	167	193	156	
other serogroup	—	3	1	24	38	35	32	27	
unknown serogroup	2	132	14	476	616	550	651	765	CO (1), CA (1)
Mumps	22	811	130	1,883	454	800	6,584	314	NY (8), PA (1), NE (10), MD (1), TX (1), WA (1)
Novel influenza A virus infections†††	—	—	0	43,771	2	4	NN	NN	
Plague	—	—	0	8	3	7	17	8	
Poliomyelitis, paralytic	—	—	—	—	—	—	—	1	
Polio virus Infection, nonparalytic§	—	—	—	—	—	—	NN	NN	
Psittacosis§	—	4	0	8	8	12	21	16	
Q fever, total§,§§§	1	16	2	97	120	171	169	136	
acute	—	10	1	79	106	—	—	—	
chronic	1	6	0	18	14	—	—	—	NE (1)
Rabies, human	—	—	—	4	2	1	3	2	
Rubella¶¶¶	—	1	0	3	16	12	11	11	
Rubella, congenital syndrome	—	—	0	1	—	—	1	1	
SARS-CoV§,****	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	49	4	152	157	132	125	129	
Syphilis, congenital (age <1 yr)††††	—	28	7	370	431	430	349	329	
Tetanus	—	—	0	18	19	28	41	27	
Toxic-shock syndrome (staphylococcal)§	—	26	1	75	71	92	101	90	
Trichinellosis	—	—	0	11	39	5	15	16	
Tularemia	—	3	1	90	123	137	95	154	
Typhoid fever	8	91	7	367	449	434	353	324	NE (1), MD (1), AZ (1), WA (2), CA (3)
Vancomycin-intermediate *Staphylococcus aureus*§	—	17	0	75	63	37	6	2	
Vancomycin-resistant *Staphylococcus aureus*§	—	1	0	—	—	2	1	3	
Vibriosis (noncholera *Vibrio* species infections)§	2	42	3	721	588	549	NN	NN	FL (1), AL (1)
Viral hemorrhagic fever§§§§	—	1	—	NN	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 24, 2010 (16th 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/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

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

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

** 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 281 influenza-associated pediatric deaths associated with 2009 influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 272 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 134 influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.

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

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

††† CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. CDC will report the total number of 2009 pandemic influenza A (H1N1) hospitalizations and deaths weekly on the CDC H1N1 influenza website (http://www.cdc.gov/h1n1flu). In addition, three cases of novel influenza A virus infections, unrelated to the 2009 pandemic influenza A (H1N1) virus, were reported to CDC during 2009.

§§§ 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.

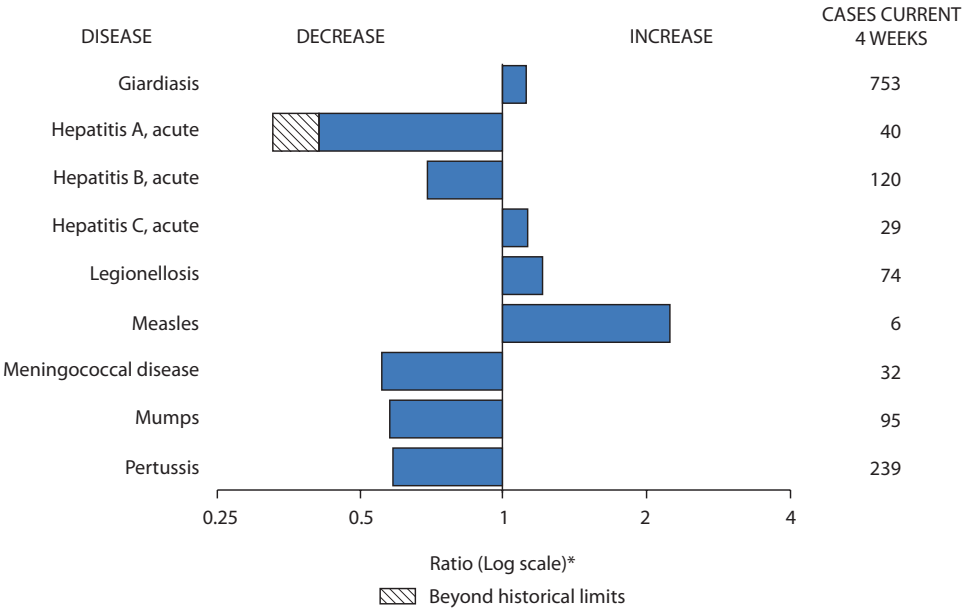
¶¶¶ No rubella cases were reported for the current week.

**** 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 April 24, 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.

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	*Chlamydia trachomatis* infection					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	10,630	23,026	27,389	277,483	387,358	59	117	262	1,334	1,418
New England	602	690	1,398	9,110	12,629	—	6	26	68	116
Connecticut	—	207	736	859	3,445	—	0	22	22	40
Maine†	32	49	75	745	791	—	1	4	14	8
Massachusetts	435	368	767	5,925	6,256	—	1	15	—	36
New Hampshire	—	36	60	170	665	—	1	5	13	17
Rhode Island†	115	67	244	1,044	1,102	—	0	8	5	1
Vermont†	20	23	63	367	370	—	1	9	14	14
Mid. Atlantic	2,923	3,065	4,435	49,902	49,739	10	14	38	152	163
New Jersey	337	426	629	6,067	8,219	—	0	5	—	8
New York (Upstate)	703	607	2,415	9,919	9,255	5	3	16	32	42
New York City	1,315	1,201	2,292	20,450	18,786	—	1	5	10	27
Pennsylvania	568	824	1,020	13,466	13,479	5	9	19	110	86
E.N. Central	127	3,384	4,021	28,968	63,137	10	28	55	278	356
Illinois	—	942	1,428	146	18,712	—	3	8	39	35
Indiana	—	379	602	3,625	7,262	—	4	10	19	76
Michigan	—	880	1,379	14,354	15,207	—	6	11	77	69
Ohio	127	814	1,014	8,049	15,552	10	7	16	101	89
Wisconsin	—	362	480	2,794	6,404	—	8	24	42	87
W.N. Central	20	1,300	1,715	18,147	22,423	12	19	59	202	173
Iowa	8	178	252	3,026	3,137	1	4	13	49	42
Kansas	12	183	573	2,372	3,190	2	2	6	24	18
Minnesota	—	268	337	3,400	4,661	6	5	31	63	35
Missouri	—	502	638	7,527	8,251	—	3	12	33	34
Nebraska†	—	93	236	1,417	1,727	3	2	9	25	18
North Dakota	—	31	92	405	525	—	0	5	2	1
South Dakota	—	0	80	—	932	—	0	10	6	25
S. Atlantic	2,560	4,517	6,224	50,033	77,835	10	17	50	257	274
Delaware	91	88	180	1,349	1,547	—	0	2	1	—
District of Columbia	62	115	178	1,476	2,251	—	0	1	1	2
Florida	587	1,406	1,671	21,227	23,183	9	7	24	105	83
Georgia	7	608	1,322	837	13,376	—	5	31	102	110
Maryland†	429	447	1,031	6,199	6,795	—	1	5	8	10
North Carolina	—	742	1,291	—	13,227	—	0	8	11	35
South Carolina†	643	520	1,421	8,614	7,242	—	1	7	9	16
Virginia†	685	607	926	9,223	8,941	—	1	7	15	14
West Virginia	56	67	137	1,108	1,273	1	0	2	5	4
E.S. Central	773	1,665	2,264	22,786	29,107	2	4	10	59	41
Alabama†	—	439	606	5,418	8,243	1	1	5	20	13
Kentucky	351	280	642	4,653	3,548	—	2	4	20	9
Mississippi	—	449	640	4,813	7,807	—	0	3	4	4
Tennessee†	422	566	734	7,902	9,509	1	1	5	15	15
W.S. Central	486	2,911	5,773	31,956	50,358	5	8	39	78	63
Arkansas†	217	269	416	4,418	4,788	—	1	5	12	9
Louisiana	—	448	1,055	2,922	9,865	—	0	6	11	7
Oklahoma	269	222	2,713	4,848	2,268	2	2	9	11	14
Texas†	—	1,999	3,214	19,768	33,437	3	6	28	44	33
Mountain	1,212	1,406	2,088	19,057	21,523	5	10	25	118	104
Arizona	219	476	743	4,082	7,461	1	0	3	6	9
Colorado	285	382	689	6,020	3,366	3	2	10	36	27
Idaho†	67	64	185	883	1,147	—	2	7	22	11
Montana†	—	55	79	836	1,049	1	1	4	15	9
Nevada†	306	169	478	2,895	3,439	—	0	2	4	6
New Mexico†	240	172	257	1,957	2,380	—	2	8	17	28
Utah	89	114	171	1,847	2,050	—	1	4	13	4
Wyoming†	6	34	69	537	631	—	0	2	5	10
Pacific	1,927	3,424	5,291	47,524	60,607	5	13	27	122	128
Alaska	—	99	134	1,566	1,742	—	0	1	1	1
California	1,645	2,590	4,383	38,543	46,473	3	7	18	73	64
Hawaii	—	118	147	1,399	1,870	—	0	1	—	1
Oregon	—	188	468	1,367	3,316	—	3	10	28	49
Washington	282	369	501	4,649	7,206	2	1	13	20	13
American Samoa	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	1	27	51	—	—	0	0	—	—
Puerto Rico	93	126	331	1,952	2,323	N	0	0	N	N
U.S. Virgin Islands	—	9	21	52	146	—	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 April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Dengue Virus Infection									
	Dengue Fever					Dengue Hemorrhagic Fever†				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	—	0	1	3	NN	—	0	0	—	NN
New England	—	0	1	2	NN	—	0	0	—	NN
Connecticut	—	0	0	—	NN	—	0	0	—	NN
Maine§	—	0	1	2	NN	—	0	0	—	NN
Massachusetts	—	0	0	—	NN	—	0	0	—	NN
New Hampshire	—	0	0	—	NN	—	0	0	—	NN
Rhode Island§	—	0	0	—	NN	—	0	0	—	NN
Vermont§	—	0	0	—	NN	—	0	0	—	NN
Mid. Atlantic	—	0	1	1	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	0	—	NN	—	0	0	—	NN
Pennsylvania	—	0	1	1	NN	—	0	0	—	NN
E.N. Central	—	0	0	—	NN	—	0	0	—	NN
Illinois	—	0	0	—	NN	—	0	0	—	NN
Indiana	—	0	0	—	NN	—	0	0	—	NN
Michigan	—	0	0	—	NN	—	0	0	—	NN
Ohio	—	0	0	—	NN	—	0	0	—	NN
Wisconsin	—	0	0	—	NN	—	0	0	—	NN
W.N. Central	—	0	0	—	NN	—	0	0	—	NN
Iowa	—	0	0	—	NN	—	0	0	—	NN
Kansas	—	0	0	—	NN	—	0	0	—	NN
Minnesota	—	0	0	—	NN	—	0	0	—	NN
Missouri	—	0	0	—	NN	—	0	0	—	NN
Nebraska§	—	0	0	—	NN	—	0	0	—	NN
North Dakota	—	0	0	—	NN	—	0	0	—	NN
South Dakota	—	0	0	—	NN	—	0	0	—	NN
S. Atlantic	—	0	0	—	NN	—	0	0	—	NN
Delaware	—	0	0	—	NN	—	0	0	—	NN
District of Columbia	—	0	0	—	NN	—	0	0	—	NN
Florida	—	0	0	—	NN	—	0	0	—	NN
Georgia	—	0	0	—	NN	—	0	0	—	NN
Maryland§	—	0	0	—	NN	—	0	0	—	NN
North Carolina	—	0	0	—	NN	—	0	0	—	NN
South Carolina§	—	0	0	—	NN	—	0	0	—	NN
Virginia§	—	0	0	—	NN	—	0	0	—	NN
West Virginia	—	0	0	—	NN	—	0	0	—	NN
E.S. Central	—	0	0	—	NN	—	0	0	—	NN
Alabama§	—	0	0	—	NN	—	0	0	—	NN
Kentucky	—	0	0	—	NN	—	0	0	—	NN
Mississippi	—	0	0	—	NN	—	0	0	—	NN
Tennessee§	—	0	0	—	NN	—	0	0	—	NN
W.S. Central	—	0	0	—	NN	—	0	0	—	NN
Arkansas§	—	0	0	—	NN	—	0	0	—	NN
Louisiana	—	0	0	—	NN	—	0	0	—	NN
Oklahoma	—	0	0	—	NN	—	0	0	—	NN
Texas§	—	0	0	—	NN	—	0	0	—	NN
Mountain	—	0	0	—	NN	—	0	0	—	NN
Arizona	—	0	0	—	NN	—	0	0	—	NN
Colorado	—	0	0	—	NN	—	0	0	—	NN
Idaho§	—	0	0	—	NN	—	0	0	—	NN
Montana§	—	0	0	—	NN	—	0	0	—	NN
Nevada§	—	0	0	—	NN	—	0	0	—	NN
New Mexico§	—	0	0	—	NN	—	0	0	—	NN
Utah	—	0	0	—	NN	—	0	0	—	NN
Wyoming§	—	0	0	—	NN	—	0	0	—	NN
Pacific	—	0	0	—	NN	—	0	0	—	NN
Alaska	—	0	0	—	NN	—	0	0	—	NN
California	—	0	0	—	NN	—	0	0	—	NN
Hawaii	—	0	0	—	NN	—	0	0	—	NN
Oregon	—	0	0	—	NN	—	0	0	—	NN
Washington	—	0	0	—	NN	—	0	0	—	NN
American Samoa	—	0	0	—	NN	—	0	0	—	NN
C.N.M.I.	—	—	—	—	NN	—	—	—	—	NN
Guam	—	0	0	—	NN	—	0	0	—	NN
Puerto Rico	—	0	0	—	NN	—	0	0	—	NN
U.S. Virgin Islands	—	0	0	—	NN	—	0	0	—	NN

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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.
† DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	—	11	57	29	56	—	13	66	9	31	1	2	13	4	8
New England	—	0	4	1	3	—	2	21	4	14	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	11	—	—	—	0	1	—	—
Maine§	—	0	1	1	—	—	0	3	2	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	3	—	2	—	0	1	—	—
Rhode Island§	—	0	4	—	3	—	0	20	2	12	—	0	1	—	—
Vermont§	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	1	15	8	9	—	3	23	1	5	—	0	2	1	—
New Jersey	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	1	15	4	3	—	3	22	1	4	—	0	1	1	—
New York City	—	0	3	3	4	—	0	1	—	1	—	0	2	—	—
Pennsylvania	—	0	1	1	1	—	0	0	—	—	—	0	0	—	—
E.N. Central	—	1	8	—	7	—	3	22	1	6	—	1	9	—	3
Illinois	—	0	4	—	2	—	0	1	—	—	—	0	1	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	8	—	2
Michigan	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Ohio	—	0	2	—	2	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	0	5	—	3	—	3	22	1	6	—	0	3	—	1
W.N. Central	—	2	23	1	3	—	0	44	—	—	—	0	5	1	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	3	—	2	—	0	44	—	—	—	0	5	—	—
Missouri	—	1	22	1	1	—	0	2	—	—	—	0	4	1	—
Nebraska§	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	4	19	16	27	—	0	2	3	5	—	0	2	1	—
Delaware	—	0	2	1	2	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	1	1	2	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	2	3	6	—	0	1	1	1	—	0	0	—	—
Maryland§	—	1	4	4	5	—	0	1	1	—	—	0	0	—	—
North Carolina	—	0	4	7	9	—	0	1	1	4	—	0	0	—	—
South Carolina§	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
Virginia§	—	1	13	—	2	—	0	1	—	—	—	0	2	1	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
E.S. Central	—	1	11	2	4	—	0	1	—	1	1	0	5	1	5
Alabama§	—	0	3	1	—	—	0	1	—	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Tennessee§	—	1	10	1	4	—	0	1	—	1	1	0	5	1	5
W.S. Central	—	0	9	1	1	—	0	1	—	—	—	0	0	—	—
Arkansas§	—	0	5	—	—	—	0	0	—	—	—	0	0	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	8	—	1	—	0	1	—	—	—	0	0	—	—
Texas§	—	0	2	1	—	—	0	1	—	—	—	0	0	—	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	0	—	2	—	0	0	—	—	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	2	—	0	0	—	—	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2009 and 2010 are provisional.
† Cumulative total *E. ewingii* cases reported as of this week = 0.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	171	328	653	4,265	4,812	2,131	5,458	6,905	61,451	93,193	27	55	147	860	1,095
New England	9	27	66	198	391	48	89	188	1,014	1,517	—	3	19	14	54
Connecticut	—	6	15	51	78	—	44	122	245	666	—	0	13	4	10
Maine§	6	3	13	60	61	2	3	11	71	50	—	0	2	1	8
Massachusetts	—	11	36	—	160	38	37	81	562	644	—	1	8	—	29
New Hampshire	1	3	12	29	30	1	2	6	39	35	—	0	2	5	4
Rhode Island§	—	1	6	10	17	7	6	19	88	103	—	0	2	3	1
Vermont§	2	4	14	48	45	—	1	5	9	19	—	0	1	1	2
Mid. Atlantic	30	59	103	690	912	464	624	915	9,799	9,615	3	12	27	204	181
New Jersey	—	0	10	—	130	26	89	134	1,254	1,569	—	2	7	21	25
New York (Upstate)	21	24	81	301	316	104	97	397	1,549	1,692	2	4	19	58	42
New York City	4	15	28	200	264	221	220	420	3,845	3,407	—	2	11	41	33
Pennsylvania	5	15	37	189	202	113	197	275	3,151	2,947	1	4	10	84	81
E.N. Central	12	43	75	603	726	39	1,048	1,438	7,991	19,780	2	9	23	114	262
Illinois	—	11	21	129	163	—	314	417	48	5,846	—	3	11	30	50
Indiana	N	0	7	N	N	—	107	209	1,048	2,374	—	1	5	22	30
Michigan	—	13	25	178	190	—	248	503	4,014	5,128	—	0	4	10	9
Ohio	12	16	28	247	234	39	280	362	2,308	4,790	2	2	6	39	35
Wisconsin	—	7	17	49	139	—	86	146	573	1,642	—	2	15	13	138
W.N. Central	8	24	157	363	453	5	273	361	3,611	4,734	3	2	22	59	58
Iowa	2	6	15	70	68	2	31	46	460	527	—	0	1	1	—
Kansas	2	3	14	59	41	3	40	85	459	798	—	0	2	7	9
Minnesota	—	0	135	61	134	—	43	64	520	728	1	0	17	17	13
Missouri	3	9	27	95	143	—	123	172	1,834	2,098	2	1	6	26	23
Nebraska§	1	4	9	66	40	—	22	54	314	436	—	0	3	3	10
North Dakota	—	0	8	6	3	—	2	14	24	22	—	0	2	5	3
South Dakota	—	0	5	6	24	—	0	14	—	125	—	0	0	—	—
S. Atlantic	46	74	136	1,099	1,099	768	1,357	1,798	13,955	22,715	10	13	31	221	283
Delaware	—	0	3	9	8	19	19	37	307	254	—	0	1	2	2
District of Columbia	—	0	2	6	13	13	45	88	575	905	—	0	1	—	1
Florida	30	36	87	520	579	188	393	476	5,687	6,619	7	4	10	71	95
Georgia	3	11	67	285	252	3	200	494	361	4,387	2	3	9	57	67
Maryland§	6	5	12	91	80	134	126	241	1,759	1,787	1	1	6	13	34
North Carolina	N	0	0	N	N	—	243	386	—	4,363	—	0	17	20	20
South Carolina§	4	2	7	34	33	171	160	412	2,499	2,155	—	2	7	32	23
Virginia§	1	9	37	142	121	224	161	272	2,613	2,064	—	1	5	20	28
West Virginia	2	1	5	12	13	16	8	19	154	181	—	0	5	6	13
E.S. Central	1	7	22	79	111	197	470	649	6,162	8,344	1	3	12	47	62
Alabama§	—	4	13	41	55	—	130	187	1,583	2,349	1	0	4	6	18
Kentucky	N	0	0	N	N	95	75	156	1,201	1,028	—	0	5	4	6
Mississippi	N	0	0	N	N	—	137	198	1,356	2,374	—	0	2	4	3
Tennessee§	1	4	18	38	56	102	147	206	2,022	2,593	—	2	10	33	35
W.S. Central	3	7	19	98	95	143	875	1,551	8,487	14,815	1	2	10	47	44
Arkansas§	—	2	9	32	33	77	85	139	1,249	1,408	—	0	3	7	8
Louisiana	—	1	7	35	43	—	143	343	910	3,154	—	0	2	9	8
Oklahoma	3	3	10	31	19	66	64	613	1,279	1,178	1	1	7	28	26
Texas§	N	0	0	N	N	—	560	951	5,049	9,075	—	0	2	3	2
Mountain	24	30	64	436	369	153	164	257	2,162	2,780	6	5	14	121	100
Arizona	1	4	7	44	59	23	58	108	506	820	2	2	10	46	32
Colorado	12	10	26	211	108	14	41	99	752	863	1	1	6	29	28
Idaho§	8	4	10	65	38	1	2	8	24	32	1	0	2	6	2
Montana§	2	2	11	35	29	—	1	6	36	28	1	0	1	1	1
Nevada§	—	2	11	16	20	92	27	94	538	613	1	0	2	5	10
New Mexico§	—	1	8	17	30	22	20	36	221	303	—	1	5	17	15
Utah	—	5	13	33	68	1	6	14	75	106	—	1	4	12	12
Wyoming§	1	1	5	15	17	—	1	7	10	15	—	0	2	5	—
Pacific	38	52	163	699	656	314	528	638	8,270	8,893	1	2	9	33	51
Alaska	—	2	7	28	20	—	20	35	375	280	—	0	3	8	3
California	29	33	60	445	466	287	440	544	7,043	7,249	—	0	4	—	12
Hawaii	—	0	2	—	6	—	12	24	175	200	—	0	3	—	16
Oregon	—	9	17	135	104	—	16	43	106	363	—	1	4	22	17
Washington	9	8	106	91	60	27	39	64	571	801	1	0	4	3	3
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	—	—	0	3	4	—	—	0	0	—	—
Puerto Rico	—	1	10	5	48	3	4	24	77	61	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	2	7	8	45	N	0	0	N	N

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 *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	10	33	61	366	605	39	56	192	737	1,126	7	16	43	197	279
New England	—	2	5	14	36	—	1	4	13	17	—	1	5	8	18
Connecticut	—	0	2	8	7	—	0	3	3	4	—	1	4	8	14
Maine†	—	0	1	2	1	—	0	2	7	3	—	0	1	—	—
Massachusetts	—	1	4	—	21	—	0	2	—	9	—	0	1	—	3
New Hampshire	—	0	1	—	3	—	0	2	2	1	—	0	0	—	—
Rhode Island†	—	0	4	4	3	—	0	0	—	—	—	0	0	—	—
Vermont†	—	0	1	—	1	—	0	1	1	—	—	0	0	—	1
Mid. Atlantic	1	4	10	53	80	1	4	16	71	137	3	2	7	22	34
New Jersey	—	0	5	4	22	—	1	5	10	40	—	0	1	—	3
New York (Upstate)	—	1	3	15	14	—	1	5	13	22	3	1	4	15	14
New York City	—	2	5	20	20	—	1	5	26	26	—	0	0	—	—
Pennsylvania	1	1	6	14	24	1	1	6	22	49	—	0	4	7	17
E.N. Central	—	4	19	44	94	1	6	13	99	171	—	4	12	36	65
Illinois	—	2	13	10	35	—	1	5	16	35	—	0	1	—	3
Indiana	—	0	4	3	7	—	1	5	17	25	—	0	4	6	4
Michigan	—	1	4	16	26	—	2	6	33	44	—	3	8	28	43
Ohio	—	0	4	10	19	1	1	4	33	47	—	0	3	2	13
Wisconsin	—	0	2	5	7	—	0	2	—	20	—	0	2	—	2
W.N. Central	—	2	8	13	32	—	3	15	46	38	—	0	10	9	4
Iowa	—	0	3	4	8	—	1	3	7	9	—	0	4	—	2
Kansas	—	0	2	4	3	—	0	2	2	2	—	0	0	—	1
Minnesota	—	0	7	1	7	—	0	13	2	6	—	0	9	3	—
Missouri	—	0	2	3	7	—	1	5	27	12	—	0	1	5	—
Nebraska†	—	0	3	1	6	—	0	2	8	8	—	0	1	—	1
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	1	—	0	1	—	1	—	0	1	1	—
S. Atlantic	7	8	13	91	141	23	15	39	222	343	3	3	12	46	61
Delaware	—	0	1	3	2	U	1	2	U	U	U	0	0	U	U
District of Columbia	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Florida	4	3	8	35	68	7	5	11	84	103	2	1	4	18	8
Georgia	—	1	4	10	21	1	3	7	48	60	1	0	2	3	14
Maryland†	1	0	3	4	14	2	1	6	22	40	—	1	3	7	15
North Carolina	—	0	7	11	14	—	0	12	4	93	—	0	10	9	8
South Carolina†	—	1	4	17	12	—	1	4	10	8	—	0	1	—	—
Virginia†	2	1	3	10	10	1	2	14	34	23	—	0	2	4	6
West Virginia	—	0	2	1	—	12	0	19	20	16	—	0	3	5	10
E.S. Central	—	1	3	11	13	4	6	13	83	119	—	1	5	28	39
Alabama†	—	0	2	3	1	2	1	5	21	34	—	0	2	1	5
Kentucky	—	0	2	5	1	—	2	6	27	28	—	1	5	22	21
Mississippi	—	0	1	—	6	—	0	3	5	7	—	0	0	—	—
Tennessee†	—	0	2	3	5	2	2	6	30	50	—	0	3	5	13
W.S. Central	1	3	18	41	59	8	9	92	89	163	—	1	6	14	14
Arkansas†	—	0	2	—	4	—	0	4	3	18	—	0	1	—	1
Louisiana	—	0	1	3	2	—	0	3	13	18	—	0	1	1	3
Oklahoma	—	0	3	—	1	5	2	8	18	32	—	0	4	6	1
Texas†	1	3	18	38	52	3	6	86	55	95	—	0	4	7	9
Mountain	1	3	8	42	46	—	2	6	25	49	—	1	4	13	20
Arizona	—	1	5	23	15	—	0	3	7	22	—	0	0	—	—
Colorado	1	1	5	7	15	—	0	2	1	11	—	0	3	2	12
Idaho†	—	0	1	2	—	—	0	2	3	1	—	0	2	5	1
Montana†	—	0	1	2	2	—	0	1	—	—	—	0	0	—	—
Nevada†	—	0	2	5	6	—	0	3	10	7	—	0	1	1	1
New Mexico†	—	0	1	2	5	—	0	1	2	4	—	0	1	3	4
Utah	—	0	2	1	3	—	0	1	2	4	—	0	1	2	2
Wyoming†	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
Pacific	—	5	16	57	104	2	6	29	89	89	1	1	7	21	24
Alaska	—	0	0	—	3	—	0	1	1	—	—	0	2	—	—
California	—	4	15	49	79	1	4	17	64	67	1	1	4	6	11
Hawaii	—	0	1	—	6	—	0	1	—	2	—	0	0	—	—
Oregon	—	0	2	4	5	—	1	4	14	11	—	0	3	9	6
Washington	—	0	4	4	11	1	0	12	10	9	—	0	7	6	7
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	6	7	—	—	1	6	20	—	—	1	4	12	—
Puerto Rico	—	0	2	2	12	—	0	5	6	8	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting 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 April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	14	57	167	474	505	90	445	2,434	2,262	3,559	12	22	78	289	286
New England	—	2	18	9	24	17	137	851	210	1,137	1	1	4	2	11
Connecticut	—	1	5	4	6	—	45	295	—	533	—	0	3	—	1
Maine†	—	0	3	—	—	17	12	76	79	34	—	0	1	—	—
Massachusetts	—	1	9	—	16	—	42	397	—	393	—	0	3	—	8
New Hampshire	—	0	2	1	—	—	18	93	107	147	—	0	1	1	—
Rhode Island†	—	0	4	3	1	—	1	29	5	4	—	0	1	—	1
Vermont†	—	0	1	1	1	—	5	42	19	26	1	0	1	1	1
Mid. Atlantic	4	16	72	105	125	50	209	1,143	1,363	1,484	2	7	13	76	59
New Jersey	—	1	13	—	21	—	38	389	263	482	—	0	1	—	—
New York (Upstate)	2	5	29	35	40	29	52	430	310	363	1	1	4	20	15
New York City	—	3	19	26	13	—	4	32	2	57	—	4	12	41	36
Pennsylvania	2	6	25	44	51	21	107	652	788	582	1	1	4	15	8
E.N. Central	2	10	39	87	103	—	24	223	55	161	—	2	11	21	39
Illinois	—	1	10	7	11	—	1	11	1	3	—	1	5	7	15
Indiana	—	1	5	8	14	—	1	7	7	6	—	0	4	2	6
Michigan	—	2	13	18	19	—	1	9	1	2	—	0	3	3	5
Ohio	2	5	17	52	44	—	1	5	5	3	—	0	6	9	11
Wisconsin	—	1	5	2	15	—	20	205	41	147	—	0	1	—	2
W.N. Central	2	2	15	17	16	—	4	251	9	36	1	1	8	19	10
Iowa	—	0	3	—	7	—	0	15	—	4	1	0	1	5	4
Kansas	—	0	1	1	3	—	0	2	1	5	—	0	1	3	1
Minnesota	2	0	13	6	—	—	0	251	6	25	—	0	8	3	1
Missouri	—	1	5	6	3	—	0	1	1	1	—	0	1	3	3
Nebraska†	—	0	2	2	2	—	0	3	1	—	—	0	2	5	—
North Dakota	—	0	1	2	1	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	0	—	1	—	0	0	—	1
S. Atlantic	5	10	22	109	110	21	68	254	535	688	6	6	16	85	112
Delaware	—	0	5	3	—	3	13	65	146	148	—	0	1	1	1
District of Columbia	—	0	2	1	2	—	0	5	1	2	1	0	1	4	5
Florida	3	4	10	48	43	—	2	11	20	9	2	2	7	41	29
Georgia	—	1	4	14	18	—	0	5	2	14	—	1	5	2	20
Maryland†	—	2	12	23	22	10	29	135	227	377	2	1	13	17	29
North Carolina	—	0	5	2	17	—	0	14	12	16	—	0	3	5	16
South Carolina†	—	0	2	1	2	1	1	3	8	8	—	0	1	1	1
Virginia†	1	1	6	15	6	7	11	79	108	98	1	1	5	14	10
West Virginia	1	0	2	2	—	—	0	33	11	16	—	0	2	—	1
E.S. Central	—	2	12	21	22	—	1	4	7	5	1	0	3	5	10
Alabama†	—	0	2	3	4	—	0	1	—	—	—	0	3	1	2
Kentucky	—	1	3	6	10	—	0	1	1	1	—	0	3	2	1
Mississippi	—	0	2	2	—	—	0	0	—	—	—	0	1	—	—
Tennessee†	—	1	9	10	8	—	1	4	6	4	1	0	1	2	7
W.S. Central	—	2	9	14	26	—	4	43	9	11	—	1	30	38	7
Arkansas†	—	0	1	1	2	—	0	0	—	—	—	0	1	1	—
Louisiana	—	0	2	1	1	—	0	0	—	—	—	0	1	—	1
Oklahoma	—	0	2	—	1	—	0	0	—	—	—	0	1	2	—
Texas†	—	1	9	12	22	—	4	43	9	11	—	1	30	35	6
Mountain	1	3	8	29	31	—	1	4	4	7	—	0	6	12	4
Arizona	1	1	4	12	11	—	0	1	—	—	—	0	2	6	1
Colorado	—	0	4	2	3	—	0	1	1	—	—	0	3	1	1
Idaho†	—	0	2	—	1	—	0	3	1	2	—	0	1	—	—
Montana†	—	0	1	1	4	—	0	1	—	1	—	0	3	—	—
Nevada†	—	0	2	10	5	—	0	2	1	2	—	0	1	2	—
New Mexico†	—	0	2	1	—	—	0	1	—	—	—	0	0	—	—
Utah	—	0	4	3	6	—	0	1	1	2	—	0	1	3	2
Wyoming†	—	0	2	—	1	—	0	1	—	—	—	0	0	—	—
Pacific	—	4	20	83	48	2	4	10	70	30	1	2	20	31	34
Alaska	—	0	0	—	1	—	0	1	1	2	—	0	1	1	1
California	—	3	19	75	40	2	2	9	47	20	1	2	13	22	24
Hawaii	—	0	0	—	1	N	0	0	N	N	—	0	0	—	1
Oregon	—	0	3	1	3	—	1	4	22	8	—	0	1	2	5
Washington	—	0	5	7	3	—	0	3	—	—	—	0	6	6	3
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	—	N	0	0	N	N	—	0	2	1	1
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Meningococcal disease, invasive† All groups					Pertussis					Rabies, animal				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	3	16	40	246	357	62	266	1,539	2,502	3,963	25	60	139	636	1,096
New England	—	0	2	2	15	—	9	25	13	192	8	5	24	69	91
Connecticut	—	0	2	—	2	—	1	4	—	8	7	1	22	31	36
Maine§	—	0	1	—	2	—	1	10	4	29	—	1	4	18	15
Massachusetts	—	0	1	—	8	—	4	17	—	125	—	0	0	—	—
New Hampshire	—	0	1	—	1	—	1	7	3	19	—	0	3	3	8
Rhode Island§	—	0	1	—	1	—	0	8	4	5	—	0	5	1	11
Vermont§	—	0	1	2	1	—	0	1	2	6	1	1	5	16	21
Mid. Atlantic	—	2	6	25	37	10	19	40	178	318	12	10	23	179	203
New Jersey	—	0	2	8	4	—	2	8	18	75	—	0	0	—	—
New York (Upstate)	—	0	3	3	8	1	5	27	74	55	12	8	22	132	95
New York City	—	0	2	6	7	—	0	11	3	25	—	0	11	47	2
Pennsylvania	—	1	3	8	18	9	9	29	83	163	—	0	10	—	106
E.N. Central	—	2	7	33	70	17	53	100	637	844	—	2	19	11	17
Illinois	—	0	4	7	16	—	10	29	87	217	—	1	9	5	5
Indiana	—	0	3	7	13	—	6	15	41	102	—	0	7	—	3
Michigan	—	0	5	4	11	—	16	41	187	175	—	1	6	3	9
Ohio	—	1	2	12	18	17	20	49	317	304	—	0	5	3	—
Wisconsin	—	0	1	3	12	—	1	12	5	46	N	0	0	N	N
W.N. Central	—	1	6	16	28	1	28	605	193	773	3	6	18	59	96
Iowa	—	0	2	3	2	—	4	10	40	58	—	0	3	—	7
Kansas	—	0	2	1	6	—	4	12	33	70	—	1	4	22	34
Minnesota	—	0	2	2	6	—	0	585	—	164	2	0	11	11	7
Missouri	—	0	3	8	9	1	12	35	94	405	1	1	5	8	7
Nebraska§	—	0	1	2	3	—	2	9	23	68	—	1	6	15	25
North Dakota	—	0	1	—	—	—	0	12	—	2	—	0	7	3	3
South Dakota	—	0	1	—	2	—	0	6	3	6	—	0	4	—	13
S. Atlantic	1	3	10	56	63	10	25	66	255	513	—	22	103	249	529
Delaware	—	0	1	1	2	—	0	2	—	4	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	1	1	3	—	0	0	—	—
Florida	1	1	5	29	27	5	6	29	57	128	—	0	21	42	161
Georgia	—	0	2	4	10	1	4	10	59	106	—	0	72	—	88
Maryland§	—	0	1	2	1	—	3	8	38	35	—	7	15	92	96
North Carolina	—	0	10	5	9	—	0	21	—	132	N	0	4	N	N
South Carolina§	—	0	1	4	5	2	4	18	63	53	—	0	0	—	—
Virginia§	—	0	2	10	7	1	3	15	30	47	—	10	26	95	154
West Virginia	—	0	2	1	2	1	0	6	7	5	—	2	6	20	30
E.S. Central	—	0	4	11	16	5	14	30	213	206	—	0	4	3	52
Alabama§	—	0	2	2	4	2	5	19	58	54	—	0	1	3	—
Kentucky	—	0	2	4	2	—	3	15	73	83	—	0	2	—	21
Mississippi	—	0	1	2	2	—	1	6	14	22	—	0	1	—	—
Tennessee§	—	0	2	3	8	3	4	10	68	47	—	0	3	—	31
W.S. Central	—	1	9	31	30	7	68	711	649	483	—	0	13	10	15
Arkansas§	—	0	2	3	5	—	5	30	30	62	—	0	10	6	11
Louisiana	—	0	3	5	9	—	0	8	8	36	—	0	0	—	—
Oklahoma	—	0	7	12	2	—	0	32	3	9	—	0	13	4	4
Texas§	—	1	7	11	14	7	61	681	608	376	—	0	1	—	—
Mountain	1	1	4	18	31	4	17	41	227	336	—	1	8	13	33
Arizona	—	0	2	5	6	—	6	12	85	62	N	0	5	N	N
Colorado	1	0	3	5	10	3	4	13	34	84	—	0	0	—	—
Idaho§	—	0	1	1	5	1	1	19	48	29	—	0	1	1	—
Montana§	—	0	2	1	3	—	0	6	5	9	—	0	4	—	10
Nevada§	—	0	1	3	3	—	0	6	1	6	—	0	1	—	—
New Mexico§	—	0	1	2	2	—	1	6	26	29	—	0	3	3	13
Utah	—	0	1	1	1	—	2	11	27	106	—	0	2	—	—
Wyoming§	—	0	2	—	1	—	0	3	1	11	—	0	3	9	10
Pacific	1	3	19	54	67	8	20	46	137	298	2	4	12	43	60
Alaska	—	0	2	—	2	—	0	4	7	24	—	0	2	8	14
California	1	2	12	42	39	1	11	25	17	112	2	3	11	31	46
Hawaii	—	0	1	—	1	—	0	3	—	10	—	0	0	—	—
Oregon	—	0	5	8	18	—	4	12	75	71	—	0	2	4	—
Washington	—	0	6	4	7	7	4	39	38	81	—	0	0	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	—	—	0	0	—	1	3	1	3	19	14
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N

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).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	309	913	1,469	7,005	10,087	53	84	193	544	893	127	279	502	3,315	4,507
New England	—	29	102	174	912	—	3	30	17	97	—	4	27	20	94
Connecticut	—	0	97	97	429	—	0	7	7	67	—	0	12	12	43
Maine§	—	2	7	19	30	—	0	3	1	—	—	0	2	3	2
Massachusetts	—	18	47	—	273	—	1	7	—	14	—	2	27	—	39
New Hampshire	—	3	44	29	126	—	1	3	8	12	—	0	4	3	1
Rhode Island§	—	1	12	17	40	—	0	26	—	—	—	0	7	1	6
Vermont§	—	1	5	12	14	—	0	3	1	4	—	0	1	1	3
Mid. Atlantic	33	98	207	843	1,149	9	6	22	58	99	9	42	89	473	935
New Jersey	—	16	47	63	223	—	1	5	1	27	—	5	23	59	277
New York (Upstate)	18	23	77	224	258	3	3	12	23	26	—	4	19	47	50
New York City	2	21	48	231	282	—	0	4	7	25	1	8	16	86	155
Pennsylvania	13	28	66	325	386	6	2	8	27	21	8	25	63	281	453
E.N. Central	27	87	159	757	1,356	9	13	36	71	168	2	32	226	582	991
Illinois	—	24	52	255	384	—	3	6	9	54	—	9	221	448	211
Indiana	—	9	24	35	106	—	1	9	5	19	—	1	5	5	28
Michigan	—	15	34	153	269	—	3	8	25	26	—	3	10	43	94
Ohio	27	25	52	280	353	9	2	11	26	24	2	10	46	74	512
Wisconsin	—	10	30	34	244	—	3	21	6	45	—	5	22	12	146
W.N. Central	24	43	86	466	713	5	11	39	78	92	47	39	87	795	148
Iowa	2	7	16	56	100	—	2	14	11	23	—	0	5	12	34
Kansas	3	6	22	74	81	—	1	5	8	7	3	3	13	58	51
Minnesota	8	10	31	126	167	—	2	17	20	27	—	1	6	14	16
Missouri	10	13	30	151	112	4	2	10	28	21	43	30	75	705	37
Nebraska§	1	4	12	44	157	1	1	6	10	12	1	0	3	6	8
North Dakota	—	0	21	8	9	—	0	3	—	—	—	0	2	—	1
South Dakota	—	0	9	7	87	—	0	12	1	2	—	0	1	—	1
S. Atlantic	91	281	453	2,129	2,359	11	12	23	122	164	19	40	78	471	667
Delaware	—	3	9	22	10	—	0	2	1	3	—	3	10	27	8
District of Columbia	—	0	3	14	17	—	0	0	—	1	—	0	2	6	6
Florida	47	132	277	1,017	965	2	4	7	52	47	13	10	18	184	133
Georgia	4	45	98	307	383	—	1	4	14	16	—	13	29	159	163
Maryland§	6	15	32	169	190	2	2	6	17	22	3	4	17	27	120
North Carolina	—	11	90	230	408	—	0	8	4	42	—	2	27	15	123
South Carolina§	16	17	66	141	164	—	0	3	2	7	1	2	6	25	54
Virginia§	10	20	68	176	182	6	3	13	30	20	2	3	15	28	55
West Virginia	8	4	23	53	40	1	0	5	2	6	—	0	2	—	5
E.S. Central	8	52	113	364	535	—	4	10	32	51	1	11	46	118	244
Alabama§	2	14	39	126	171	—	1	4	11	8	1	2	10	14	60
Kentucky	—	7	18	66	109	—	1	4	2	16	—	3	25	47	34
Mississippi	—	14	45	50	117	—	0	1	3	4	—	1	4	7	9
Tennessee§	6	14	33	122	138	—	1	8	16	23	—	5	16	50	141
W.S. Central	36	105	497	648	880	2	5	41	30	50	37	49	158	494	784
Arkansas§	—	10	25	54	97	—	0	4	5	8	1	5	15	12	75
Louisiana	—	9	43	139	111	—	0	1	4	—	—	1	7	26	61
Oklahoma	8	11	30	72	112	—	0	6	1	4	8	6	19	85	42
Texas§	28	59	478	383	560	2	4	41	20	38	28	35	142	371	606
Mountain	22	51	133	544	739	3	8	26	58	94	2	16	48	146	314
Arizona	3	18	50	184	264	—	1	4	9	8	—	11	42	80	219
Colorado	15	10	33	159	158	2	2	11	10	54	1	2	6	25	28
Idaho§	1	3	10	36	46	1	1	7	11	7	—	0	1	3	—
Montana§	—	2	7	26	38	—	0	7	9	3	—	0	2	3	7
Nevada§	2	4	13	39	67	—	0	4	5	3	1	1	7	9	25
New Mexico§	1	5	26	59	64	—	1	3	8	11	—	1	8	22	27
Utah	—	5	14	27	83	—	1	11	6	7	—	0	4	4	8
Wyoming§	—	1	9	14	19	—	0	2	—	1	—	0	1	—	—
Pacific	68	120	370	1,080	1,444	14	8	84	78	78	10	21	74	216	330
Alaska	—	1	7	21	15	—	0	0	—	—	—	0	2	—	1
California	56	90	225	842	1,112	3	4	34	45	55	10	16	51	188	263
Hawaii	—	5	61	—	70	—	0	2	—	3	—	0	4	—	6
Oregon	—	8	19	105	113	—	1	11	8	7	—	1	4	16	19
Washington	12	12	133	112	134	11	2	48	25	13	—	2	19	12	41
American Samoa	—	1	1	1	—	—	0	0	—	—	—	0	0	—	3
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	9	39	58	150	—	0	0	—	—	—	0	2	—	3
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2009 and 2010 are provisional.
† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Spotted Fever Rickettsiosis (including RMSF)†									
	Confirmed					Probable				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	1	2	10	13	13	2	13	72	73	237
New England	—	0	1	—	—	—	0	2	1	4
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	0	—	—	—	0	2	1	3
Massachusetts	—	0	1	—	—	—	0	1	—	1
New Hampshire	—	0	0	—	—	—	0	1	—	—
Rhode Island§	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	1	—	—	—	0	0	—	—
Mid. Atlantic	—	0	3	2	—	—	1	6	7	7
New Jersey	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	1	—	—	—	0	3	1	1
New York City	—	0	1	—	—	—	0	4	6	4
Pennsylvania	—	0	2	2	—	—	0	2	—	2
E.N. Central	—	0	2	—	1	—	0	7	—	12
Illinois	—	0	1	—	—	—	0	6	—	8
Indiana	—	0	2	—	—	—	0	2	—	—
Michigan	—	0	1	—	1	—	0	1	—	—
Ohio	—	0	0	—	—	—	0	4	—	4
Wisconsin	—	0	0	—	—	—	0	1	—	—
W.N. Central	1	0	3	1	2	1	2	23	11	11
Iowa	—	0	1	—	—	—	0	1	—	—
Kansas	—	0	1	—	1	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	1	—	—
Missouri	1	0	1	1	—	1	2	22	11	11
Nebraska§	—	0	2	—	1	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	1	8	7	7	1	4	25	40	161
Delaware	—	0	1	1	—	—	0	3	4	2
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	0	1	—	—	—	0	1	1	1
Georgia	—	0	7	5	6	—	0	0	—	—
Maryland§	—	0	1	—	—	—	0	3	3	14
North Carolina	—	0	1	1	—	—	1	24	27	124
South Carolina§	—	0	1	—	1	—	0	4	2	9
Virginia§	—	0	1	—	—	1	0	5	3	11
West Virginia	—	0	0	—	—	—	0	1	—	—
E.S. Central	—	0	2	2	1	—	3	15	9	27
Alabama§	—	0	1	—	—	—	1	7	2	8
Kentucky	—	0	1	1	—	—	0	0	—	—
Mississippi	—	0	0	—	1	—	0	1	1	—
Tennessee§	—	0	2	1	—	—	2	14	6	19
W.S. Central	—	0	3	1	—	—	1	25	5	12
Arkansas§	—	0	0	—	—	—	0	14	—	3
Louisiana	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	3	—	—	—	0	24	1	2
Texas§	—	0	1	1	—	—	0	11	4	7
Mountain	—	0	2	—	2	—	0	3	—	3
Arizona	—	0	2	—	1	—	0	2	—	1
Colorado	—	0	1	—	—	—	0	0	—	—
Idaho§	—	0	0	—	—	—	0	1	—	—
Montana§	—	0	1	—	1	—	0	2	—	—
Nevada§	—	0	0	—	—	—	0	1	—	—
New Mexico§	—	0	0	—	—	—	0	0	—	1
Utah	—	0	0	—	—	—	0	0	—	1
Wyoming§	—	0	1	—	—	—	0	1	—	—
Pacific	—	0	1	—	—	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	—	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	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.
† Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by *Rickettsia rickettsii*, is the most common and well-known spotted fever.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	*Streptococcus pneumoniae*,† invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	180	56	397	5,098	1,334	25	45	130	844	977	74	246	388	2,770	4,259
New England	4	2	51	179	28	—	1	23	12	32	5	6	21	109	107
Connecticut	—	0	50	45	—	—	0	22	2	—	—	0	9	11	23
Maine§	1	1	5	40	4	—	0	2	4	—	—	0	3	10	1
Massachusetts	—	0	1	—	1	—	0	5	—	25	5	4	12	73	71
New Hampshire	1	0	6	44	5	—	0	2	3	5	—	0	1	4	8
Rhode Island§	—	0	5	15	11	—	0	1	2	—	—	0	5	9	4
Vermont§	2	0	6	35	7	—	0	1	1	2	—	0	2	2	—
Mid. Atlantic	11	5	33	312	74	1	5	48	93	109	30	34	50	532	585
New Jersey	—	0	4	29	—	—	1	3	18	21	4	3	12	71	84
New York (Upstate)	3	2	12	66	34	1	2	19	48	55	—	2	11	28	30
New York City	4	0	14	41	3	—	0	28	7	27	20	20	39	325	371
Pennsylvania	4	2	19	176	37	—	0	5	20	6	6	7	14	108	100
E.N. Central	16	13	74	698	284	5	8	16	138	155	—	24	54	171	423
Illinois	—	0	7	39	—	—	1	5	33	15	—	10	36	7	205
Indiana	—	5	20	166	106	—	1	4	21	31	—	2	9	22	55
Michigan	—	1	26	226	13	—	1	6	34	28	—	3	13	56	70
Ohio	16	8	18	176	165	5	2	7	41	55	—	7	13	86	72
Wisconsin	—	0	20	91	—	—	0	2	9	26	—	0	3	—	21
W.N. Central	37	4	60	367	72	3	3	12	73	73	—	5	12	62	96
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	2	10
Kansas	1	1	7	46	33	—	0	2	8	11	—	0	3	2	5
Minnesota	31	0	45	211	—	2	1	10	35	23	—	1	4	13	26
Missouri	1	1	8	46	31	1	0	3	21	30	—	3	8	42	52
Nebraska§	4	0	7	56	—	—	0	2	8	2	—	0	2	3	1
North Dakota	—	0	4	4	8	—	0	1	—	3	—	0	1	—	2
South Dakota	—	0	2	4	—	—	0	2	1	4	—	0	1	—	—
S. Atlantic	68	26	141	1,478	642	7	11	27	230	254	23	60	200	760	959
Delaware	1	0	3	12	10	—	0	2	—	—	1	0	3	3	11
District of Columbia	—	0	3	13	—	—	0	1	3	—	2	3	8	36	58
Florida	42	14	89	733	383	3	4	18	96	93	4	18	28	260	367
Georgia	4	9	27	219	194	1	3	9	62	70	—	13	151	93	158
Maryland§	8	0	25	191	4	1	1	7	24	34	3	6	12	84	85
North Carolina	—	0	0	—	—	—	0	0	—	—	12	9	31	154	162
South Carolina§	10	0	25	249	—	—	1	4	23	25	—	2	6	42	29
Virginia§	—	0	3	19	—	—	1	3	17	23	1	6	22	88	87
West Virginia	3	1	21	42	51	2	0	4	5	9	—	0	2	—	2
E.S. Central	10	4	50	479	123	2	2	9	46	56	6	20	40	212	382
Alabama§	—	0	0	—	—	—	0	0	—	—	—	5	18	47	156
Kentucky	—	1	8	43	40	—	0	2	4	6	1	1	13	26	21
Mississippi	—	0	5	24	3	—	0	2	5	6	—	4	17	36	66
Tennessee§	10	2	44	412	80	2	2	7	37	44	5	7	15	103	139
W.S. Central	4	2	72	648	45	4	6	38	112	139	3	45	74	339	872
Arkansas§	—	1	8	63	23	—	0	4	9	16	2	5	16	69	53
Louisiana	—	0	8	35	22	—	0	3	10	16	—	10	27	64	293
Oklahoma	4	0	5	27	—	4	1	5	27	24	1	1	6	14	35
Texas§	—	0	65	523	—	—	3	34	66	83	—	29	46	192	491
Mountain	25	2	82	818	64	3	6	12	123	144	3	9	18	89	166
Arizona	11	0	51	404	—	1	2	7	57	67	—	4	11	18	75
Colorado	12	0	20	227	—	1	1	4	31	23	1	2	5	36	32
Idaho§	—	0	1	5	—	—	0	2	2	2	—	0	1	2	2
Montana§	1	0	1	7	—	—	0	0	—	—	—	0	1	—	—
Nevada§	1	1	4	30	24	1	0	1	4	6	2	1	10	25	32
New Mexico§	—	0	8	67	—	—	0	4	12	12	—	1	4	7	17
Utah	—	1	9	71	33	—	1	5	15	33	—	0	2	1	8
Wyoming§	—	0	2	7	7	—	0	1	2	1	—	0	1	—	—
Pacific	5	0	14	119	2	—	0	7	17	15	4	40	55	496	669
Alaska	—	0	9	52	—	—	0	5	14	8	—	0	0	—	—
California	5	0	12	67	—	—	0	2	3	—	1	36	54	456	593
Hawaii	—	0	1	—	2	—	0	2	—	7	—	0	3	10	13
Oregon	—	0	0	—	—	—	0	0	—	—	—	1	5	6	11
Washington	—	0	0	—	—	—	0	0	—	—	3	2	7	24	52
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	—	—	—	3	17	54	49
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.
† Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2010, and April 25, 2009 (16th week)*

Reporting area	Varicella (chickenpox)§					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive¶				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2010	Cum 2009	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2010	Cum 2009	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2010	Cum 2009
United States	244	282	637	4,645	8,188	—	1	46	2	—	—	0	49	—	1
New England	1	15	37	181	352	—	0	0	—	—	—	0	0	—	—
Connecticut	—	7	23	43	171	—	0	0	—	—	—	0	0	—	—
Maine§	—	4	15	76	62	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	2	—	0	0	—	—	—	0	0	—	—
New Hampshire	1	3	10	47	75	—	0	0	—	—	—	0	0	—	—
Rhode Island§	—	0	2	3	4	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	3	12	38	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	22	22	56	337	663	—	0	2	—	—	—	0	1	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Pennsylvania	22	22	56	337	663	—	0	0	—	—	—	0	0	—	—
E.N. Central	59	106	205	1,769	2,944	—	0	4	—	—	—	0	3	—	—
Illinois	2	25	56	435	747	—	0	3	—	—	—	0	0	—	—
Indiana§	24	7	26	207	199	—	0	1	—	—	—	0	1	—	—
Michigan	—	36	84	551	845	—	0	1	—	—	—	0	0	—	—
Ohio	33	28	81	507	937	—	0	0	—	—	—	0	2	—	—
Wisconsin	—	7	57	69	216	—	0	1	—	—	—	0	0	—	—
W.N. Central	5	10	35	194	504	—	0	5	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Kansas§	3	3	15	65	132	—	0	1	—	—	—	0	2	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
Missouri	2	6	24	106	330	—	0	2	—	—	—	0	1	—	—
Nebraska§	N	0	0	N	N	—	0	2	—	—	—	0	6	—	—
North Dakota	—	0	26	21	36	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	2	6	—	0	3	—	—	—	0	2	—	—
S. Atlantic	58	25	78	654	965	—	0	4	—	—	—	0	2	—	—
Delaware§	1	0	3	7	2	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	1	1	11	—	0	1	—	—	—	0	0	—	—
Florida§	42	14	54	354	602	—	0	1	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Maryland§	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina§	10	0	34	54	142	—	0	2	—	—	—	0	0	—	—
Virginia§	2	0	11	107	28	—	0	2	—	—	—	0	0	—	—
West Virginia	3	8	25	131	180	—	0	0	—	—	—	0	0	—	—
E.S. Central	2	6	29	76	235	—	0	6	2	—	—	0	4	—	—
Alabama§	2	6	27	76	232	—	0	0	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	—	3	—	0	5	2	—	—	0	4	—	—
Tennessee§	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
W.S. Central	74	68	261	998	1,834	—	0	19	—	—	—	0	6	—	—
Arkansas§	—	0	31	69	46	—	0	1	—	—	—	0	0	—	—
Louisiana	—	0	7	18	24	—	0	2	—	—	—	0	4	—	—
Oklahoma	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Texas§	74	65	245	911	1,764	—	0	16	—	—	—	0	4	—	—
Mountain	23	20	57	424	638	—	0	12	—	—	—	0	17	—	1
Arizona	—	0	0	—	—	—	0	4	—	—	—	0	2	—	—
Colorado§	15	8	22	167	248	—	0	7	—	—	—	0	14	—	—
Idaho§	N	0	0	N	N	—	0	3	—	—	—	0	5	—	—
Montana§	2	0	17	79	85	—	0	1	—	—	—	0	1	—	—
Nevada§	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New Mexico§	—	0	5	29	53	—	0	2	—	—	—	0	1	—	—
Utah	6	7	32	148	252	—	0	1	—	—	—	0	0	—	1
Wyoming§	—	0	1	1	—	—	0	1	—	—	—	0	2	—	—
Pacific	—	1	5	12	53	—	0	12	—	—	—	0	12	—	—
Alaska	—	0	4	12	28	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	8	—	—	—	0	6	—	—
Hawaii	—	0	4	—	25	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	6	—	—	—	0	3	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	4	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	2	6	30	67	191	—	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. 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/epo/dphsi/phs/infdis.htm.

TABLE III. Deaths in 122 U.S. cities,* week ending April 24, 2010 (16th week)

Reporting area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
New England	521	370	113	22	9	7	42
Boston, MA	144	84	46	6	5	3	12
Bridgeport, CT	34	28	6	—	—	—	5
Cambridge, MA	17	14	3	—	—	—	2
Fall River, MA	16	14	2	—	—	—	—
Hartford, CT	49	38	8	2	1	—	1
Lowell, MA	20	17	3	—	—	—	—
Lynn, MA	10	8	1	1	—	—	1
New Bedford, MA	17	14	2	1	—	—	—
New Haven, CT	23	12	7	3	1	—	4
Providence, RI	66	49	12	4	—	1	4
Somerville, MA	7	5	1	1	—	—	1
Springfield, MA	43	31	7	2	1	2	3
Waterbury, CT	27	21	5	—	1	—	3
Worcester, MA	48	35	10	2	—	1	6
Mid. Atlantic	1,926	1,315	431	103	42	35	86
Albany, NY	46	32	9	2	2	1	2
Allentown, PA	24	18	3	2	1	—	1
Buffalo, NY	76	52	20	1	1	2	6
Camden, NJ	30	9	14	4	—	3	1
Elizabeth, NJ	29	21	6	1	1	—	1
Erie, PA	42	34	8	—	—	—	4
Jersey City, NJ	10	8	2	—	—	—	—
New York City, NY	1,033	720	230	56	21	6	41
Newark, NJ	48	21	19	5	3	—	2
Paterson, NJ	23	13	7	2	1	—	2
Philadelphia, PA	258	164	58	19	8	9	6
Pittsburgh, PA§	33	21	4	1	—	7	1
Reading, PA	31	26	4	—	—	1	5
Rochester, NY	87	56	16	6	4	5	6
Schenectady, NY	19	17	2	—	—	—	1
Scranton, PA	22	14	7	—	—	1	—
Syracuse, NY	55	43	11	1	—	—	4
Trenton, NJ	17	16	1	—	—	—	1
Utica, NY	15	8	6	1	—	—	—
Yonkers, NY	28	22	4	2	—	—	2
E.N. Central	1,916	1,306	447	78	44	41	120
Akron, OH	22	16	2	3	—	1	2
Canton, OH	35	25	10	—	—	—	1
Chicago, IL	309	184	95	16	13	1	5
Cincinnati, OH	80	45	27	2	4	2	6
Cleveland, OH	237	174	43	10	4	6	14
Columbus, OH	224	157	44	10	4	9	19
Dayton, OH	119	82	29	7	—	1	9
Detroit, MI	110	61	32	7	6	4	7
Evansville, IN	43	34	8	—	1	—	5
Fort Wayne, IN	74	52	13	4	3	2	7
Gary, IN	10	7	1	—	—	2	—
Grand Rapids, MI	58	43	12	2	—	1	5
Indianapolis, IN	183	124	43	7	4	5	15
Lansing, MI	32	28	3	1	—	—	3
Milwaukee, WI	85	55	26	3	1	—	4
Peoria, IL	38	29	7	—	1	1	6
Rockford, IL	46	35	8	—	—	3	—
South Bend, IN	52	39	10	3	—	—	4
Toledo, OH	96	70	18	3	2	3	1
Youngstown, OH	63	46	16	—	1	—	7
W.N. Central	512	346	121	22	13	9	29
Des Moines, IA	—	—	—	—	—	—	—
Duluth, MN	27	22	4	—	1	—	3
Kansas City, KS	22	13	5	3	—	1	—
Kansas City, MO	110	75	28	4	3	—	4
Lincoln, NE	30	20	9	1	—	—	2
Minneapolis, MN	71	37	21	7	2	4	4
Omaha, NE	92	66	19	4	3	—	6
St. Louis, MO	7	5	1	—	1	—	1
St. Paul, MN	68	49	16	1	—	2	5
Wichita, KS	85	59	18	2	3	2	4
S. Atlantic	1,369	879	331	100	38	21	87
Atlanta, GA	153	90	42	17	4	—	10
Baltimore, MD	152	86	47	9	5	5	12
Charlotte, NC	120	82	21	8	6	3	4
Jacksonville, FL	160	107	38	8	4	3	12
Miami, FL	170	115	37	12	4	2	3
Norfolk, VA	36	20	8	5	1	2	1
Richmond, VA	65	44	14	6	—	1	1
Savannah, GA	50	37	7	5	1	—	5
St. Petersburg, FL	54	34	15	5	—	—	8
Tampa, FL	197	143	41	5	5	3	11
Washington, D.C.	196	111	58	17	8	2	17
Wilmington, DE	16	10	3	3	—	—	3
E.S. Central	902	596	213	61	20	12	86
Birmingham, AL	177	104	52	12	7	2	18
Chattanooga, TN	93	60	24	5	3	1	5
Knoxville, TN	106	76	21	7	—	2	9
Lexington, KY	74	55	15	2	1	1	7
Memphis, TN	180	118	42	16	4	—	26
Mobile, AL	61	38	14	5	2	2	—
Montgomery, AL	47	36	7	2	—	2	5
Nashville, TN	164	109	38	12	3	2	16
W.S. Central	1,193	799	259	76	33	25	86
Austin, TX	88	61	18	6	2	1	7
Baton Rouge, LA	61	43	11	5	1	1	—
Corpus Christi, TX	72	52	16	3	1	—	9
Dallas, TX	166	98	43	12	8	4	8
El Paso, TX	83	51	18	8	3	3	1
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	185	122	47	6	2	8	20
Little Rock, AR	109	67	22	11	6	3	3
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	238	171	35	21	8	3	23
Shreveport, LA	74	55	15	2	—	2	6
Tulsa, OK	117	79	34	2	2	—	9
Mountain	1,155	768	261	83	22	21	78
Albuquerque, NM	143	89	31	13	4	6	15
Boise, ID	39	34	3	2	—	—	5
Colorado Springs, CO	60	37	14	6	2	1	2
Denver, CO	91	60	25	5	1	—	7
Las Vegas, NV	295	203	69	16	3	4	22
Ogden, UT	24	20	2	2	—	—	1
Phoenix, AZ	172	95	51	15	3	8	11
Pueblo, CO	27	21	5	1	—	—	1
Salt Lake City, UT	124	79	27	12	4	2	4
Tucson, AZ	180	130	34	11	5	—	10
Pacific	1,618	1,131	357	81	25	23	165
Berkeley, CA	11	7	3	1	—	—	1
Fresno, CA	126	82	34	7	—	3	8
Glendale, CA	32	26	6	—	—	—	4
Honolulu, HI	52	38	7	3	3	1	5
Long Beach, CA	60	41	14	3	—	1	10
Los Angeles, CA	246	155	70	12	4	5	36
Pasadena, CA	26	22	4	—	—	—	—
Portland, OR	139	91	37	8	2	1	8
Sacramento, CA	210	151	37	12	5	5	28
San Diego, CA	264	216	35	9	3	1	23
San Francisco, CA	118	77	28	6	3	4	17
San Jose, CA	U	U	U	U	U	U	U
Santa Cruz, CA	36	28	6	2	—	—	5
Seattle, WA	124	77	37	8	1	1	7
Spokane, WA	57	44	8	3	1	1	6
Tacoma, WA	117	76	31	7	3	—	7
Total¶	11,112	7,510	2,533	626	246	194	779

U: Unavailable. —: No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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