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Prevalence of Abnormal Lipid Levels Among Youths — United States, 1999–2006

Cardiovascular disease (CVD) is the leading cause of death among adults in the United States (*1*). CVD risk factors, including abnormal lipid levels and elevated body mass index (BMI), often emerge during childhood and adolescence (*2*). In 2008, the American Academy of Pediatrics (AAP) established recommendations for targeted screening of youths aged ≥2 years for abnormal blood lipid levels (*2*). To provide prevalence data on abnormal lipid levels among youths, eligibility for lipid screening based on BMI, and eligibility for therapeutic lifestyle counseling among overweight youths, CDC analyzed results from the National Health and Nutrition Examination Survey (NHANES) for 1999–2006. This report describes the results of that analysis, which found that the prevalence of abnormal lipid levels among youths aged 12–19 years was 20.3%. This prevalence varied by BMI; 14.2% of normal weight youths, 22.3% of overweight and 42.9% of obese had at least one abnormal lipid level. Among all youths, 32% had a high BMI and therefore would be candidates for lipid screening under AAP recommendations. Given the high prevalence of abnormal lipid levels among youths who are overweight and obese in this study, clinicians should be aware of lipid screening guidelines, especially recommendations for screening youths who are overweight or obese.

NHANES is a continuous cross-sectional survey of the health and nutritional status of the U.S. civilian, noninstitutionalized population. Each year, approximately 6,000 persons are selected to participate in the survey through a complex, multistage probability design.* All NHANES surveys include a household interview and a detailed physical examination that includes anthropometric measurements. A randomly selected sample of NHANES participants is asked to fast for 8–24 hours. Only participants who have fasted at least 8 hours before blood specimens are taken for laboratory testing are included in the fasting sample. The results from the fasting subsample are weighted to account for the probability of selection and nonresponse.

NHANES data are released in 2-year increments; this analysis was conducted with data from the last four survey cycles: 1999–2000, 2001–2002, 2003–2004, and 2005–2006. During 1999–2006, approximately 78% of selected persons completed a physical examination component in NHANES mobile examination centers. The initial combined sample from the four surveys included 9,187 youths, aged 12–19 years, who took part in home interviews and were examined at mobile examination centers. The sample of youths who provided fasting blood samples for lipid profile testing was 3,733. From those, 73 youths who reported being pregnant or had a positive urine pregnancy test, and 535 youths for whom data were missing were excluded, for a final study sample of 3,125 youths (Table 1).

Age in years and race/ethnicity were self-reported at the time of participation. Youths were classified as non-Hispanic white, non-Hispanic black, or Hispanic. Asian youths and persons classified of other races are included in the overall analyses, but estimates for these specific groups are not reported because of small sample sizes and unstable estimates. Serum levels for youths were classified for low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C),

* Additional information available at http://www.cdc.gov/nchs/nhanes.htm.

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and triglycerides according to National Cholesterol Education Program and American Heart Association cutoff points used in the AAP screening guidelines (*2*) (Table 2). AAP guidelines for targeted lipid screening of youths are based on family history of high blood cholesterol, family history of premature CVD (men aged ≤55 years or women aged ≤65 years), unknown family history of high blood cholesterol or premature CVD, or the presence of at least one major CVD risk factor (smoking, hypertension, diabetes, or overweight/obesity) (*2*). The percentage of youths who were candidates for lipid screening in this study was determined based on BMI percentiles[†] (normal weight, overweight, obese). Eligibility for therapeutic lifestyle counseling among overweight and obese youths was determined based on AAP guidelines for screening and treatment (*2*).[§] Significant differences in the prevalence of abnormal lipids as a function of demographic factors and overweight or obesity status were assessed using chi-square tests. Prevalence ratios (PRs) were used to estimate relative risk for abnormal lipids levels.

Among all youths, 20.3% had at least one abnormal lipid level based on cutoff points for high LDL-C (≥130 mg/dL), low HDL-C (≤35 mg/dL), and high triglyceride levels (≥150 mg/dL) (*2*) (Table 2). Compared with youths who were normal weight, overweight and obese youths were significantly more likely to have at least one abnormal lipid level (PR = 1.6 and PR = 3.0, respectively). A greater proportion of boys had low HDL-C compared with girls (11.0% versus 4.0%), and youths aged 18–19

[†] Overweight and obesity are defined based on the 2000 CDC age- and sex-specific growth charts for the United States. Overweight and obesity are defined as having a BMI within the 85th to <95th percentile or ≥95th percentile, respectively. Normal weight is defined as having an age- and sex-specific BMI >5th and <85th percentile. Available at http://www.cdc.gov/growthcharts.

[§] AAP recommends an individual approach to therapeutic lifestyle counseling for youths who 1) have one or more CVD risk factors (e.g., overweight and hypertension) and have high LDL-C levels or 2) are overweight or obese with low HDL-C or high triglyceride levels. Thus, all overweight or obese youths with any abnormal lipid level would be candidates for therapeutic lifestyle counseling.

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TABLE 1. Estimated weighted distribution of characteristics for youths aged 12–19 years (N = 3,125) — National Health and Nutrition Examination Survey, 1999–2006

Characteristic	Overall sample	
	No.	(%)
Sex		
Boys	1,634	(52)
Girls	1,491	(48)
Current age (yrs)		
12–13	881	(27)
14–15	729	(24)
16–17	785	(26)
18–19	730	(24)
Race/Ethnicity		
White, non-Hispanic	855	(64)
Black, non-Hispanic	999	(14)
Hispanic	1,138	(15)
Other	133	(7)
BMI*		
Normal weight	2,008	(68)
Overweight	514	(15)
Obese	603	(17)

* Body mass index; based on the 2000 CDC sex-specific growth charts for the United States. Available at http://www.cdc.gov/growthcharts.

years were more likely to have low HDL-C (10.4%) or high triglycerides (16.4%) compared with youths aged 12–13 years (4.7% and 9.5%, respectively). Youths aged 14–15 years also were more likely to have low HDL-C (8.7%) compared with youths aged 12–13 years (4.7%). High LDL-C levels differed little across age groups among the youths. The percentage of non-Hispanic white youths with low HDL-C (8.5%) or high triglycerides (12.1%) was higher compared with levels for non-Hispanic black youths (4.7% and 3.7%, respectively).

Based solely on their BMI (15% overweight youths and 17% obese youths), 32% of all youths would be candidates for lipid screening. The percentages of overweight or obese youths who were candidates for therapeutic lifestyle counseling based on lipid levels were 22.3% and 42.9%, respectively.

Reported by

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Editorial Note

Recommendations for screening youths for lipid disorders differ among various recommending bodies.

What is already known on this topic?

Abnormal lipid levels are major risk factors for cardiovascular disease and are associated with greater than normal body mass index (BMI) in children and adolescents.

What is added by this report?

In 1999–2006, 20.3% of youths aged 12–19 years had abnormal lipids. A total of 32% were overweight or obese, making them eligible for lipid screening under American Academy of Pediatrics (AAP) guidelines based solely on their BMI.

What are the implications for public health practice?

Using AAP guidelines, screening overweight and obese youths for abnormal lipid levels can identify youths who are candidates for therapeutic lifestyle counseling. Clinicians should be aware of lipid screening guidelines and recommended interventions, especially for children and youths who are overweight or obese.

In 2007, the U.S. Preventive Services Task Force (USPSTF)¶ concluded that the evidence was insufficient to recommend for or against routine screening for lipid disorders in infants, children, adolescents, or young adults (up to age 20 years). USPSTF has not revised this recommendation. AAP takes a more aggressive stance on screening policy, recommending targeted screening of youths based on family history and other CVD-related risk factors. The results of the analysis in this report indicate that under the AAP recommendations, 32% of all youths were in a population recommended for lipid screening based solely on their weight status. The results also indicate that, during 1999–2006, an estimated one fifth of all youths had at least one lipid abnormality, and among obese youths, the prevalence was 43%. Although previous studies have demonstrated the association between higher BMI and abnormal lipid profiles in youths (*3*), this analysis reports the prevalence of abnormal lipid profiles among youths by BMI status in the United States using nationally representative data.

In this analysis, differences in lipid levels also were associated with sex, age, and race/ethnicity. These

¶ Screening for lipid disorders in children. Rockville, MD: US Department of Health and Human Services, Agency for Healthcare Research and Quality, USPSTF; 2007. Available at http://www.ahrq.gov/clinic/uspstf/uspschlip.htm.

TABLE 2. Estimated prevalence, prevalence ratios (PRs), and 95% confidence intervals (95% CIs) for lipid abnormalities among youths (N = 3,125) — National Health and Nutrition Examination Survey, 1999–2006

	High LDL-C* (n = 235)				Low HDL-C* (n = 208)				High triglycerides* (n = 270)				≥1 Lipid abnormality† (n = 577)			
Characteristic	%	(95% CI)	PR	(95% CI)	%	(95% CI)	PR	(95% CI)	%	(95% CI)	PR	(95% CI)	%	(95% CI)	PR	(95% CI)
Sex																
Boys	8.4	(6.4–11.0)	1.0	Ref§	11.0	(9.0–13.4)	1.0	Ref	11.4	(8.9–14.6)	1.0	Ref	24.3	(21.0–28.0)	1.0	Ref
Girls	6.8	(5.1–9.0)	0.8	(0.5–1.2)	4.0	(2.8–5.7)	0.4	(0.3–0.5)	8.8	(6.6–11.6)	0.8	(0.5–1.1)	15.9	(12.7–19.7)	0.7	(0.5–0.9)
Age (yrs)																
12–13	7.3	(5.0–10.6)	1.0	Ref	4.7	(2.9–7.5)	1.0	Ref	9.5	(6.8–13.1)	1.0	Ref	18.2	(14.4–22.6)	1.0	Ref
14–15	6.9	(4.4–10.6)	1.0	(0.5–1.8)	8.7	(6.2–12.1)	1.9	(1.2–3.0)	8.1	(5.8–11.4)	0.9	(0.6–1.3)	18.4	(14.8–22.6)	1.0	(0.8–1.3)
16–17	5.2	(3.4–8.0)	0.7	(0.4–1.2)	7.2	(5.3–9.8)	1.6	(0.9–2.7)	7.0	(5.1–9.5)	0.7	(0.5–1.1)	16.5	(13.3–20.2)	0.9	(0.7–1.2)
18–19	11.4	(8.3–15.5)	1.6	(1.0–2.4)	10.4	(7.8–13.7)	2.2	(1.3–3.8)	16.4	(13.0–20.6)	1.7	(1.2–2.6)	28.8	(24.7–33.3)	1.6	(1.2–2.1)
Race¶																
White, non-Hispanic	7.7	(5.9–10.0)	1.0	Ref	8.5	(6.7–10.7)	1.0	Ref	12.1	(9.5–15.2)	1.0	Ref	22.4	(19.2–26.0)	1.0	Ref
Black, non-Hispanic	8.9	(7.3–10.8)	1.2	(0.8–1.7)	4.7	(3.5–6.4)	0.6	(0.4–0.8)	3.7	(2.4–5.5)	0.3	(0.2–0.5)	14.6	(12.4–17.1)	0.7	(0.5–0.8)
Hispanic	5.4	(4.1–7.0)	0.7	(0.5–1.0)	7.9	(5.8–10.6)	0.9	(0.7–1.3)	9.3	(7.7–11.2)	0.8	(0.6–1.0)	18.6	(16.2–21.2)	0.8	(0.7–1.0)
BMI**																
Normal weight††	5.8	(4.3–7.8)	1.0	Ref	4.3	(3.3–5.6)	1.0	Ref	5.9	(4.6–7.5)	1.0	Ref	14.2	(12.1–16.6)	1.0	Ref
Overweight††	8.4	(5.4–12.8)	1.4	(0.8–2.5)	8.3	(4.8–13.9)	1.9	(1.1–3.4)	13.8	(9.6–19.5)	2.4	(1.5–3.7)	22.3	(18.0–27.4)	1.6	(1.2–2.1)
Obese	14.2	(10.2–19.6)	2.5	(1.6–3.8)	20.5	(16.3–25.5)	4.8	(3.4–6.7)	24.1	(18.8–30.3)	4.1	(3.1–5.5)	42.9	(36.0–50.1)	3.0	(2.5–3.7)
Total	7.63	(6.2–9.3)			7.6	(6.3–9.2)			10.2	(8.4–12.2)			20.3	(18.0–22.8)		

* Low-density lipoprotein (high = LDL-C ≥130 mg/dL); high-density lipoprotein (low = HDL-C ≥35 mg/dL); high triglycerides (≥150 mg/dL) levels.
† Defined as having high LDL-C, low HDL-C, and/or high triglycerides levels.
§ Referent.
¶ Asian youths and persons classified as of other races are included in the overall analyses, but estimates for these specific groups are not reported because of small sample sizes and unstable estimates.
** Body mass index; based on the 2000 CDC sex-specific growth charts for the United States. Available at http://www.cdc.gov/growthcharts. Overweight and obesity are defined as having a BMI within the 85th to <95th percentile or ≥95th percentile, respectively. Normal weight was defined as having an age- and sex-specific BMI >5th to <85th percentile.
†† Eligible for therapeutic lifestyle counseling.

findings are similar to previous studies, which showed that girls tend to have higher HDL-C levels compared with boys after puberty (*3*), older youths are more likely to have abnormal lipid levels compared with younger youths (*4*), and fewer non-Hispanic black youths have low HDL-C and high triglyceride levels compared with non-Hispanic white youths (*3*).

Untreated abnormal lipid levels in childhood and adolescence are linked to increased risk for CVD in adulthood (*2*). Targeted screening of youths for abnormal lipid levels can identify those youths who might benefit from interventions that reduce the risk for CVD. Recommended interventions focus on dietary changes (e.g., reduced consumption of saturated fat and dietary cholesterol, and increased consumption of dietary fiber) to improve LDL-C (*5,6*). Weight management through an improved diet and nutritional counseling also is recommended as a primary treatment of abnormal lipid levels. Finally, studies suggest that physical activity might improve HDL-C and triglyceride levels, and to some extent, LDL-C concentrations (*7*). Although therapeutic lifestyle counseling is the first course of action in reducing abnormal lipid levels among youths, AAP recommends considering pharmacologic interventions to treat children whose LDL remains persistently high even after therapeutic lifestyle counseling (*2*). However, this study and a previous study of children aged 12–17 years using the same NHANES dataset determined that less than 1% of adolescents had lipid levels high enough to warrant drug therapy according to AAP guidelines (*8*).

The findings in this report are subject to at least one limitation. Although the analysis could determine the proportion of all youths who were candidates for lipid screening based solely on BMI, it could not determine the proportion of all youths who were candidates for lipid screening based on other CVD factors cited by AAP, because NHANES data do not include family history information.

Based on the findings in this study, clinicians should be aware of lipid screening guidelines and recommended interventions for children and youths who are overweight or obese. Recently, USPSTF also recommended routine screening for overweight and obesity among youths (*9*). Health-care providers can

refer eligible youths to nutritional counseling, community fitness programs, and school-based lifestyle programs. Surveillance data regarding youth obesity levels, lipid screening practices, and trends in CVD risk factors can aid public health practitioners in implementing population-based lifestyle programs and anticipating future screening needs and eligibility criteria.

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Transfusion-Related Transmission of Yellow Fever Vaccine Virus — California, 2009

In the United States, yellow fever (YF) vaccination is recommended for travelers and active duty military members visiting endemic areas of sub-Saharan Africa and Central/South America (*1,2*). The American Red Cross recommends that recipients of YF vaccine defer blood product donation for 2 weeks because of the theoretical risk for transmission from a viremic donor (*3*). On April 10, 2009, a hospital blood bank supervisor learned that, on March 27, blood products had been collected from 89 U.S. active duty trainees who had received YF vaccine 4 days before donation. This report summarizes the subsequent investigation by the hospital and CDC to identify lapses in donor deferral and to determine whether transfusion-related transmission of YF vaccine virus occurred. The investigation found that a recent change in the timing of trainee vaccination had occurred and that vaccinees had not reported recent YF vaccination status at time of donation. Despite a prompt recall, six units of blood products were transfused into five patients. No clinical evidence or laboratory abnormalities consistent with a serious adverse reaction were identified in four recipients within the first month after transfusion; the fifth patient, who had prostate cancer and end-stage, transfusion-dependent, B-cell lymphoma, died while in hospice care. Three of the four surviving patients had evidence of serologic response to YF vaccine virus. This report provides evidence that transfusion-related transmission of YF vaccine virus can occur and underscores the need for careful screening and deferral of recently vaccinated blood donors.

On April 10, 2009, during a routine record review in connection with a subsequent blood drive, the blood bank supervisor learned of a breach in the deferral protocol for blood products collected from trainees. Further investigation revealed that the blood obtained in the previous drive was from trainees who had been vaccinated with YF vaccine 4 days before the drive. All of those blood products already had been processed and incorporated into the inventory at the hospital's blood bank. The blood bank supervisor reviewed blood bank records and identified 87 whole blood units and three apheresis platelet units obtained from the recently vaccinated trainees. Blood products that had been released for transfusion were tracked forward to identify the patients who had received the implicated blood products. Remaining unused blood products were identified and destroyed.

During April 20–30, investigators reviewed inpatient and outpatient records of patients who received the potentially infected blood products. A data collection tool was developed to capture demographic information, underlying medical conditions, blood product received, and information on previous YF vaccine doses. Because YF vaccine has been recognized to cause serious adverse events in persons who are immunocompromised or aged >60 years (*1*), information was collected on potential adverse events (e.g., fever, meningismus, mental status changes, elevated transaminases, or multisystem organ failure) that might have occurred during the 1 month after receipt of the blood products. All blood product recipients were notified in writing of the potential exposure to YF vaccine virus, and serum samples from the recipients were tested by enzyme-linked immunosorbent assay for immunoglobulin M (IgM) antibodies against YF virus (YFV). Samples testing positive for YFV-specific IgM antibodies were evaluated using the plaque reduction neutralization test, with a 90% cutoff value for neutralizing antibody titers against YFV (the standard evaluation at CDC for determining serologic response to YF vaccine virus). Additional testing for West Nile virus and St. Louis encephalitis virus IgM and IgG antibodies was performed using enzyme immunoassays to evaluate for possible cross-reactive flaviviral antibodies.

Blood Product Recipients

During March 31–April 9, five patients had received six blood products (three platelets, two fresh frozen plasmas, and one packed red cell unit) from six of the trainees. These six trainees had no previous history of vaccination or travel history consistent with exposure to wild-type YFV. In the month after the transfusion, one blood product recipient had died. The decedent was a man aged 82 years who was in hospice care for terminal prostate cancer and end-stage, transfusion-dependent, B-cell lymphoma. He died 20 days after receiving one of the implicated

platelet units. No autopsy was performed, and no premortem blood specimens were available for testing. The other four recipients of blood products had no documented laboratory abnormalities or symptoms attributable to YF vaccine (Table).

Residual blood products from the six transfusions had been discarded. Testing for pretransfusion serologic status of the blood product recipients could not be performed because banked sera were not available. However, serum samples drawn 26–37 days posttransfusion indicated that three of the four recipients had YFV-IgM antibodies confirmed by plaque reduction neutralization test. Testing for cross-reactive flaviviral infection by IgM and IgG antibodies was negative for all four recipients. Testing by reverse transcription–polymerase chain reaction or culture for the presence of YF vaccine virus in the surviving recipients was not performed because samples were obtained when viremia would no longer be expected if transfusion-related transmission had occurred. The patient without YFV-specific antibodies was a premature infant who received multiple aliquots of red blood cells from one donor. Of the three recipients demonstrating YFV-IgM antibodies, two had been previously vaccinated with YF vaccine at least 20 years earlier. A booster response was identified in these two previously vaccinated donor recipients by the presence of YFV-IgM antibodies and high neutralizing antibody titers (160 and 40,960, respectively).

Public Health Response

A review of records associated with the blood product donations confirmed that, in accordance with standard blood bank screening procedures, each trainee had been questioned regarding recent vaccinations on the day of donation. However, none reported having received YF vaccine 4 days earlier. To prevent a similar event in the future, personnel at the military training center now provides the blood bank with immunization records of all trainees at least 1 week before the blood drive, and just before donation, staff members ask each donor individually about his or her vaccination history.

Reported by

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Editorial Note

This investigation documents, for the first time, serologic evidence for transmission of YF vaccine

TABLE. Selected characteristics, clinical outcomes, and laboratory findings of five patients exposed to blood products from donors recently vaccinated with yellow fever vaccine — California, 2009*

						Serologic evaluation	
Age	Sex	Previous yellow fever vaccine (year)	Blood product received (quantity)	Underlying medical conditions	Symptoms and laboratory abnormalities†	Yellow fever virus IgM ELISA / PRNT§	No. of days post-transfusion
Premature infant (24 wks estimated gestational age)¶	Female	No	Irradiated red blood cells (4 aliquots; 30 cc total)	Prematurity, intraventricular hemorrhage	None	Negative / Not done	37
6 yrs	Male	No	Irradiated platelets (1 unit)	Wilm's tumor (relapsed), recent chemotherapy	None	Positive / 160	36
66 yrs	Male	Yes (1964)	Platelets (1 unit)	Kidney/liver transplant (2005) , diabetes, history of alcohol abuse	None	Positive / 160	33
58 yrs	Male	Yes (1975, 1986)	Fresh frozen plasma (2 units)	Chronic renal insufficiency, peritoneal and pulmonary tuberculosis, psoriasis (received infliximab >2 mos before)	None	Positive / 40,960	26
82 yrs	Male	Yes (1959, 1965)	Irradiated platelets (1 unit)	Diffuse large B cell lymphoma s/p chemotherapy and radiation treatment, prostate carcinoma	Deceased**	Premortem specimen not available for testing	—

* Based on electronic medical record review.
† In the 30 days after blood product transfusion (e.g., fever, rigors, headache, meningismus, paralysis, and mental status changes, and abnormalities in white blood cell count, transaminases, or cerebral spinal fluid [if clinically indicated]).
§ Immunoglobulin M enzyme-linked immunosorbent assay result and plaque reduction neutralization test titer.
¶ Received blood products during days 2, 4, 6, and 9 of life.
** Patient was discharged to inpatient hospice for underlying malignancy and died 20 days after receiving blood products. An autopsy was not performed.

What is already known on this topic?

Blood donor centers temporarily defer donation from persons receiving live virus vaccines because of a theoretical risk for viral transmission to the blood product recipient.

What is added by this report?

Transfusion-related transmission of yellow fever vaccine virus is documented for the first time.

What are the implications for public health practice?

Blood donation centers should identify recipients of live virus vaccines to recommend the appropriate timeframe for deferral, which varies depending upon the timeframe for expected postvaccination viremia.

virus through infected blood products. Before this report, the risk for transmitting YF vaccine virus through blood products was only theoretical. From this investigation, various blood products, including irradiated platelets, appear capable of transmitting the YF vaccine virus. Although irradiation can minimize transfusion-associated graft-versus-host disease, the dose is inadequate to kill YF vaccine virus (A. Barrett, University of Texas Medical Branch, personal communication, 2009).

Of the four surviving blood product recipients, three had YFV-IgM and neutralizing antibodies. The one surviving recipient who did not have serologic evidence of exposures was a preterm infant. Two potential reasons for the lack of detectable levels of YFV-IgM antibodies in the preterm infant are the infant's immune system was not mature enough to mount an adequate immune response and lower levels of YF vaccine virus were present in red blood cells compared with other serum-containing products. Despite evidence of transmission of YF vaccine virus, no adverse events attributable to the transfused virus were identified in the blood recipients. In addition, these blood recipients were not ideal candidates for YF vaccination because of age or compromised immune status.

Persons receiving their first dose of YF vaccine often will develop a low-level viremia within 3–7 days after vaccination that persists for 1–3 days (*4*). As neutralizing antibody develops, viremia resolves. Neutralizing antibody develops in 90% of recipients within 10 days of vaccination and in 99% of recipients within 30 days (*5*). Immunity lasts for at least 10 years (*1*). Persons receiving subsequent doses typically do not develop viremia but might have an elevation in IgM antibodies if several years have passed since their last vaccination (*6*). YFV-IgM antibodies detected in the recipients might represent passive immunization (i.e., transfer of antibodies formed in the donor) rather than transmission of vaccine virus via blood product. However, this explanation is unlikely because all the donors were primary vaccine recipients, and they would be expected to have viremia with low or nonexistent levels of IgM antibodies at 4 days post-vaccination, when the blood donation occurred (*7,8*). Detection of YF vaccine virus in the original blood products or acute sera from recipients could have confirmed vaccine virus transmission, but samples were unavailable to perform such testing. Two of the three recipients with positive YFV-IgM antibody titers had been vaccinated previously with YF vaccine more than 20 years earlier likely had an anamnestic response to the vaccine virus in the blood products. This immunologic response is consistent with reports that YFV-IgM antibodies can reform after a booster dose of the vaccine, particularly with longer time between vaccinations (*6,8*).

Transfusion-related transmission of attenuated YF vaccine virus is preventable. Health-care providers should inform persons receiving live vaccines about the temporary deferral for blood donation. Providing additional checks and balances is especially important when blood product donors receive several vaccinations within a short period (e.g., in the case of active duty military personnel or travelers). If feasible, occupational health personnel at military training facilities should collaborate with the organizers of blood drives targeting military trainees to coordinate a minimum 2-week interval separating receipt of live vaccines and collection of blood products. All potential blood donors should be individually screened for a recent history of receipt of vaccines containing live virus during the month before donation, and temporary deferment should be based upon the expected post-vaccination period of viremia. Most temporary deferments due to receipt of live vaccines are 2 weeks; however, recipients of measles, mumps, and rubella vaccines and varicella vaccines should be deferred for 4 weeks because of the theoretical risk for prolonged viremia.

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Update: Influenza Activity — United States, August 30, 2009–January 9, 2010

The emergence and spread of the 2009 pandemic influenza A (H1N1) virus (2009 H1N1) resulted in extraordinary influenza activity in the United States throughout the summer and fall months of 2009 (*1,2*). During this period, influenza activity reached its highest level in the week ending October 24, 2009, with 49 of 50 states reporting geographically widespread disease. As of January 9, 2010, overall influenza activity had declined substantially. Since April 2009, the dominant circulating influenza virus in the United States has been 2009 H1N1. This report summarizes U.S. influenza activity* from August 30, 2009, through January 9, 2010.

Viral Surveillance

During August 30, 2009–January 9, 2010, World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories in the United States tested 310,151 respiratory specimens for influenza viruses; 81,179 (26.2%) were positive, 80,951 (99.7%) of those specimens were positive for influenza A, and 228 (0.3%) were positive for influenza B. Of the 61,726 influenza A viruses for which subtyping was performed, 61,332 (99.4%) were 2009 H1N1 viruses. Only 29 viruses (<0.1%) were seasonal influenza A (H1), 52 (<0.1%) were influenza A (H3) viruses, and 313 (0.5%) were influenza A, but could not be subtyped because of specimen quantity or quality.

CDC has antigenically characterized 944 viruses that were 2009 H1N1, one seasonal influenza A (H1N1), seven influenza A (H3N2), and six influenza B viruses collected since September 1, 2009. A total of 942 (99.8%) 2009 H1N1 viruses tested were related to the A/California/7/2009 (H1N1) reference virus selected by WHO as the 2009 H1N1 vaccine virus; only two viruses (0.2%) showed reduced titers with antisera produced against A/California/7/2009.

One seasonal influenza A (H1N1) virus was related to the influenza A (H1N1) component of the 2009–10 Northern Hemisphere influenza vaccine (A/Brisbane/59/2007). The seven influenza A (H3N2) viruses collected during September 22–November 1, 2009, showed reduced titers with antisera produced against A/Brisbane/10/2007, the 2009–10 Northern Hemisphere influenza A (H3N2) vaccine component, and were antigenically related to A/Perth/16/2009, the WHO-recommended influenza A (H3N2) component of the 2010 Southern Hemisphere vaccine formulation. The six influenza B viruses tested belong to the B/Victoria lineage and are related to the influenza vaccine component for the 2009–10 Northern Hemisphere influenza vaccine (B/Brisbane/60/2008).

Antiviral Resistance of Influenza Virus Isolates

CDC conducts surveillance for resistance of circulating influenza viruses to both classes of influenza antiviral medications: adamantanes (amantadine and rimantadine) and neuraminidase inhibitors (zanamivir and oseltamivir). Since September 1, 2009, 39 (1.3%) of 2,926 total 2009 H1N1 viruses tested by neuraminidase inhibition assay and/or by detection of a single known mutation in the virus which confers oseltamivir resistance, H275Y, have shown oseltamivir resistance. This proportion of oseltamivir-resistant 2009 H1N1 viruses might overestimate the prevalence of oseltamivir-resistant 2009 H1N1 viruses in the United States because most of these viruses were tested because of clinical suspicion for oseltamivir resistance. Three additional cases of oseltamivir resistance among 2009 H1N1 viruses have been identified by other laboratories where antiviral resistance testing also is performed; thus, a total of 42 oseltamivir-resistant 2009 H1N1 viruses have been reported to CDC since September 1, 2009.

Since April 2009, a total of 52 oseltamivir-resistant 2009 H1N1 viruses have been detected in patients

* The CDC influenza surveillance system collects five categories of information from eight data sources: 1) viral surveillance (World Health Organization collaborating U.S. laboratories, the National Respiratory and Enteric Virus Surveillance System, and novel influenza A virus case reporting), 2) outpatient illness surveillance (U.S. Outpatient ILI Surveillance Network), 3) mortality (122 Cities Mortality Reporting System and influenza-associated pediatric mortality reports), 4) hospitalizations (Emerging Infections Program) and 5) summary of geographic spread of influenza (state and territorial epidemiologist reports).

in the United States. Forty (77%) of the 52 patients had documented exposure to oseltamivir through either treatment or chemoprophylaxis; exposure to oseltamivir in nine (17%) patients has not yet been determined, and three patients (6%) had no known exposure. One seasonal influenza A (H1N1) was tested and was resistant to oseltamivir. One influenza B virus was tested and was not resistant to oseltamivir. None of eight influenza A (H3N2) viruses tested were resistant to oseltamivir. All tested viruses were sensitive to the neuraminidase inhibitor zanamivir. One seasonal influenza A (H1N1) virus was found to be sensitive, and nine (81.8%) of 11 influenza A (H3N2) and 834 (99.6%) of 837 2009 H1N1 virus isolates tested were found to have resistance to the adamantanes (amantadine and rimantadine).

State-Specific Activity Levels

The largest number of states to date reporting widespread activity occurred during the week ending October 24, 2009, when 49 jurisdictions reported widespread activity.[†] During the week ending January 9, 2010, no jurisdiction reported widespread activity. The early widespread state-specific activity contrasts with the previous three influenza seasons (October to May), when state-specific influenza activity did not reach comparable levels until mid-February or early March.

Outpatient Illness Surveillance

In the week ending October 24, 2009, the weekly percentage of outpatient visits for influenza-like illness (ILI)[§] reported by the U.S. Outpatient ILI Surveillance Network (ILINet) reached 7.7%, the highest level to date this influenza season. As of January 9, 2010, ILI activity had decreased to 1.9% (Figure 1). During the previous three influenza seasons, peak ILI activity occurred later in the season and ranged from 3.5% during the week ending February 17 of the 2006–07 season to 6.0% during the week ending February 17 of the 2007–08 season. As of the week ending January 9, one of 10 regions was reporting weekly percentages of outpatient visits for ILI at or above its region-specific baseline. ILI activity was at or above the national baseline of 2.3% during the entire period of November–December 2009.[¶]

Influenza-Associated Hospitalizations

Laboratory-confirmed influenza-associated hospitalizations are monitored using a population-based surveillance network that includes sites in 10 states in the Emerging Infections Program (EIP) and sites in six additional states added during 2009.[**] This season, cumulative hospitalization rates have been highest in children aged 0–4 years, and generally rates have declined with age. As of January 9, 2010, cumulative rates of laboratory-confirmed influenza-associated hospitalizations reported for children aged 0–4 years were 5.9 per 10,000 population by EIP and 9.7 per 10,000 population by the new sites (Figure 2). Rates for other age groups were as follows: 5–17 years, 2.5 by EIP and 3.6 by the new sites; 18–49 years, 2.2 by EIP and 1.7 by the new sites; 50–64 years, 2.9 by EIP and 1.8 by the new sites; and ≥65 years, 2.4 by EIP and 1.7 by the new sites. In comparison, EIP cumulative hospitalization rates for the entire October-May influenza reporting seasons of 2006–07, 2007–08, and 2008–09, ranged as follows: ages 0–4 years (2.6 to 4.2), 5–17 years (0.4 to 0.6), 18–49 years (0.3 to 0.7), 50–64 years (0.4 to 1.5), and ≥65 years (1.4 to 7.5) (Figure 2).

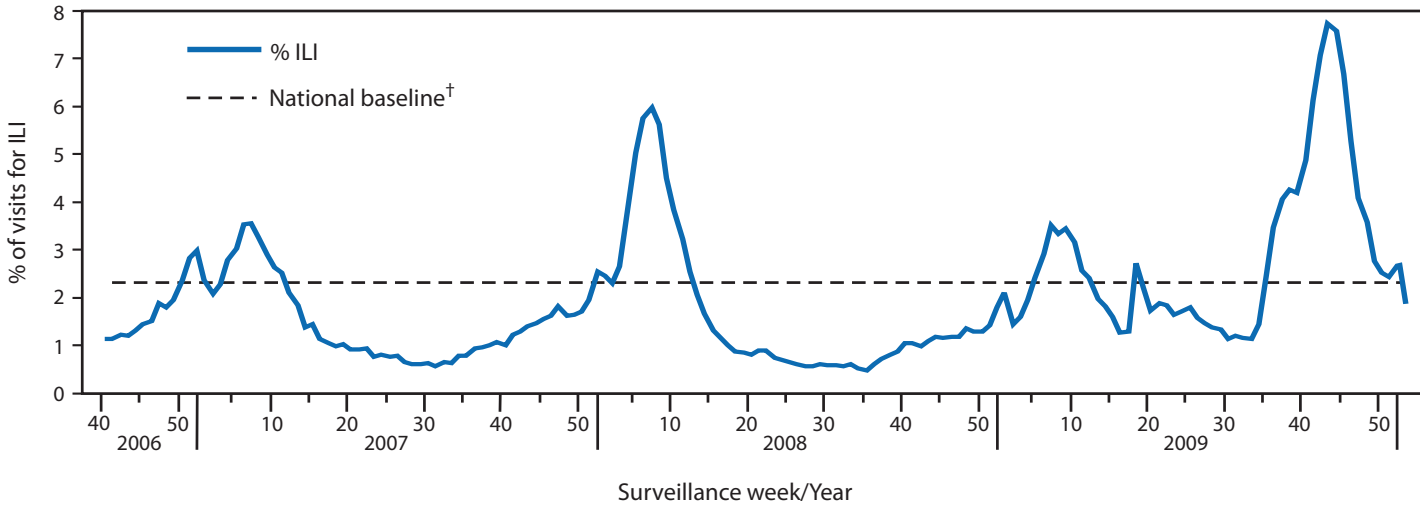
[†] Levels of activity are 1) *no activity*; 2) *sporadic*: isolated laboratory-confirmed influenza cases or a laboratory-confirmed outbreak in one institution, with no increase in influenza-like illness (ILI) activity; 3) *local*: increased ILI, or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region with recent laboratory evidence of influenza in that region; virus activity no greater than sporadic in other regions; 4) *regional*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least two but less than half of the regions in the state with recent laboratory evidence of influenza in those regions; and 5) *widespread*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state with recent laboratory evidence of influenza in the state.

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

[¶] The national and regional baselines are the mean percentage of visits for ILI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. National and regional percentages of patient visits for ILI are weighted on the basis of state population. Use of the national baseline for regional data is not appropriate.

[**] EIP currently conducts surveillance for laboratory-confirmed, influenza-related hospitalizations in 61 counties and Baltimore, Maryland. The EIP catchment area includes 13 metropolitan areas located in 10 states. Beginning in September 2009, new EIP sites covering 40 counties in six states began reporting influenza-related hospitalization surveillance. Hospital laboratory, admission, and discharge databases, and infection-control logs are reviewed to identify persons with a positive influenza test (i.e., viral culture, direct fluorescent antibody assays, reverse transcription–polymerase chain reaction, serology, or a commercial rapid antigen test) from testing conducted as part of their routine care.

FIGURE 1. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-Like Illness Surveillance Network (ILINet), by surveillance week — United States, 2006–07, 2007–08, 2008–09, and 2009–10* influenza seasons



* Through January 9, 2010.

† The national baseline is the mean percentage of visits for ILI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. Use of the national baseline for regional data is not appropriate.

In response to the emergence of 2009 H1N1 viruses, the Council of State and Territorial Epidemiologists (CSTE) instituted reporting of 2009 H1N1-confirmed hospitalizations and deaths to CDC. On August 30, CDC and CSTE instituted modified case definitions for aggregate reporting of influenza-associated hospitalizations and deaths. This cumulative jurisdiction-level reporting is referred to as the Aggregate Hospitalization and Death Reporting Activity (AHDRA).[††] During August 30, 2009–January 9, 2010, a total of 38,454 hospitalizations associated with laboratory-confirmed influenza virus infections were reported to CDC through AHDRA. The median number of states reporting hospitalizations per week through AHDRA was 33 (range: 25–35).

Pneumonia and Influenza-Related Mortality

Pneumonia and influenza-associated deaths are monitored by the 122 Cities Mortality Reporting System and AHDRA. For the week ending January 9, pneumonia or influenza was reported as an underlying or contributing cause of death for 7.3% of all deaths reported through the 122 Cities Mortality Reporting System, below the week-specific epidemic threshold of 7.6%[§§] (Figure 3). The longest period that pneumonia and influenza-related mortality was above the epidemic threshold was for 11 consecutive weeks from the week ending October 3, 2009, to the week ending December 12, 2009. The highest level of pneumonia and influenza-related mortality was 8.1% for the week ending November 21, 2009. In contrast, peak pneumonia and influenza-associated mortality did not occur until later in the three previous seasons, peaking at 7.7% during the week ending February 24, 2007, during the 2006–07 influenza season and at 9.1% in the week ending February 16, 2008, during the 2007–08 season.

During August 30–January 9, a total of 1,779 deaths associated with laboratory-confirmed influenza virus infections were reported to CDC through AHDRA. The 1,779 laboratory-confirmed deaths are in addition to the 593 laboratory-confirmed deaths from 2009 H1N1 that were reported to CDC from April through August 30, 2009. Since August 30, cumulative deaths associated with laboratory-confirmed

[††] States report weekly to the CDC either 1) laboratory-confirmed influenza hospitalizations and deaths or 2) pneumonia and influenza syndrome-based cases of hospitalization and death resulting from all types or subtypes of influenza. Although only the laboratory-confirmed cases are included in this Report, CDC continues to analyze data both from laboratory-confirmed and syndromic hospitalizations and deaths. Additional information is available at http://www.cdc.gov/h1n1flu/reportingqa.htm#reportingofflu.

[§§] The seasonal baseline proportion of pneumonia and influenza deaths is projected using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from pneumonia and influenza that were reported by the 122 Cities Mortality Reporting System during the preceding 5 years. The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

What is already known on this topic?

The 2009 pandemic influenza A (H1N1) virus emerged in the United States in April 2009 and caused substantial disease worldwide.

What is added by this report?

In recent weeks, declines have been observed in 2009 H1N1 influenza activity; however, rates of influenza-related hospitalizations and deaths among persons aged <65 years during this season have been substantially higher than in recent influenza seasons.

What are the implications for public health practice?

Epidemiologic data in this report support expanded recommendations by CDC that the influenza A (H1N1) 2009 monovalent vaccine be offered to all persons aged ≥6 months, depending on local availability.

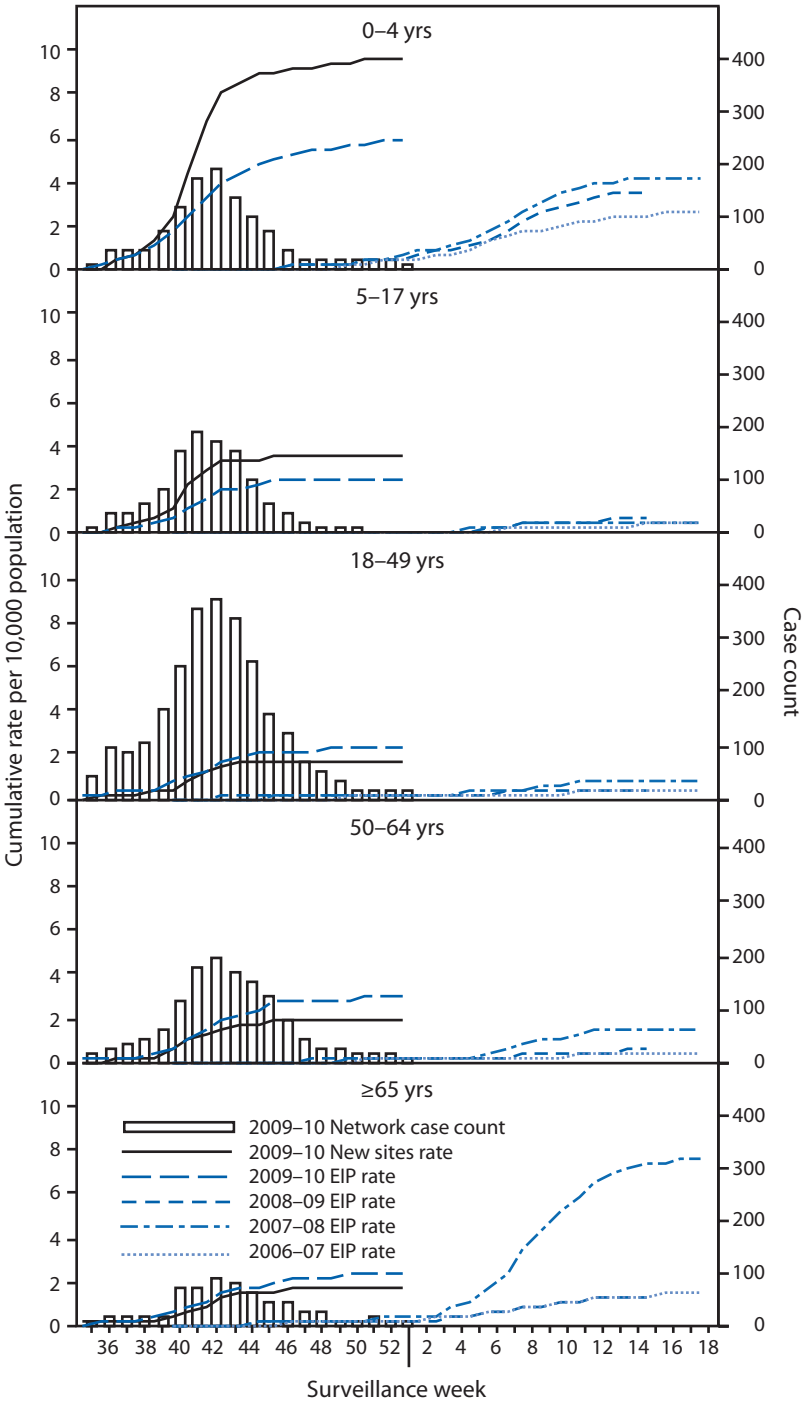
2009 H1N1 infection per 100,000 population were 0.31 for persons aged 0–4 years, 0.26 for 5–18 years, 0.38 for 19–24 years, 0.60 for 25–49 years, 1.03 for 50–64 years, and 0.65 for ≥65 years. For the period August 30–January 9, the median number of states reporting laboratory-confirmed deaths per week through AHDRA was 34 (range: 23–38).

Influenza-Associated Pediatric Mortality

CDC has received 236 reports of pediatric deaths associated with laboratory-confirmed influenza infection that occurred and were reported since August 30, 2009, the start of the 2009–10 influenza season (Figure 4). A total of 195 (83%) cases were associated with laboratory-confirmed 2009 H1N1 virus. Forty pediatric deaths were associated with an influenza A infection for which the subtype was undetermined but likely was 2009 H1N1 based on the predominance of this virus among those circulating. One death was associated with an influenza B virus infection (Figure 4).

Of the 236 pediatric deaths reported occurring since August 30, a total of 43 (18.2%) were among children aged <2 years, 26 (11.0%) were among children aged 2–4 years, 87 (36.9%) were among children aged 5–11 years, and 80 (33.9%) were among children aged 12–17 years. Since the week ending May 2, CDC has received 255 reports of pediatric deaths associated with laboratory-confirmed 2009 H1N1 virus. During the 2005–06, 2006–07, and 2007–08 influenza seasons, the mean number of reported pediatric influenza deaths was 74.

FIGURE 2. Number of laboratory-confirmed influenza-associated hospitalizations and cumulative hospitalization rates per 10,000 population, by age group and surveillance week — Emerging Infections Program (EIP) and new sites,* 2006–07, 2007–08, 2008–09,† and 2009–10§ U.S. influenza seasons

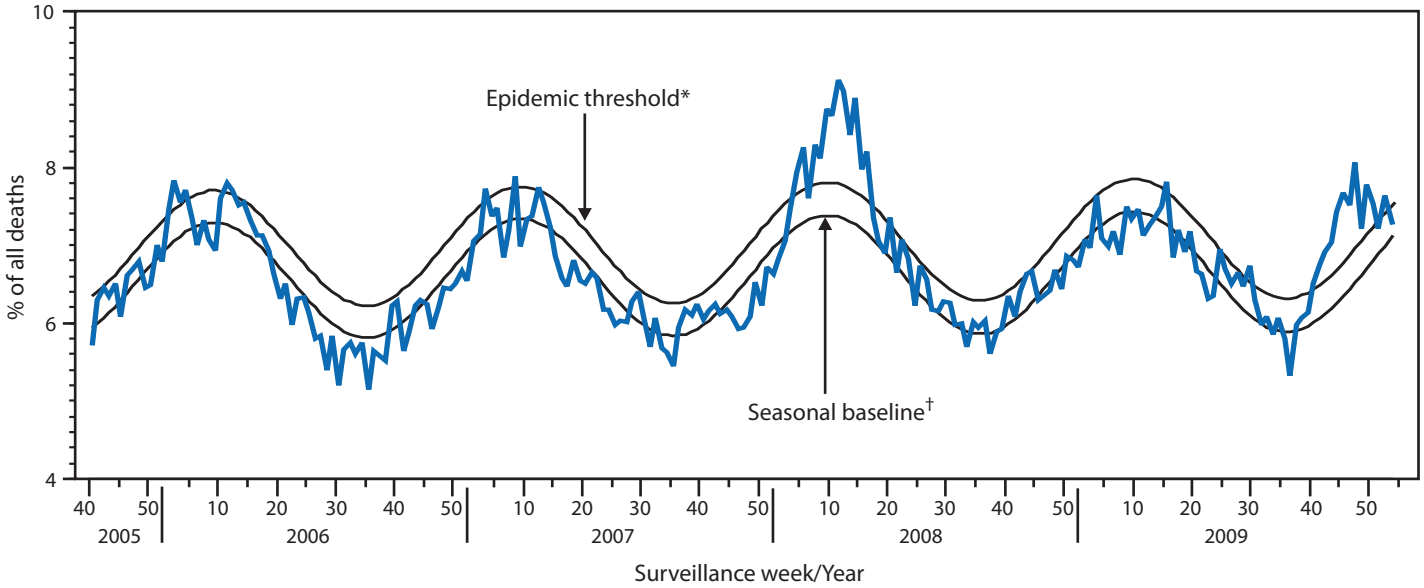


* In 2009, new sites in six additional states were added to the sites in the 10 states already participating in EIP. During September 1, 2009–January 9, 2010, total influenza-associated hospitalization rates were reported for EIP and the new sites for all types of influenza, including influenza A, influenza B, and 2009 pandemic influenza A (H1N1).

† Ending April 14, 2009, with reports of cases of 2009 H1N1.

§ Through January 9, 2010.

FIGURE 3. Percentage of all deaths attributed to pneumonia and influenza (P&I), by surveillance week and year — 122 Cities Mortality Reporting Sytem, United States, 2006–2010



* The epidemic threshold is 1.645 standard deviations above the seasonal baseline.
† The seasonal baseline is projected using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from P&I during the preceding 5 years.

Reported by

WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza. L Brammer, MPH, S Epperson, MPH, L Blanton, MPH, T Wallis, MS, A Fiore, MD, L Gubareva, PhD, J Bresee, MD, L Kamimoto, MD, X Xu, MD, A Klimov, PhD, N Cox, PhD, Influenza Div; L Finelli, DrPH, National Center for Immunization and Respiratory Diseases; S Graitcer, MD, EIS Officer, CDC.

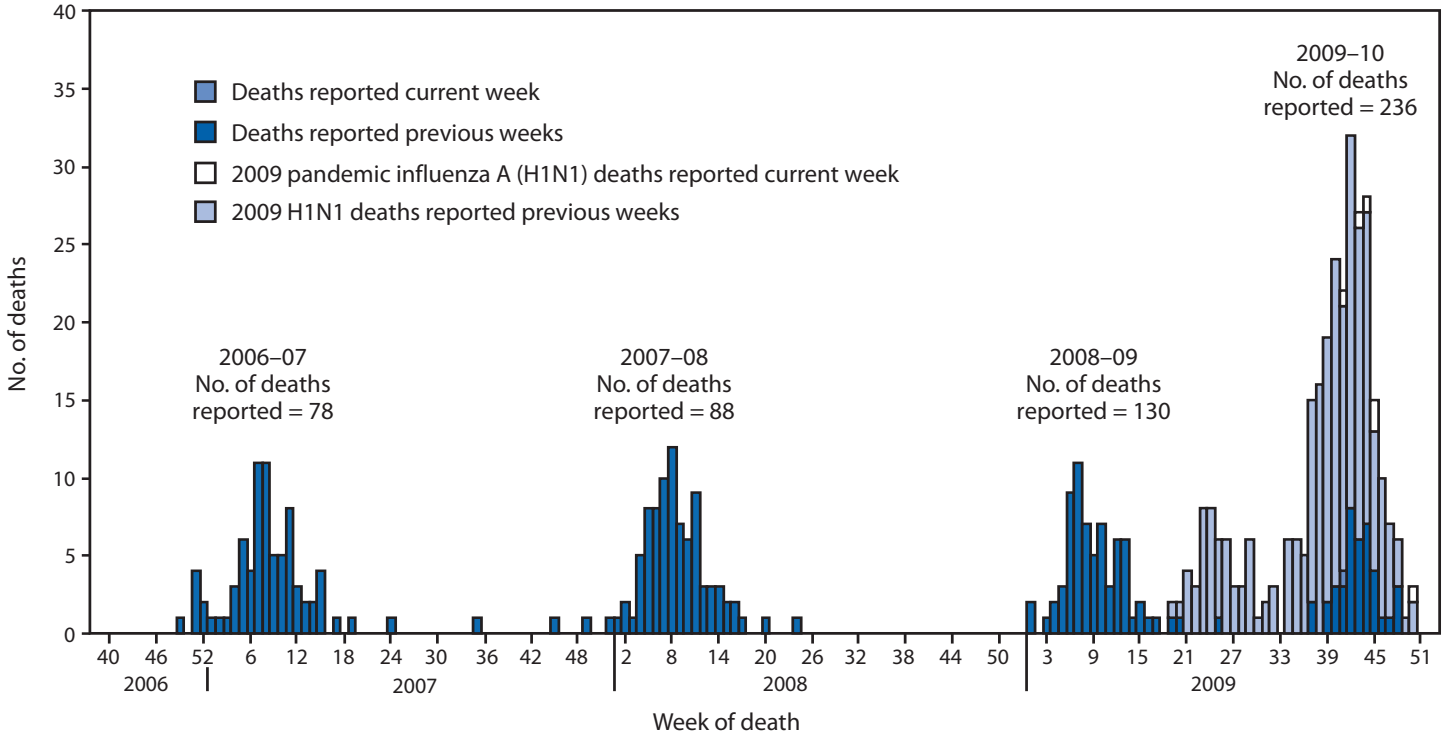
Editorial Note

As of January 9, 2010, the vast majority of influenza activity this season had been from 2009 H1N1. Activity was highest during the week ending October 24, 2009, and has since declined. The number of influenza-associated pediatric deaths reported to date for the 2009–10 season (236) is more than three times the average number (74) reported for the 2005–06, 2006–07, and 2007–08 influenza seasons. Resistance to antiviral neuraminidase inhibitors has been low among the 2009 H1N1 viruses, and the vast majority of 2009 H1N1 viruses tested remain related to the A/California/7/2009 (H1N1) reference virus selected by WHO as the 2009 H1N1 vaccine virus.

January and February are months during which seasonal influenza activity usually increases; thus, increased influenza activity from 2009 H1N1 viruses, seasonal influenza viruses, or both might occur in the remainder of the influenza season. In all three 20th century influenza pandemics (in 1918, 1957, and 1968), multiple waves of influenza activity were observed (*3*). The 2009 H1N1 virus is likely to continue to circulate through the winter months, resulting in more cases, hospitalizations, and deaths. Although limited supplies of influenza A (H1N1) 2009 monovalent vaccine had previously necessitated prioritizing vaccination among certain groups, approximately 130 million doses have been shipped since the vaccine was released, and most jurisdictions are encouraging vaccination of all persons aged ≥6 months (*4*). The 2009 H1N1-related morbidity and mortality described in this report point to the importance of a continued focus on vaccination, both among persons in the initial target groups as well as the rest of the population.

As the season progresses, public health officials should maintain the ability to detect changes in influenza activity. Testing, including subtyping of influenza A viruses to detect both pandemic and seasonal influenza strains, should continue for all hospitalized and severely ill patients, including patients aged ≥65 years. Timely reporting of all pediatric deaths associated with laboratory-confirmed influenza remains essential to detecting changes in severity of disease among children (includeing reporting no

FIGURE 4. Number of influenza-associated pediatric deaths, by week of death — United States, 2006–07, 2007–08, 2008–09, and 2009–10* influenza seasons



* Through January 9, 2010.

cases). Continued reporting of ILI through ILINet also will be important to tracking changes in influenza activity. Using previously established reporting channels, health-care providers should continue reporting to local or state health departments any particularly severe or unusual influenza cases or any cases among health-care workers and persons at risk for severe complications from influenza (e.g., pregnant women and immunocompromised persons). Institutional closings or clusters of influenza infections in prisons, schools, colleges, and long-term care facilities also should be reported through state and local health departments. In addition, any adverse reactions to influenza vaccines should continue to be reported via the Vaccine Adverse Event Reporting System (http://vaers.hhs.gov/index), and any adverse events after use of antivirals should be reported to MedWatch (http://www.fda.gov/safety/medwatch). Changes in the geographic spread, type, and severity of the circulating influenza viruses will continue to be monitored with updates reported weekly in the online national influenza surveillance summary, FluView.¶¶ Additional information regarding prevention and treatment of the 2009 pandemic influenza A (H1N1) is also available online.***

Acknowledgments

This report is based, in part, on data contributed by participating state and territorial health departments and state public health laboratories, World Health Organization collaborating laboratories, National Respiratory and Enteric Virus Surveillance System collaborating laboratories, the U.S. Outpatient ILI Surveillance Network, the Emerging Infections Program, the Aggregate Hospitalization and Death Reporting Activity, the Influenza Associated Pediatric Mortality Surveillance System, and the 122 Cities Mortality Reporting System.

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¶¶ Available at http://www.cdc.gov/flu/weekly.

*** Available at http://www.cdc.gov/h1n1flu.

Interim Results: Influenza A (H1N1) 2009 Monovalent Vaccination Coverage — United States, October–December 2009

On January 15, this report was posted as an MMWR Early Release *on the* MMWR *website* (http://www.cdc.gov/mmwr).

In July 2009, the Advisory Committee on Immunization Practices (ACIP) issued recommendations for use of the influenza A (H1N1) 2009 monovalent vaccine (*1*). Recognizing that the vaccine supply would not be ample immediately but would grow over time, ACIP identified 1) initial target groups, consisting of approximately 160 million persons, and 2) a limited vaccine subset of the target groups, initially estimated at 42 million persons (and more recently estimated at 62 million persons), to receive first priority while the 2009 H1N1 vaccine supply was limited (*1*). ACIP recommended expanding vaccination to the rest of the population as vaccine supplies increased. To estimate 2009 H1N1 vaccination coverage to date for the 2009–10 influenza season, CDC analyzed results from the National 2009 H1N1 Flu Survey (NHFS) and the Behavioral Risk Factor Surveillance System (BRFSS) survey, conducted during December 27, 2009–January 2, 2010, and December 1–27, 2009, respectively. The results indicated that, as of January 2, an estimated 20.3% of the U.S. population (61 million persons) had been vaccinated, including 27.9% of persons in the initial target groups and 37.5% of those in the limited vaccine subset. An estimated 29.4% of U.S. children aged 6 months–18 years had been vaccinated. Now that an ample supply of 2009 H1N1 vaccine is available, efforts should continue to increase vaccination coverage among persons in the initial target groups and to offer vaccination to the rest of the U.S. population, including those aged ≥65 years (*2*).

To provide both timely estimates of 2009 H1N1 vaccination coverage and reliable estimates of coverage in priority populations (e.g., the initial target groups and the limited vaccine subset*), CDC used two separate surveys, NHFS and BRFSS. NHFS is a new survey, scheduled to operate from October 2009 through June 2010 to track 2009 H1N1 and seasonal influenza vaccination coverage nationally on a weekly basis. NHFS is a random-digit–dialed telephone survey based on a rolling weekly sample of respondents with landline and cellular telephones. Monthly targets were set to achieve approximately 4,889 completed interviews from landline households and 1,111 from cellular-only or cellular-mostly households, or approximately 6,000 interviews in all. To determine influenza vaccination status, respondents were asked whether they (or their child) had received "an H1N1 flu vaccination" since September, and if so, in which month.† The NHFS estimates presented in this report show the percentage of respondents interviewed during the week of December 27, 2009–January 2, 2010, who reported receiving vaccine from October 1, 2009 to the date of interview. Unvaccinated NHFS respondents also were asked: "How likely are you to get an H1N1 flu vaccination between now and June 2010?"

Because the weekly sample sizes from NHFS are not large enough for reliable estimation of vaccination coverage among persons in individual initial target groups, CDC also used BRFSS, which collected vaccination coverage data for most of the initial target groups on a monthly basis. BRFSS conducts state-based, random-digit–dialed telephone surveys of the noninstitutionalized U.S. population aged ≥18 years to determine the prevalence of health conditions and health risk behaviors. Since 2001, BRFSS has included questions on seasonal influenza vaccination in its core survey. To determine 2009 H1N1 vaccination coverage, BRFSS respondents in 49 states (all except Vermont) and the District of Columbia were asked if they (or their child in 39 of

* Initial target groups include pregnant women, persons who live with or provide care for infants aged <6 months, health-care and emergency medical services personnel, children and young adults aged 6 months–24 years, and persons aged 25–64 years who have medical conditions that put them at higher risk for influenza-related complications. The limited vaccine subset includes pregnant women, persons who live with or provide care for infants aged <6 months, health-care and emergency medical services personnel who have direct contact with patients or infectious material, children aged 6 months–4 years, and children aged 5–18 years who have medical conditions that put them at higher risk for influenza-related complications.

† Respondents were asked: "Since September 2009, have you had an H1N1 flu vaccination? There are two types of H1N1 flu vaccinations. One is a shot and the other is a spray, mist or drop in the nose. How many H1N1 vaccination doses have you received? During what month did you receive [your/your first] H1N1 flu vaccine? Was this a shot or the spray in the nose? During what month did you receive your second H1N1 flu vaccine? Was this a shot or the spray in the nose?" The landline sample was augmented with a sample of children aged <18 years identified during screening for the National Immunization Survey. Additional NHFS information is available at http://www.cdc.gov/nis/h1n1_introduction.htm and http://www.cdc.gov/nis/data/h1n1_flu_survey.pdf.

these states and the District of Columbia) had been vaccinated for the "H1N1 flu" since September, and if so, in which month?[§] BRFSS results in this report represent the percentage of respondents who reported receiving 2009 H1N1 vaccine during the period from October 1, 2009, through the date of interview during December 1–27, 2009.

For both NHFS and BRFSS, respondents with missing influenza vaccination information were excluded. Results from both surveys were weighted to reflect selected demographic and geographic population estimates and analyzed by statistical software that accounts for survey design. Statistical significance of differences was assessed by t-test. For NHFS, the Council of American Survey and Research Organizations (CASRO) response rate for the first 13 weekly sample groups was 34% for landline telephone respondents and 26% for cellular telephone respondents; the cooperation rate was 43% for landline and 57% for cellular. During December 2009, the BRFSS median CASRO response and cooperation rates were 50% and 74%, respectively.[¶]

From October 10, 2009 to January 2, 2010, the weekly NHFS percentage of U.S. residents who reported they had received at least 1 dose of 2009 H1N1 vaccine rose to 20.3% (Figure). According to NHFS data, of the 24 million vaccine doses administered in the United States through mid-November, an estimated 21 million (85%) went to persons in the initial 2009 H1N1 target groups. By the end of December, this percentage had declined to 74% (48 million of the 65 million doses administered). For the survey week December 27, 2009–January 2, 2010, NHFS data indicated that 29.4% of children aged 6 months–18 years (22 million) had received at least 1 dose of vaccine, including 33.0% of children aged 6 months–4 years (Table 1). Among children aged 6 months–9 years, an age group recommended to receive 2 doses of 2009 H1N1 vaccine, 34.6% (95% confidence interval [CI] = 26.6%– 42.6%) had received at least 1 dose; among these children, 17.8% (CI = 10.1%– 25.5%) had received 2 doses.

According to NHFS estimates, vaccination coverage was 27.9% among persons included in the 2009 H1N1 initial target groups and 37.5% among those in the limited vaccine subset, two populations estimated to number 160 million (CI = 144–176 million) and 62 million (CI = 51–73 million) respectively in the United States (Table 1). Among BRFSS survey respondents during December 1–27, estimated coverage for specific initial target groups was 38.0% for pregnant women, 22.3% for health-care personnel, and 11.6% for adults aged 25–64 years with high-risk medical conditions. Among NHFS respondents during November 29–December 26, coverage was 13.9% for adults who live with or provide care for infants aged <6 months (Table 2).

BRFSS estimates of 2009 H1N1 vaccination rates generally were higher among non-Hispanic whites than among non-Hispanic blacks. However, this difference was statistically significant only among adults aged 25–64 years with high-risk conditions (13.1% [CI = 11.1%–15.1%] versus 5.4% [CI = 2.5%–8.3%]) and health-care personnel (25.6% [CI = 22.5%–28.7%] versus 7.6% [CI = 3.3%–11.9%]).

Among the December 27–January 2 NHFS participants who had not yet received 2009 H1N1 vaccination, 10.9% (CI = 7.4%–14.4%) said they definitely intended to get vaccinated by June 2010; an additional 22.5% (CI = 18.6%–26.4%) said they would probably get vaccinated. Among parents of unvaccinated children, 21.1% (CI = 10.7%– 31.5%) said they definitely intended to have their children vaccinated, and 17.7% (CI = 10.6%–24.8%) said they probably would have their children vaccinated.

Reported by

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[§] Respondents were asked: "There are two ways to get the H1N1 flu vaccination. One is a shot in the arm and the other is a spray, mist, or drop in the nose. Since September 2009, have you been vaccinated either way for the H1N1 flu? During what month did you receive your H1N1 flu vaccine? Was this a shot or was it a vaccine sprayed in the nose?" Additional BRFSS information is available at http://www.cdc.gov/brfss.

[¶] The CASRO response rate is the product of three other rates: the resolution rate, which is the proportion of telephone numbers that can be identified as either for a business or residence; the screening rate, which is the proportion of qualified households that complete the screening process; and the cooperation rate, which is the proportion of contacted eligible households for which a completed interview is obtained. CASRO response and cooperation rates reported by different surveys are not strictly comparable because of differences in how disposition categories are defined.

What is already known on this topic?

Since 2009 H1N1 influenza vaccine first became available in October 2009, public health agencies have directed limited vaccine supplies toward groups of persons who can most benefit from the vaccine.

What is added by this report?

By the end of December 2009, an estimated 61 million persons (20% of the U.S. population) had been vaccinated, including 27.9% of persons in the initial target groups, 29.4% of children, 11.6% of adults aged 25–64 years with underlying medical conditions, 22.3% of health-care personnel, and 13.9% of adults caring for infants aged <6 months.

What are the implications for public health practice?

Now that there is ample supply of vaccine, efforts should continue to improve vaccination coverage among persons in initial target groups, as well as to offer vaccination to the rest of the U.S. population, including those aged ≥65 years.

Editorial Note

Development of 2009 H1N1 vaccines began immediately after the virus emerged in late April 2009. By late June, several manufacturers had begun the process of producing vaccines; within 4 months, vaccines had been licensed by the Food and Drug Administration, and the first lots of vaccine were released for use in the United States. By mid-December, approximately 85 million doses had been shipped to providers around the country. During October 5–December 31, a period of limited vaccine supply, vaccination efforts focused on those groups at highest risk for influenza or influenza complications or persons in close contact with those at high risk (*1*). This report indicates that, by the beginning of 2010, an estimated 20% of the population, or 61 million U.S. residents, had received 2009 H1N1 vaccine. Of persons in the groups initially targeted by ACIP for vaccination, an estimated 28% reported receiving 2009 H1N1 vaccine. The highest coverage (approximately 38%) was achieved among persons in the limited vaccine subset, as defined by ACIP, indicating that public health efforts largely were effective at directing available vaccine to those persons who needed it most.

Overall, the 29% 2009 H1N1 vaccination coverage among children aged 6 months–18 years was similar to estimates of seasonal influenza vaccination coverage (24%–27%) for this age group during the 2008–09 influenza season (*3,4*). Among children aged <5 years, who have been recommended for seasonal influenza vaccination since 2006 (*5*) and who have been among the groups most severely affected by 2009 H1N1, first-dose 2009 H1N1 influenza vaccination coverage was 33%, approaching seasonal influenza vaccination coverage estimates (35%–43%) during recent seasons (*3,4*).

Hospitalization rates and mortality from 2009 H1N1 influenza have been high among pregnant women (*6,7*). The 38% 2009 H1N1 vaccination coverage among pregnant women in this report was higher than the rate typically achieved (15%–25%) for seasonal influenza vaccination (*8*). However, the CI around this estimate is large (24%–52%). A separate system, the Pregnancy Risk Assessment Monitoring System (PRAMS), is collecting data, including influenza immunization coverage, from approximately 30,000 women with live births in 31 states and will provide more precise estimates in the future. To improve influenza vaccination coverage among pregnant women this year and during future seasons, efforts should continue to urge obstetricians and other health-care providers to provide influenza vaccine to pregnant women.

The results in this report show that nearly 90% of adults aged <65 years with medical conditions that increase their risk for influenza-related complications remain unvaccinated. Among adults hospitalized with 2009 H1N1 infection, approximately three fourths had at least one high-risk condition (e.g., asthma,

FIGURE. Weekly estimates of influenza A (H1N1) 2009 monovalent vaccination coverage among U.S. residents aged ≥6 months — National 2009 H1N1 Flu Survey, week ending October 10, 2009, through week ending January 2, 2010

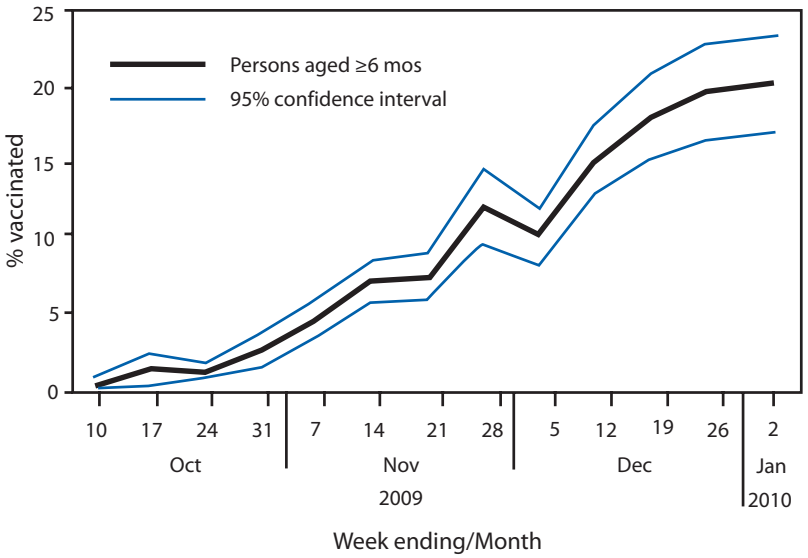

TABLE 1. Estimated influenza A (H1N1) 2009 monovalent vaccination coverage among U.S. residents aged ≥6 months,* by age group and priority group status — National 2009 H1N1 Flu Survey (NHFS), December 27, 2009, through January 2, 2010

Age group/Priority group	U.S. population (millions)	H1N1 vaccination coverage				
		No. surveyed†	% vaccinated (95% CI§)		Estimated no. of persons vaccinated (millions) (95% CI)	
Age group						
Total ≥6 mos	299	3,023	20.3	(17.2–23.4)	61	(51–70)
6 mos–4 yrs	19	500	33.0	(21.6–44.4)¶	6	(4–8)
6 mos–18 yrs	76	1,638	29.4	(23.8–35.0)	22	(18–27)
6 mos–24 yrs	101	1,716	25.9	(20.6–31.2)	26	(21–32)
6 mos–64 yrs	261	2,672	21.7	(18.3–25.1)	57	(48–66)
5–18 yrs	57	1,138	28.1	(21.7–34.5)	16	(12–20)
≥19 yrs	223	1,385	17.3	(13.8–20.8)	39	(31–46)
19–64 yrs	185	1,034	18.6	(14.5–22.7)	34	(27–42)
≥65 years	38	351	11.2	(6.5–15.9)	4	(2–6)
Priority group						
Initial target groups**	160	2,101	27.9	(23.5–32.3)	45	(38–52)
Limited vaccine subset††	62	807	37.5	(30.1–44.9)	23	(19–28)

* Coverage estimates are based on vaccinations reported as received from October 1, 2009, to the date of the interview.
† Excludes 1.5% of respondents with missing vaccination information.
§ Confidence interval.
¶ Estimate might be unreliable because CI half-width is >10.
** Pregnant women, persons who live with or provide care for infants aged <6 months, health-care and emergency medical services personnel, children and young adults aged 6 months–24 years, and persons aged 25–64 years who have medical conditions that put them at higher risk for influenza-related complications.
†† Pregnant women, persons who live with or provide care for infants aged <6 months, health-care and emergency medical services personnel who have direct contact with patients or infectious material, children aged 6 months–4 years, and children aged 5–18 years who have medical conditions that put them at higher risk for influenza-related complications.

chronic obstructive pulmonary disease, diabetes and chronic cardiovascular disease) (*9*). Given the increased supply of vaccine, efforts to encourage 2009 H1N1 vaccination among persons at increased risk for 2009 H1N1 influenza complications should be strengthened.

Seasonal influenza vaccination coverage among health-care workers historically has been below 50% (*8*). Efforts to vaccinate health-care workers began when 2009 H1N1 vaccine first became available, but according to the BRFSS survey, during December 1–27, only 22% of health-care workers reported having been vaccinated. Unvaccinated health-care workers who become infected risk transmitting the virus to their family members or patients, who often are at high risk for severe influenza. The current high percentage of unvaccinated health-care workers highlights the need to strengthen measures to improve their influenza vaccination coverage.

Among adults with chronic medical conditions, NHFS and BRFSS show lower vaccination coverage among blacks than whites. Similar disparities have been identified for seasonal influenza and pneumococcal polysaccharide vaccination (*4*). The finding of lower 2009 H1N1 vaccination coverage among black health-care workers suggests that access to care is not the only barrier to influenza vaccination and highlights a role for targeted outreach efforts.

The findings in this report are subject to at least three limitations. First, the NHFS results presented in this analysis are based on data collected during a single week of interviews, and all results are based on self-report or parental report of 2009 H1N1 vaccination. Because of the limited size of the NHFS sample, confidence limits around estimates are large and final estimates might differ. Second, BRFSS and NHFS are subject to selection bias because of noninclusion of households with only cellular telephones (BRFSS) and households with no telephone service (BRFSS and NHFS). Finally, CASRO response rates and cooperation rates were low, particularly for NHFS.

Although influenza activity has declined in the United States in recent weeks, cases of 2009 H1N1 influenza, including cases of severe disease, continue to occur. The epidemiology of 2009 H1N1 influenza over the months ahead is unknown, but another rise in incidence, as occurred during the winter of the 1957–58 pandemic, remains possible (*10*). In addition, increases in influenza activity from seasonal influenza also might occur as the season progresses. Vaccination remains the best way to prevent influenza infection and influenza-related hospitalizations and deaths.

TABLE 2. Estimated influenza A (H1N1) 2009 monovalent vaccination coverage* among U.S. residents, by initial target group — Behavioral Risk Factor Surveillance System (BRFSS)† and National 2009 H1N1 Flu Survey (NHFS), December 1–27, 2009

	H1N1 vaccination coverage	
Initial target group	No. surveyed§	% vaccinated (95% CI¶)
Adults aged 25–64 years with high-risk conditions**	4,044	11.6 (9.9–13.3)
Health-care personnel††	3,329	22.3 (19.6–25.0)
Pregnant women	150	38.0 (24.3–51.7)§§
Adults living or caring for infant aged <6 months (NHFS¶¶)	402	13.9 (9.2–18.6)

* Coverage estimates are based on vaccinations reported as received from October 1 to the date of the interview.
† Includes data from the District of Columbia and all states except Vermont for all adults; excludes Delaware for health-care personnel and Alaska, Arizona, Delaware, and Ohio for pregnant women.
§ Excludes 2.85% of respondents with missing vaccination information.
¶ Confidence interval.
** High-risk conditions identified by BRFSS include asthma, diabetes, heart disease, and other conditions (lung problems other than asthma, kidney problems, anemia including sickle cell, or a weakened immune system caused by a chronic illness or by medicines taken for a chronic illness).
†† Includes persons working in a health-care setting or providing direct patient care but not in a health-care setting
§§ Estimate might be unreliable because CI half-width is >10.
¶¶ Data from NHFS interviews conducted during November 29–December 26, 2009. BRFSS did not collect information on this target group.

Acknowledgments

The findings in this report are based, in part, on NHFS contributions by M Montgomery, K Copeland, N Davis, and others at the National Opinion Research Center, Chicago, Illinois; data collected by state BRFSS coordinators; members of the CDC H1N1 Vaccine Coverage Monitoring Team; and members of the CDC Behavioral Surveillance Branch, Atlanta, GA.

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Errata

MMWR Vol. 59, No. 1

In the report, "'Choking Game' Awareness and Participation Among 8th Graders — Oregon, 2008," on page 5, errors occurred in the ordering of the reference list. The list should read as follows:

References

1. Katz KA, Toblin RL. Language matters: unintentional strangulation, strangulation activity, and the "choking game." Arch Pediatr Adolesc Med 2009;163:93–4.
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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 January 16, 2010 (2nd 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	—	
Botulism, total	1	1	3	93	145	144	165	135	
foodborne	—	—	0	12	17	32	20	19	
infant	1	1	2	58	109	85	97	85	OH (1)
other (wound and unspecified)	—	—	1	23	19	27	48	31	
Brucellosis	—	—	2	102	80	131	121	120	
Chancroid	—	2	0	24	25	23	33	17	
Cholera	—	—	0	8	5	7	9	8	
Cyclosporiasis§	—	—	3	125	139	93	137	543	
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup virus disease	—	—	—	41	62	55	67	80	
Eastern equine encephalitis virus disease	—	—	—	4	4	4	8	21	
Powassan virus disease	—	—	—	1	2	7	1	1	
St. Louis encephalitis virus disease	—	—	0	10	13	9	10	13	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	—	1	26	30	22	29	9	
nonserotype b	—	1	5	209	244	199	175	135	
unknown serotype	4	10	5	224	163	180	179	217	NE (1), GA (3)
Hansen disease§	—	—	2	59	80	101	66	87	
Hantavirus pulmonary syndrome§	—	—	0	12	18	32	40	26	
Hemolytic uremic syndrome, postdiarrheal§	—	2	5	215	330	292	288	221	
HIV infection, pediatric (age <13 yrs)††	—	—	2	—	—	—	—	380	
Influenza-associated pediatric mortality§,§§	9	16	1	360	90	77	43	45	NY (1), IL (2), CO (3), AZ (1), MD (1), TX (1)
Listeriosis	4	7	18	767	759	808	884	896	MO (1), GA (1), KY (1), TN (1)
Measles¶¶	—	—	1	61	140	43	55	66	
Meningococcal disease, invasive***:									
A, C, Y, and W-135	1	4	6	275	330	325	318	297	FL (1)
serogroup B	—	—	5	147	188	167	193	156	
other serogroup	—	—	1	23	38	35	32	27	
unknown serogroup	4	11	16	467	616	550	651	765	NY (1), NYC (1), MO (1), DE (1)
Mumps	27	27	20	1,124	454	800	6,584	314	NY (27)
Novel influenza A virus infections†††	—	—	—	43,771	2	4	NN	NN	
Plague	—	—	0	7	3	7	17	8	
Poliomyelitis, paralytic	—	—	—	—	—	—	—	1	
Polio virus Infection, nonparalytic§	—	—	—	—	—	—	NN	NN	
Psittacosis§	—	—	0	9	8	12	21	16	
Q fever, total§,§§§	—	—	3	100	120	171	169	136	
acute	—	—	2	84	106	—	—	—	
chronic	—	—	0	16	14	—	—	—	
Rabies, human	—	—	0	4	2	1	3	2	
Rubella¶¶¶	—	—	0	3	16	12	11	11	
Rubella, congenital syndrome	—	—	—	1	—	—	1	1	
SARS-CoV§,****	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	—	4	130	157	132	125	129	
Syphilis, congenital (age <1 yr)	—	—	6	267	431	430	349	329	
Tetanus	—	—	0	14	19	28	41	27	
Toxic-shock syndrome (staphylococcal)§	—	1	2	76	71	92	101	90	
Trichinellosis	—	—	0	12	39	5	15	16	
Tularemia	—	—	2	83	123	137	95	154	
Typhoid fever	1	5	9	332	449	434	353	324	OH (1)
Vancomycin-intermediate *Staphylococcus aureus*§	—	—	1	70	63	37	6	2	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	0	—	—	2	1	3	
Vibriosis (noncholera *Vibrio* species infections)§	—	—	4	597	588	549	NN	NN	
Viral Hemorrhagic Fever††††	—	—	—	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 January 16, 2010 (2nd 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 258 influenza-associated pediatric deaths associated with 2009 influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 243 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 132 influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.

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

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

††† CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. 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.

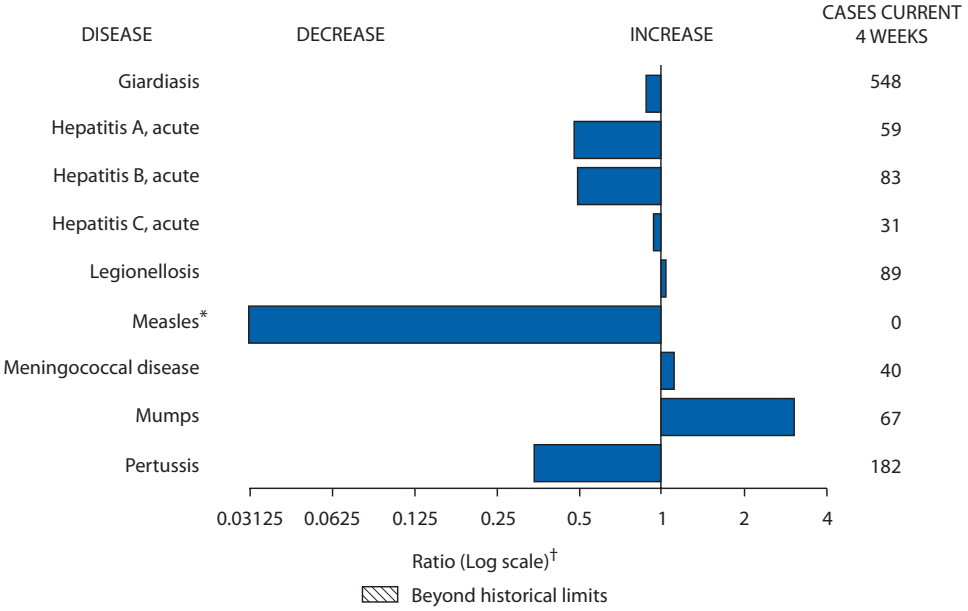
§§§ In 2009, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

¶¶¶ 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.

†††† There were no cases of Viral Hemorrhagic Fever during week one. See Table II for Dengue Hemorrhagic Fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals January 16, 2010, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 2 of zero (0).

† 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 January 16, 2010, and January 17, 2009 (2nd week)*

Reporting area	Chlamydia trachomatic infection					Cryptosporidiosis				
	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	7,937	22,389	26,585	18,594	42,835	33	113	260	78	168
New England	539	759	1,482	948	1,009	1	6	23	2	48
Connecticut	35	225	457	37	53	—	0	0	—	38
Maine†	—	47	75	—	124	1	1	4	2	1
Massachusetts	434	377	944	770	590	—	2	16	—	6
New Hampshire	1	34	61	6	74	—	1	5	—	3
Rhode Island†	43	63	244	96	117	—	0	8	—	—
Vermont†	26	21	63	39	51	—	1	9	—	—
Mid. Atlantic	2,169	3,005	4,299	4,669	5,157	6	14	37	13	21
New Jersey	—	426	838	190	865	—	1	5	—	—
New York (Upstate)	400	607	1,509	587	428	1	3	12	2	4
New York City	1,260	1,160	1,956	2,757	2,347	—	1	8	—	9
Pennsylvania	509	812	986	1,135	1,517	5	8	19	11	8
E.N. Central	1,215	3,405	4,280	2,519	7,955	6	25	54	21	35
Illinois	—	1,043	1,378	2	2,679	—	2	8	—	4
Indiana	205	399	695	357	727	—	4	9	—	6
Michigan	924	870	1,332	1,697	1,792	2	5	11	8	5
Ohio	86	608	1,044	398	2,066	4	7	16	11	9
Wisconsin	—	375	471	65	691	—	7	24	2	11
W.N. Central	244	1,339	1,697	708	2,554	7	18	61	11	9
Iowa	4	173	256	47	404	3	3	14	4	2
Kansas	22	177	561	109	314	—	2	6	—	1
Minnesota	—	256	338	1	611	—	4	34	—	—
Missouri	126	508	638	383	904	2	3	12	5	3
Nebraska†	92	101	237	165	156	2	2	9	2	2
North Dakota	—	32	91	3	45	—	0	5	—	—
South Dakota	—	52	80	—	120	—	1	10	—	1
S. Atlantic	2,208	3,855	5,365	4,975	6,046	7	19	45	13	27
Delaware	91	88	180	156	189	—	0	2	—	—
District of Columbia	63	124	225	87	267	—	0	1	—	—
Florida	554	1,421	1,671	1,540	2,573	4	8	24	8	8
Georgia	2	699	1,150	2	506	2	5	23	4	9
Maryland†	259	425	899	536	560	—	1	5	—	2
North Carolina	—	0	0	—	—	—	0	9	—	5
South Carolina†	623	514	1,421	1,103	934	1	1	7	1	1
Virginia†	583	602	926	1,489	894	—	1	7	—	1
West Virginia	33	70	136	62	123	—	0	2	—	1
E.S. Central	591	1,734	2,217	1,126	3,752	2	3	10	5	4
Alabama†	2	466	629	64	924	—	1	5	—	2
Kentucky	—	234	642	—	640	1	1	4	2	—
Mississippi	—	429	840	—	1,018	—	0	3	—	—
Tennessee†	589	569	810	1,062	1,170	1	1	5	3	2
W.S. Central	426	2,951	5,803	1,970	5,921	—	8	35	3	3
Arkansas†	309	270	416	533	603	—	1	5	—	1
Louisiana	73	518	1,130	73	1,104	—	0	6	—	—
Oklahoma	44	167	2,714	1,364	339	—	2	9	—	—
Texas†	—	2,007	2,519	—	3,875	—	5	20	3	2
Mountain	195	1,432	2,093	681	2,604	3	9	26	7	11
Arizona	—	499	755	174	434	—	0	3	—	3
Colorado	—	287	727	—	1,236	—	2	10	—	2
Idaho†	—	69	184	33	87	1	1	7	3	1
Montana†	36	56	86	85	136	—	1	4	1	1
Nevada†	121	174	477	267	311	—	0	2	1	—
New Mexico†	—	175	344	42	71	—	2	8	—	3
Utah	38	110	160	80	261	2	0	3	2	—
Wyoming†	—	36	69	—	68	—	0	2	—	1
Pacific	350	3,472	4,688	998	7,837	1	14	25	3	10
Alaska	—	98	137	71	234	—	0	1	—	—
California	74	2,672	3,591	350	6,225	—	8	20	—	4
Hawaii	—	119	147	13	240	—	0	1	—	—
Oregon	—	200	468	—	219	1	3	9	3	6
Washington	276	381	571	564	919	—	1	8	—	—
American Samoa	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	93	135	332	168	204	N	0	0	N	N
U.S. Virgin Islands	—	10	17	—	1	—	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 January 16, 2010, and January 17, 2009 (2nd 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	0	—	NN	—	0	0	—	NN
New England	—	0	0	—	NN	—	0	0	—	NN
Connecticut	—	0	0	—	NN	—	0	0	—	NN
Maine§	—	0	0	—	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	0	—	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	0	—	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 January 16, 2010, and January 17, 2009 (2nd week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	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	1	11	64	2	5	1	12	49	1	—	—	2	12	—	—
New England	—	0	4	—	—	—	1	21	—	—	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Maine§	—	0	1	—	—	—	0	3	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	3	—	—	—	0	1	—	—
Rhode Island§	—	0	4	—	—	—	0	20	—	—	—	0	1	—	—
Vermont§	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	2	8	—	—	—	3	19	—	—	—	0	2	—	—
New Jersey	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	1	6	—	—	—	3	18	—	—	—	0	1	—	—
New York City	—	0	3	—	—	—	0	1	—	—	—	0	2	—	—
Pennsylvania	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.N. Central	—	1	7	—	—	—	2	22	—	—	—	1	8	—	—
Illinois	—	0	4	—	—	—	0	1	—	—	—	0	1	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	7	—	—
Michigan	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Ohio	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	0	4	—	—	—	2	22	—	—	—	0	3	—	—
W.N. Central	—	1	24	—	—	—	0	23	—	—	—	0	5	—	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	23	—	—	—	0	5	—	—
Missouri	—	1	22	—	—	—	0	1	—	—	—	0	3	—	—
Nebraska§	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	1	3	24	2	4	1	0	2	1	—	—	0	2	—	—
Delaware	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	1	1	1	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	2	—	—	1	0	1	1	—	—	0	0	—	—
Maryland§	1	1	4	1	1	—	0	1	—	—	—	0	1	—	—
North Carolina	—	0	4	—	2	—	0	1	—	—	—	0	0	—	—
South Carolina§	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Virginia§	—	0	14	—	—	—	0	1	—	—	—	0	2	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	1	11	—	1	—	0	1	—	—	—	0	6	—	—
Alabama§	—	0	3	—	—	—	0	1	—	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Tennessee§	—	1	11	—	1	—	0	1	—	—	—	0	6	—	—
W.S. Central	—	0	9	—	—	—	0	2	—	—	—	0	0	—	—
Arkansas§	—	0	5	—	—	—	0	0	—	—	—	0	0	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	8	—	—	—	0	1	—	—	—	0	0	—	—
Texas§	—	0	1	—	—	—	0	2	—	—	—	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	1	—	—	—	0	0	—	—	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	—	—	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 January 16, 2010, and January 17, 2009 (2nd 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	128	331	508	250	511	2,150	5,297	6,606	4,842	11,492	26	58	92	62	141
New England	3	30	65	11	37	57	96	210	113	99	—	3	12	—	5
Connecticut	—	5	15	—	8	14	47	107	16	15	—	0	9	—	—
Maine§	1	3	13	4	5	—	3	9	—	3	—	0	2	—	1
Massachusetts	—	13	36	—	15	33	39	112	76	71	—	2	6	—	3
New Hampshire	1	3	11	1	3	1	2	6	6	4	—	0	1	—	1
Rhode Island§	—	1	6	—	—	6	6	19	12	5	—	0	2	—	—
Vermont§	1	3	14	6	6	3	1	5	3	1	—	0	1	—	—
Mid. Atlantic	31	60	100	44	101	466	584	840	1,002	1,164	9	12	25	18	29
New Jersey	—	3	12	—	25	—	89	124	38	203	—	2	7	—	6
New York (Upstate)	16	25	54	21	19	71	106	244	106	126	5	3	12	6	6
New York City	4	16	26	8	33	241	210	368	530	449	—	2	11	3	2
Pennsylvania	11	15	35	15	24	154	188	272	328	386	4	4	10	9	15
E.N. Central	18	45	74	43	88	444	1,073	1,341	809	2,588	4	11	28	6	40
Illinois	—	10	20	—	25	—	337	399	—	879	—	2	9	—	9
Indiana	N	0	0	N	N	76	133	206	129	277	—	1	5	—	3
Michigan	5	11	24	13	18	346	267	501	560	650	—	0	3	—	1
Ohio	13	15	28	29	28	22	202	333	106	606	4	2	6	6	9
Wisconsin	—	9	19	1	17	—	88	144	14	176	—	3	20	—	18
W.N. Central	8	25	145	25	56	70	274	365	191	652	2	3	12	7	7
Iowa	7	6	15	14	14	—	32	47	8	69	—	0	0	—	—
Kansas	—	3	14	—	8	5	44	84	19	95	—	0	2	—	—
Minnesota	—	0	124	—	—	—	40	65	1	91	—	0	9	—	—
Missouri	1	9	27	5	20	50	124	172	132	330	1	1	5	6	4
Nebraska§	—	3	9	4	9	15	22	55	30	39	1	0	4	1	2
North Dakota	—	0	8	—	—	—	2	14	1	2	—	0	2	—	1
South Dakota	—	1	5	2	5	—	5	14	—	26	—	0	0	—	—
S. Atlantic	47	71	109	74	98	683	1,110	1,502	1,507	2,018	8	13	31	19	30
Delaware	—	0	3	1	1	15	18	37	26	30	—	0	1	—	—
District of Columbia	—	0	5	—	4	22	48	88	38	147	—	0	1	—	—
Florida	37	38	59	58	56	207	410	476	568	833	3	4	10	6	11
Georgia	—	10	67	—	13	1	228	465	1	207	4	3	9	7	11
Maryland§	6	5	13	7	9	59	114	215	148	168	1	1	6	1	2
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	17	—	3
South Carolina§	1	2	8	3	5	202	158	412	348	338	—	1	5	5	—
Virginia§	3	8	21	5	10	167	150	272	361	269	—	1	5	—	2
West Virginia	—	1	5	—	—	10	9	21	17	26	—	0	3	—	1
E.S. Central	—	8	22	3	10	171	492	649	361	1,279	2	3	11	3	8
Alabama§	—	4	13	2	3	—	135	186	27	312	—	1	4	—	1
Kentucky	N	0	0	N	N	—	64	156	—	217	—	0	5	—	—
Mississippi	N	0	0	N	N	—	132	252	—	352	—	0	1	—	—
Tennessee§	—	4	18	1	7	171	156	220	334	398	2	2	9	3	7
W.S. Central	1	7	19	5	5	124	869	1,556	544	1,927	1	2	7	1	3
Arkansas§	1	2	9	2	—	94	86	139	166	191	—	0	3	—	1
Louisiana	—	1	7	—	4	14	167	418	14	369	—	0	1	—	2
Oklahoma	—	3	10	3	1	16	59	613	364	112	1	1	5	1	—
Texas§	N	0	0	N	N	—	552	695	—	1,255	—	0	2	—	—
Mountain	10	27	61	25	53	29	175	233	82	324	—	5	10	6	13
Arizona	—	4	7	3	10	—	59	91	22	74	—	2	8	2	5
Colorado	—	8	26	9	13	—	39	106	—	163	—	1	6	3	5
Idaho§	3	3	10	4	6	—	2	8	2	4	—	0	1	—	—
Montana§	—	2	11	—	6	—	1	5	1	3	—	0	1	—	—
Nevada§	2	1	10	2	—	29	27	93	53	38	—	0	2	—	—
New Mexico§	—	2	8	—	6	—	21	34	4	28	—	0	3	1	2
Utah	1	5	13	3	10	—	5	12	—	11	—	1	2	—	1
Wyoming§	4	1	5	4	2	—	1	7	—	3	—	0	1	—	—
Pacific	10	51	82	20	63	106	542	691	233	1,441	—	3	8	2	6
Alaska	—	2	7	2	1	—	18	32	11	40	—	0	3	1	2
California	—	33	60	—	49	73	447	575	150	1,233	—	0	4	—	1
Hawaii	—	0	2	—	1	—	11	24	3	22	—	0	3	—	2
Oregon	6	7	18	14	12	—	20	44	—	26	—	1	4	1	1
Washington	4	7	33	4	—	33	39	71	69	120	—	0	3	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	2	10	—	—	—	4	24	2	4	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	2	7	—	—	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 January 16, 2010, and January 17, 2009 (2nd 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	35	57	23	59	22	63	89	44	149	6	17	36	8	35
New England	2	2	5	2	3	—	1	3	2	3	2	1	5	3	3
Connecticut	2	0	2	2	—	—	0	3	2	2	2	1	4	3	3
Maine†	—	0	1	—	—	—	0	2	—	—	—	0	2	—	—
Massachusetts	—	1	4	—	3	—	0	2	—	1	—	0	2	—	—
New Hampshire	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Rhode Island†	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Vermont†	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Mid. Atlantic	1	5	10	4	7	—	5	16	2	11	—	2	7	—	3
New Jersey	—	1	5	—	2	—	1	6	—	3	—	0	1	—	1
New York (Upstate)	—	1	3	—	1	—	1	4	—	2	—	1	4	—	—
New York City	1	2	5	2	2	—	1	5	1	2	—	0	0	—	—
Pennsylvania	—	1	6	2	2	—	2	8	1	4	—	0	4	—	2
E.N. Central	2	4	18	4	15	2	6	19	2	40	2	3	14	2	11
Illinois	—	2	12	—	4	—	1	7	—	3	—	0	1	—	—
Indiana	—	0	4	—	1	—	1	5	—	5	—	0	4	—	—
Michigan	1	1	4	1	5	1	2	8	1	10	2	3	12	2	8
Ohio	1	0	3	2	5	1	1	8	1	21	—	0	5	—	3
Wisconsin	—	0	4	1	—	—	0	4	—	1	—	0	2	—	—
W.N. Central	—	2	7	1	2	1	3	8	1	10	—	0	4	—	—
Iowa	—	0	3	—	—	—	0	3	—	3	—	0	4	—	—
Kansas	—	0	2	—	—	—	0	2	—	—	—	0	1	—	—
Minnesota	—	0	4	—	—	—	0	4	—	—	—	0	2	—	—
Missouri	—	0	3	1	2	1	1	5	1	5	—	0	1	—	—
Nebraska†	—	0	3	—	—	—	0	2	—	2	—	0	1	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
S. Atlantic	2	8	14	6	14	11	16	32	19	36	—	3	12	1	3
Delaware	—	0	1	—	—	U	0	0	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	2	3	9	3	6	8	5	13	13	12	—	1	4	—	1
Georgia	—	1	3	—	3	3	3	7	6	15	—	0	3	—	1
Maryland†	—	1	4	—	5	—	1	5	—	1	—	1	3	1	1
North Carolina	—	0	7	—	—	—	0	19	—	7	—	0	10	—	—
South Carolina†	—	1	4	3	—	—	1	4	—	—	—	0	1	—	—
Virginia†	—	1	3	—	—	—	1	6	—	1	—	0	2	—	—
West Virginia	—	0	2	—	—	—	0	19	—	—	—	0	2	—	—
E.S. Central	1	1	3	1	4	5	7	11	9	20	—	2	6	—	10
Alabama†	1	0	2	1	1	2	1	7	4	4	—	0	2	—	—
Kentucky	—	0	2	—	—	2	2	6	4	6	—	1	5	—	5
Mississippi	—	0	1	—	2	—	0	2	—	1	—	0	0	—	—
Tennessee†	—	0	2	—	1	1	3	5	1	9	—	0	3	—	5
W.S. Central	1	3	10	1	1	2	9	19	5	10	1	1	4	1	—
Arkansas†	—	0	1	—	—	—	1	4	—	—	—	0	1	—	—
Louisiana	—	0	1	—	1	—	0	4	—	6	—	0	1	—	—
Oklahoma	—	0	3	—	—	1	2	8	1	1	—	0	4	—	—
Texas†	1	3	10	1	—	1	6	11	4	3	1	0	3	1	—
Mountain	1	3	8	4	6	1	2	6	4	3	—	1	4	—	3
Arizona	—	1	5	2	3	—	1	3	—	1	—	0	0	—	—
Colorado	—	1	5	—	2	—	0	2	—	2	—	0	3	—	2
Idaho†	1	0	1	2	—	—	0	2	—	—	—	0	1	—	—
Montana†	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Nevada†	—	0	2	—	—	1	0	3	4	—	—	0	1	—	—
New Mexico†	—	0	1	—	—	—	0	2	—	—	—	0	2	—	1
Utah	—	0	2	—	1	—	0	1	—	—	—	0	2	—	—
Wyoming†	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
Pacific	—	6	17	—	7	—	5	14	—	16	1	1	4	1	2
Alaska	—	0	1	—	—	—	0	1	—	—	—	0	2	—	—
California	—	5	16	—	7	—	4	10	—	14	—	1	4	—	1
Hawaii	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Oregon	—	0	2	—	—	—	1	4	—	2	1	0	3	1	1
Washington	—	1	3	—	—	—	0	6	—	—	—	0	3	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	2	—	1	—	0	5	—	—	—	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.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 16, 2010, and January 17, 2009 (2nd 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	22	50	159	42	80	26	335	1,947	88	272	7	22	48	19	27
New England	—	2	17	—	2	3	64	479	4	54	—	1	4	—	3
Connecticut	—	1	5	—	—	—	0	0	—	—	—	0	3	—	—
Maine†	—	0	3	—	—	1	11	77	1	—	—	0	1	—	—
Massachusetts	—	1	9	—	2	—	26	321	—	30	—	0	3	—	3
New Hampshire	—	0	2	—	—	—	14	89	—	15	—	0	1	—	—
Rhode Island†	—	0	4	—	—	—	1	28	—	—	—	0	1	—	—
Vermont†	—	0	1	—	—	2	5	42	3	9	—	0	1	—	—
Mid. Atlantic	7	15	69	9	20	14	180	1,078	40	120	2	6	13	8	1
New Jersey	—	2	13	—	3	—	38	378	—	46	—	0	1	—	—
New York (Upstate)	4	5	29	5	8	3	53	272	3	9	2	1	4	4	—
New York City	—	2	20	—	1	—	2	24	—	4	—	4	11	2	—
Pennsylvania	3	6	25	4	8	11	90	631	37	61	—	1	4	2	1
E.N. Central	1	9	35	6	18	—	18	216	—	19	—	3	10	—	4
Illinois	—	1	10	—	—	—	1	11	—	—	—	1	4	—	1
Indiana	—	1	4	—	—	—	1	6	—	—	—	0	3	—	—
Michigan	—	2	11	—	5	—	1	10	—	—	—	0	3	—	1
Ohio	1	4	17	6	12	—	1	5	—	1	—	1	6	—	2
Wisconsin	—	0	2	—	1	—	16	198	—	18	—	0	1	—	—
W.N. Central	—	2	7	1	—	—	5	37	—	3	—	1	8	—	3
Iowa	—	0	2	—	—	—	1	14	—	2	—	0	1	—	2
Kansas	—	0	1	—	—	—	0	2	—	1	—	0	1	—	1
Minnesota	—	0	4	—	—	—	0	37	—	—	—	0	8	—	—
Missouri	—	1	5	1	—	—	0	1	—	—	—	0	2	—	—
Nebraska†	—	0	2	—	—	—	0	3	—	—	—	0	1	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
S. Atlantic	7	10	21	14	23	7	59	237	41	70	5	6	17	10	5
Delaware	—	0	5	1	—	—	12	65	6	13	—	0	1	—	1
District of Columbia	—	0	2	—	—	—	0	5	—	—	—	0	2	—	—
Florida	3	4	10	4	6	—	2	11	3	1	4	1	7	4	—
Georgia	1	1	5	1	6	—	1	6	—	1	1	1	5	1	—
Maryland†	3	2	12	6	5	3	27	125	10	48	—	1	13	3	1
North Carolina	—	0	6	—	6	—	0	14	—	—	—	0	5	—	2
South Carolina†	—	0	2	—	—	—	0	3	—	2	—	0	1	—	—
Virginia†	—	1	5	2	—	4	10	49	21	5	—	1	5	2	1
West Virginia	—	0	2	—	—	—	0	33	1	—	—	0	1	—	—
E.S. Central	7	2	12	8	7	2	1	2	3	—	—	0	3	1	—
Alabama†	—	0	2	—	1	—	0	1	—	—	—	0	3	1	—
Kentucky	3	1	3	3	1	—	0	1	—	—	—	0	3	—	—
Mississippi	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Tennessee†	4	1	9	5	5	2	1	2	3	—	—	0	3	—	—
W.S. Central	—	2	7	1	1	—	1	9	—	—	—	1	10	—	—
Arkansas†	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	2	—	1	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Texas†	—	2	6	1	—	—	1	9	—	—	—	1	9	—	—
Mountain	—	3	8	3	6	—	1	4	—	—	—	0	6	—	1
Arizona	—	1	3	2	4	—	0	2	—	—	—	0	2	—	—
Colorado	—	0	4	—	—	—	0	1	—	—	—	0	3	—	1
Idaho†	—	0	2	—	—	—	0	3	—	—	—	0	1	—	—
Montana†	—	0	2	—	—	—	0	1	—	—	—	0	3	—	—
Nevada†	—	0	1	1	1	—	0	1	—	—	—	0	0	—	—
New Mexico†	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Utah	—	0	4	—	1	—	0	1	—	—	—	0	2	—	—
Wyoming†	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Pacific	—	3	12	—	3	—	3	11	—	6	—	3	9	—	10
Alaska	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
California	—	3	11	—	3	—	2	10	—	5	—	2	6	—	9
Hawaii	—	0	1	—	—	N	0	0	N	N	—	0	1	—	—
Oregon	—	0	2	—	—	—	0	4	—	1	—	0	2	—	1
Washington	—	0	4	—	—	—	0	3	—	—	—	0	2	—	—
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	1	—	1
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2009 and 2010 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 16, 2010, and January 17, 2009 (2nd week)*

Reporting area	Meningococcal disease, invasive† All groups					Pertussis					Rabies, animal				
	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	5	17	33	15	30	36	269	436	97	459	7	65	140	24	166
New England	—	0	4	—	—	—	11	24	—	35	—	6	24	5	9
Connecticut	—	0	2	—	—	—	1	4	—	2	—	2	22	—	3
Maine§	—	0	1	—	—	—	1	10	—	5	—	1	4	1	1
Massachusetts	—	0	3	—	—	—	7	14	—	25	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	1	7	—	3	—	0	3	1	1
Rhode Island§	—	0	1	—	—	—	0	7	—	—	—	1	7	—	2
Vermont§	—	0	1	—	—	—	0	1	—	—	—	1	5	3	2
Mid. Atlantic	2	2	6	5	2	5	21	38	11	38	6	10	23	11	10
New Jersey	—	0	2	—	—	—	3	11	—	8	—	0	0	—	—
New York (Upstate)	1	0	4	1	—	2	4	20	2	4	6	7	22	11	8
New York City	1	0	2	2	2	—	0	11	—	—	—	0	3	—	—
Pennsylvania	—	1	4	2	—	3	11	29	9	26	—	0	16	—	2
E.N. Central	—	3	10	2	7	17	53	100	45	141	—	2	19	1	2
Illinois	—	0	4	—	1	—	11	29	—	50	—	1	9	—	1
Indiana	—	0	3	—	1	—	6	15	—	21	—	0	6	—	1
Michigan	—	0	5	1	—	2	14	40	11	19	—	1	6	—	—
Ohio	—	1	3	1	3	15	18	49	34	44	—	0	5	1	—
Wisconsin	—	0	3	—	2	—	3	12	—	7	N	0	0	N	N
W.N. Central	1	2	6	1	3	5	31	145	10	110	—	7	18	—	4
Iowa	—	0	2	—	—	—	3	10	—	7	—	0	3	—	—
Kansas	—	0	2	—	1	—	4	12	—	5	—	1	6	—	3
Minnesota	—	0	2	—	—	—	0	101	—	—	—	0	11	—	—
Missouri	1	0	3	1	2	4	18	47	6	90	—	1	5	—	—
Nebraska§	—	0	1	—	—	1	2	11	4	5	—	1	6	—	1
North Dakota	—	0	1	—	—	—	0	12	—	—	—	0	7	—	—
South Dakota	—	0	1	—	—	—	0	6	—	3	—	0	4	—	—
S. Atlantic	2	2	10	6	7	6	28	71	15	49	1	26	111	5	121
Delaware	1	0	1	1	—	—	0	2	—	1	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Florida	1	1	4	4	3	4	8	29	10	20	1	0	95	4	95
Georgia	—	0	2	1	1	—	3	11	1	10	—	0	72	—	—
Maryland§	—	0	1	—	—	1	2	8	1	3	—	7	15	—	12
North Carolina	—	0	10	—	2	—	0	65	—	3	N	2	4	N	N
South Carolina§	—	0	1	—	—	1	4	18	2	9	—	0	0	—	—
Virginia§	—	0	2	—	1	—	3	13	—	3	—	10	26	—	13
West Virginia	—	0	2	—	—	—	0	5	1	—	—	2	6	1	1
E.S. Central	—	0	4	1	—	3	14	30	8	34	—	1	6	—	6
Alabama§	—	0	1	—	—	1	4	19	1	3	—	0	0	—	—
Kentucky	—	0	1	1	—	—	3	15	2	21	—	1	4	—	4
Mississippi	—	0	1	—	—	—	1	5	—	4	—	0	1	—	—
Tennessee§	—	0	2	—	—	2	3	9	5	6	—	0	4	—	2
W.S. Central	—	1	8	—	3	—	62	139	3	9	—	0	13	—	2
Arkansas§	—	0	2	—	1	—	5	23	—	2	—	0	10	—	1
Louisiana	—	0	3	—	2	—	1	8	—	5	—	0	0	—	—
Oklahoma	—	0	2	—	—	—	0	32	—	—	—	0	13	—	1
Texas§	—	1	5	—	—	—	52	126	3	2	—	0	1	—	—
Mountain	—	1	4	—	2	—	17	32	4	37	—	1	6	—	5
Arizona	—	0	2	—	—	—	4	11	—	4	N	0	0	N	N
Colorado	—	0	3	—	—	—	4	12	1	11	—	0	0	—	—
Idaho§	—	0	1	—	1	—	1	19	3	2	—	0	0	—	—
Montana§	—	0	2	—	—	—	1	6	—	—	—	0	4	—	—
Nevada§	—	0	1	—	1	—	0	3	—	—	—	0	1	—	—
New Mexico§	—	0	1	—	—	—	1	6	—	4	—	0	2	—	1
Utah	—	0	1	—	—	—	3	16	—	16	—	0	2	—	—
Wyoming§	—	0	2	—	—	—	0	5	—	—	—	0	4	—	4
Pacific	—	3	10	—	6	—	20	43	1	6	—	4	12	2	7
Alaska	—	0	2	—	1	—	1	4	1	3	—	0	3	2	3
California	—	2	6	—	3	—	10	22	—	1	—	4	12	—	4
Hawaii	—	0	1	—	1	—	0	3	—	—	—	0	0	—	—
Oregon	—	0	6	—	1	—	3	14	—	2	—	0	3	—	—
Washington	—	0	7	—	—	—	5	26	—	—	—	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	0	—	—	—	0	1	—	—	2	1	3	2	—
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 January 16, 2010, and January 17, 2009 (2nd 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	314	826	1,377	589	1,632	11	75	153	24	165	92	283	495	207	646
New England	1	30	89	1	450	—	3	30	—	67	—	4	27	—	47
Connecticut	—	0	0	—	406	—	0	0	—	65	—	0	0	—	40
Maine§	1	2	7	1	6	—	0	3	—	—	—	0	2	—	—
Massachusetts	—	23	51	—	24	—	2	6	—	1	—	3	27	—	7
New Hampshire	—	3	42	—	6	—	0	3	—	1	—	0	4	—	—
Rhode Island§	—	1	11	—	7	—	0	26	—	—	—	0	7	—	—
Vermont§	—	1	5	—	1	—	0	3	—	—	—	0	1	—	—
Mid. Atlantic	30	87	206	69	123	—	6	21	2	9	15	57	87	36	116
New Jersey	—	13	46	—	20	—	0	4	—	4	—	8	27	—	46
New York (Upstate)	12	23	66	12	15	—	3	9	—	2	3	4	11	4	2
New York City	4	22	46	26	30	—	1	5	—	2	—	8	15	8	31
Pennsylvania	14	30	65	31	58	—	2	8	2	1	12	27	63	24	37
E.N. Central	18	90	152	46	213	1	15	34	4	18	11	47	96	18	178
Illinois	—	24	52	—	54	—	3	10	—	3	—	11	34	—	28
Indiana	—	5	19	—	17	—	1	8	—	3	—	1	5	—	6
Michigan	7	18	34	12	43	—	3	8	1	3	—	4	11	1	22
Ohio	11	27	52	33	57	1	2	11	3	2	11	18	57	17	96
Wisconsin	—	12	30	1	42	—	5	20	—	7	—	6	26	—	26
W.N. Central	22	47	86	34	53	2	12	39	3	13	37	23	86	92	19
Iowa	2	7	16	4	5	—	2	14	—	5	—	0	8	—	9
Kansas	—	6	22	—	11	—	1	5	—	1	—	3	13	—	8
Minnesota	—	12	29	—	—	—	2	19	—	—	—	1	7	—	—
Missouri	12	11	30	21	24	1	2	10	2	5	37	16	72	92	2
Nebraska§	8	5	41	9	5	1	1	6	1	2	—	0	3	—	—
North Dakota	—	0	21	—	—	—	0	3	—	—	—	0	2	—	—
South Dakota	—	2	22	—	8	—	0	12	—	—	—	0	1	—	—
S. Atlantic	214	276	452	370	408	5	12	22	10	31	16	43	79	37	108
Delaware	—	2	9	1	—	—	0	2	—	—	—	3	10	2	1
District of Columbia	—	0	5	—	1	—	0	1	—	—	—	0	2	—	1
Florida	90	133	278	177	148	2	4	7	5	10	10	8	24	13	26
Georgia	16	43	98	56	51	—	1	4	1	3	5	13	29	18	20
Maryland§	7	16	32	18	23	3	2	5	4	6	1	6	19	1	14
North Carolina	88	16	89	88	143	—	1	11	—	12	—	4	27	—	30
South Carolina§	10	17	67	19	22	—	0	3	—	—	—	3	8	3	7
Virginia§	3	20	47	11	19	—	2	7	—	—	—	3	12	—	9
West Virginia	—	4	23	—	1	—	0	5	—	—	—	0	3	—	—
E.S. Central	17	52	113	33	92	—	4	12	2	6	4	13	46	6	37
Alabama§	1	14	39	8	31	—	1	4	2	2	—	2	11	—	14
Kentucky	6	7	18	10	19	—	1	4	—	1	2	2	25	2	4
Mississippi	—	14	45	—	18	—	0	1	—	—	—	1	4	—	1
Tennessee§	10	14	33	15	24	—	1	10	—	3	2	6	16	4	18
W.S. Central	7	91	216	8	33	1	5	15	1	1	9	48	149	10	47
Arkansas§	4	10	25	4	4	1	1	4	1	—	3	6	14	4	3
Louisiana	—	6	43	—	11	—	0	0	—	—	—	1	8	—	7
Oklahoma	3	11	30	4	1	—	0	6	—	—	—	5	19	—	4
Texas§	—	54	150	—	17	—	3	11	—	1	6	33	123	6	33
Mountain	3	53	129	23	89	2	9	26	2	4	—	19	49	7	54
Arizona	—	19	50	1	22	—	1	4	—	1	—	13	42	—	31
Colorado	—	10	33	9	22	—	3	13	—	—	—	2	6	5	5
Idaho§	1	3	10	6	7	2	1	7	2	—	—	0	2	—	—
Montana§	—	1	7	2	3	—	0	7	—	—	—	0	5	—	—
Nevada§	—	3	11	3	9	—	0	3	—	—	—	1	7	—	10
New Mexico§	1	5	29	1	5	—	1	3	—	2	—	1	8	1	8
Utah	1	6	15	1	19	—	1	11	—	1	—	0	3	1	—
Wyoming§	—	1	9	—	2	—	0	2	—	—	—	0	1	—	—
Pacific	2	125	223	5	171	—	8	34	—	16	—	24	48	1	40
Alaska	—	1	7	1	3	—	0	0	—	—	—	0	2	—	—
California	—	93	151	—	136	—	4	15	—	15	—	18	41	—	37
Hawaii	—	4	59	—	19	—	0	2	—	1	—	0	4	—	1
Oregon	2	8	19	4	13	—	1	11	—	—	—	1	3	1	2
Washington	—	12	70	—	—	—	2	25	—	—	—	2	10	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	1	2	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	1	6	21	3	8	—	0	0	—	—	—	0	2	—	—
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 January 16, 2010, and January 17, 2009 (2nd 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	3	2	10	4	2	—	19	73	—	27
New England	—	0	1	—	—	—	0	2	—	1
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	0	—	—	—	0	2	—	1
Massachusetts	—	0	0	—	—	—	0	1	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island§	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	1	—	—	—	0	0	—	—
Mid. Atlantic	—	0	3	—	—	—	1	6	—	—
New Jersey	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	1	—	—	—	0	3	—	—
New York City	—	0	1	—	—	—	0	4	—	—
Pennsylvania	—	0	2	—	—	—	0	2	—	—
E.N. Central	—	0	2	—	1	—	1	7	—	—
Illinois	—	0	1	—	—	—	0	6	—	—
Indiana	—	0	2	—	—	—	0	2	—	—
Michigan	—	0	1	—	1	—	0	1	—	—
Ohio	—	0	0	—	—	—	0	4	—	—
Wisconsin	—	0	0	—	—	—	0	1	—	—
W.N. Central	—	0	3	—	—	—	3	27	—	—
Iowa	—	0	1	—	—	—	0	1	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	1	—	—
Missouri	—	0	1	—	—	—	3	26	—	—
Nebraska§	—	0	2	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—
S. Atlantic	3	1	9	4	1	—	6	26	—	20
Delaware	—	0	0	—	—	—	0	3	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	0	1	—	—	—	0	2	—	—
Georgia	3	0	7	4	1	—	0	0	—	—
Maryland§	—	0	2	—	—	—	0	3	—	1
North Carolina	—	0	1	—	—	—	3	24	—	16
South Carolina§	—	0	1	—	—	—	0	4	—	2
Virginia§	—	0	1	—	—	—	0	5	—	1
West Virginia	—	0	0	—	—	—	0	1	—	—
E.S. Central	—	0	4	—	—	—	3	15	—	4
Alabama§	—	0	4	—	—	—	1	7	—	2
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—
Tennessee§	—	0	2	—	—	—	2	14	—	2
W.S. Central	—	0	3	—	—	—	1	25	—	1
Arkansas§	—	0	0	—	—	—	0	14	—	1
Louisiana	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	3	—	—	—	0	24	—	—
Texas§	—	0	1	—	—	—	0	3	—	—
Mountain	—	0	2	—	—	—	0	1	—	1
Arizona	—	0	1	—	—	—	0	0	—	—
Colorado	—	0	1	—	—	—	0	0	—	—
Idaho§	—	0	0	—	—	—	0	1	—	—
Montana§	—	0	1	—	—	—	0	1	—	—
Nevada§	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	0	0	—	—	—	0	1	—	—
Utah	—	0	0	—	—	—	0	1	—	1
Wyoming§	—	0	1	—	—	—	0	1	—	—
Pacific	—	0	0	—	—	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	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 January 16, 2010, and January 17, 2009 (2nd 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	63	54	114	171	147	50	46	133	183	76	83	269	326	172	521
New England	3	1	50	8	2	3	1	22	8	1	6	6	15	8	10
Connecticut	—	0	50	—	—	—	0	22	—	—	1	1	8	1	1
Maine§	—	0	2	2	1	—	0	2	2	—	—	0	1	—	—
Massachusetts	—	0	1	—	—	—	0	5	—	1	4	4	10	6	7
New Hampshire	3	0	3	6	—	—	0	2	—	—	—	0	2	—	2
Rhode Island§	—	0	4	—	—	—	0	1	—	—	1	0	5	1	—
Vermont§	—	0	2	—	1	3	0	3	6	—	—	0	0	—	—
Mid. Atlantic	4	3	13	8	4	6	5	19	18	6	22	34	50	47	73
New Jersey	—	0	0	—	—	—	0	4	—	3	—	3	13	3	14
New York (Upstate)	2	2	13	4	2	6	2	12	6	3	—	2	8	—	—
New York City	—	0	1	—	—	—	0	11	—	—	16	22	39	36	44
Pennsylvania	2	1	8	4	2	—	0	12	12	—	6	6	14	8	15
E.N. Central	5	12	25	19	33	4	7	25	29	20	6	24	42	15	50
Illinois	—	0	0	—	—	—	1	4	—	2	—	11	30	2	28
Indiana	—	4	11	—	6	—	1	4	—	2	3	2	10	5	5
Michigan	—	0	2	1	2	4	1	20	24	4	3	4	13	7	7
Ohio	5	7	18	18	25	—	2	7	4	9	—	5	12	1	8
Wisconsin	—	0	0	—	—	—	1	3	1	3	—	0	3	—	2
W.N. Central	4	2	9	7	7	4	3	13	7	4	—	6	12	1	14
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Kansas	—	1	5	—	2	—	0	2	—	1	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	10	—	—	—	1	4	—	5
Missouri	4	1	6	7	5	3	0	5	3	3	—	3	8	1	9
Nebraska§	—	0	1	—	—	1	0	3	4	—	—	0	3	—	—
North Dakota	—	0	3	—	—	—	0	3	—	—	—	0	1	—	—
South Dakota	—	0	2	—	—	—	0	2	—	—	—	0	1	—	—
S. Atlantic	38	26	56	94	69	17	11	29	46	23	19	62	97	52	103
Delaware	—	0	2	1	—	—	0	2	—	—	—	0	3	—	2
District of Columbia	—	0	0	—	—	—	0	0	—	—	1	3	8	2	13
Florida	36	14	45	81	45	—	3	11	—	7	2	19	32	7	47
Georgia	2	8	25	12	21	—	3	10	4	5	—	14	37	—	—
Maryland§	—	0	1	—	1	14	1	16	30	5	5	6	12	10	5
North Carolina	—	0	0	—	—	—	0	0	—	—	8	9	31	15	22
South Carolina§	—	0	0	—	—	3	1	9	12	4	3	2	6	7	4
Virginia§	—	0	0	—	—	—	0	3	—	2	—	6	15	11	10
West Virginia	—	1	13	—	2	—	0	3	—	—	—	0	2	—	—
E.S. Central	8	4	25	13	18	1	2	20	21	6	8	21	37	14	47
Alabama§	—	0	0	—	—	—	0	0	—	—	—	7	18	2	26
Kentucky	3	1	5	5	6	—	0	2	—	1	—	1	13	—	3
Mississippi	—	0	1	—	1	—	0	2	—	2	—	4	12	—	1
Tennessee§	5	2	23	8	11	1	2	20	21	3	8	8	15	12	17
W.S. Central	—	1	6	—	7	14	5	19	24	6	14	51	79	14	93
Arkansas§	—	1	5	—	5	—	0	4	2	2	12	5	16	12	2
Louisiana	—	0	5	—	2	—	0	4	—	3	2	13	41	2	27
Oklahoma	—	0	0	—	—	1	1	4	2	—	—	1	5	—	3
Texas§	—	0	0	—	—	13	3	15	20	1	—	31	48	—	61
Mountain	1	2	21	22	5	1	5	24	25	9	1	8	18	3	13
Arizona	—	0	21	21	—	—	2	10	—	4	—	3	9	1	3
Colorado	—	0	0	—	—	—	1	21	21	4	—	1	4	—	5
Idaho§	—	0	0	—	—	—	0	2	—	—	—	0	1	—	—
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Nevada§	1	0	4	1	—	—	0	2	—	—	1	1	10	2	1
New Mexico§	—	0	1	—	—	1	0	4	4	—	—	1	5	—	2
Utah	—	1	5	—	2	—	1	6	—	1	—	0	2	—	2
Wyoming§	—	0	2	—	3	—	0	1	—	—	—	0	1	—	—
Pacific	—	0	1	—	2	—	0	5	5	1	7	43	66	18	118
Alaska	—	0	0	—	—	—	0	5	5	—	—	0	0	—	—
California	—	0	0	—	—	—	0	0	—	—	5	40	59	15	106
Hawaii	—	0	1	—	2	—	0	2	—	1	—	0	2	—	4
Oregon	—	0	0	—	—	—	0	0	—	—	—	1	5	—	—
Washington	—	0	0	—	—	—	0	0	—	—	2	2	7	3	8
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	3	17	5	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 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 January 16, 2010, and January 17, 2009 (2nd 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	93	281	653	202	822	—	0	44	—	—	—	0	48	—	—
New England	1	6	19	5	19	—	0	0	—	—	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Maine¶	—	0	12	—	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	1	3	10	5	13	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	0	7	—	5	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	18	28	55	27	84	—	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	28	55	27	84	—	0	0	—	—	—	0	0	—	—
E.N. Central	44	115	232	100	355	—	0	4	—	—	—	0	3	—	—
Illinois	—	31	73	—	64	—	0	3	—	—	—	0	0	—	—
Indiana	—	6	30	—	20	—	0	1	—	—	—	0	1	—	—
Michigan	17	40	84	38	117	—	0	1	—	—	—	0	0	—	—
Ohio	27	35	88	61	127	—	0	0	—	—	—	0	2	—	—
Wisconsin	—	8	57	1	27	—	0	1	—	—	—	0	0	—	—
W.N. Central	5	14	62	9	43	—	0	5	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Kansas	—	3	19	—	5	—	0	1	—	—	—	0	2	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
Missouri	5	8	51	9	30	—	0	2	—	—	—	0	1	—	—
Nebraska¶	N	0	0	N	N	—	0	2	—	—	—	0	6	—	—
North Dakota	—	0	26	—	8	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	—	—	—	0	3	—	—	—	0	2	—	—
S. Atlantic	21	25	109	37	62	—	0	3	—	—	—	0	1	—	—
Delaware	—	0	2	—	1	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
Florida	15	14	61	23	44	—	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	54	—	2	—	0	2	—	—	—	0	0	—	—
Virginia¶	—	0	9	—	6	—	0	1	—	—	—	0	0	—	—
West Virginia	6	9	32	14	9	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	9	29	—	20	—	0	6	—	—	—	0	4	—	—
Alabama¶	—	9	27	—	20	—	0	0	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	—	—	—	0	5	—	—	—	0	4	—	—
Tennessee¶	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
W.S. Central	—	71	260	—	109	—	0	17	—	—	—	0	6	—	—
Arkansas¶	—	0	23	—	14	—	0	1	—	—	—	0	0	—	—
Louisiana	—	1	7	—	3	—	0	2	—	—	—	0	4	—	—
Oklahoma	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Texas¶	—	69	244	—	92	—	0	14	—	—	—	0	4	—	—
Mountain	4	19	62	24	124	—	0	12	—	—	—	0	17	—	—
Arizona	—	0	0	—	—	—	0	4	—	—	—	0	2	—	—
Colorado	—	9	33	17	34	—	0	7	—	—	—	0	14	—	—
Idaho¶	N	0	0	N	N	—	0	3	—	—	—	0	5	—	—
Montana¶	—	0	16	—	20	—	0	1	—	—	—	0	1	—	—
Nevada¶	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New Mexico¶	—	0	20	—	32	—	0	2	—	—	—	0	1	—	—
Utah	4	8	32	7	38	—	0	1	—	—	—	0	1	—	—
Wyoming¶	—	0	0	—	—	—	0	1	—	—	—	0	2	—	—
Pacific	—	1	6	—	6	—	0	12	—	—	—	0	12	—	—
Alaska	—	1	5	—	5	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	8	—	—	—	0	6	—	—
Hawaii	—	0	4	—	1	—	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	—	6	26	—	6	—	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.
§ 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.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending January 16, 2010 (2nd week)

Reporting area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
New England	546	394	96	30	11	15	50
Boston, MA	168	106	41	13	3	5	13
Bridgeport, CT	U	U	U	U	U	U	U
Cambridge, MA	14	13	1	—	—	—	1
Fall River, MA	17	15	1	1	—	—	4
Hartford, CT	54	38	8	3	3	2	5
Lowell, MA	16	15	1	—	—	—	3
Lynn, MA	20	15	4	1	—	—	2
New Bedford, MA	21	20	—	—	1	—	2
New Haven, CT	42	32	6	3	—	1	7
Providence, RI	67	50	9	1	2	5	5
Somerville, MA	4	2	1	1	—	—	—
Springfield, MA	33	23	8	2	—	—	—
Waterbury, CT	22	17	3	2	—	—	1
Worcester, MA	68	48	13	3	2	2	7
Mid. Atlantic	2,016	1,409	455	103	24	25	134
Albany, NY	39	25	10	3	—	1	4
Allentown, PA	27	16	7	2	1	1	2
Buffalo, NY	72	55	13	4	—	—	7
Camden, NJ	16	9	3	1	2	1	—
Elizabeth, NJ	9	5	3	1	—	—	—
Erie, PA	61	46	10	3	2	—	3
Jersey City, NJ	20	12	6	1	1	—	4
New York City, NY	1,152	826	254	52	11	9	79
Newark, NJ	26	17	8	—	—	1	1
Paterson, NJ	1	1	—	—	—	—	—
Philadelphia, PA	365	222	101	28	2	12	10
Pittsburgh, PA§	38	24	13	1	—	—	3
Reading, PA	30	24	2	3	1	—	4
Rochester, NY	U	U	U	U	U	U	U
Schenectady, NY	15	13	2	—	—	—	1
Scranton, PA	29	23	5	1	—	—	3
Syracuse, NY	71	55	11	2	3	—	7
Trenton, NJ	U	U	U	U	U	U	U
Utica, NY	16	12	3	—	1	—	2
Yonkers, NY	29	24	4	1	—	—	4
E.N. Central	2,051	1,424	445	107	33	42	148
Akron, OH	56	38	11	4	—	3	9
Canton, OH	39	27	10	2	—	—	3
Chicago, IL	U	U	U	U	U	U	U
Cincinnati, OH	126	87	28	4	—	7	25
Cleveland, OH	257	189	52	10	3	3	11
Columbus, OH	240	159	54	17	2	8	28
Dayton, OH	159	109	40	6	1	3	9
Detroit, MI	142	75	50	9	5	3	5
Evansville, IN	73	62	7	2	2	—	8
Fort Wayne, IN	85	57	19	5	4	—	7
Gary, IN	21	14	4	2	1	—	—
Grand Rapids, MI	69	47	12	2	2	6	6
Indianapolis, IN	248	163	60	14	5	6	5
Lansing, MI	45	25	12	6	2	—	2
Milwaukee, WI	118	80	26	9	1	2	6
Peoria, IL	52	34	9	5	3	1	6
Rockford, IL	54	42	11	1	—	—	—
South Bend, IN	69	58	9	2	—	—	7
Toledo, OH	118	87	23	7	1	—	7
Youngstown, OH	80	71	8	—	1	—	4
W.N. Central	796	539	194	39	16	8	66
Des Moines, IA	133	98	26	6	2	1	5
Duluth, MN	42	30	11	—	1	—	1
Kansas City, KS	30	15	8	6	1	—	2
Kansas City, MO	117	84	24	6	2	1	9
Lincoln, NE	47	37	9	1	—	—	3
Minneapolis, MN	62	35	20	2	3	2	9
Omaha, NE	103	80	19	2	1	1	12
St. Louis, MO	75	33	26	9	4	3	9
St. Paul, MN	69	54	14	—	1	—	5
Wichita, KS	118	73	37	7	1	—	11
S. Atlantic	1,351	888	326	70	34	33	95
Atlanta, GA	146	102	38	4	2	—	7
Baltimore, MD	231	134	62	19	7	9	26
Charlotte, NC	130	85	30	8	5	2	17
Jacksonville, FL	220	159	48	6	4	3	16
Miami, FL	61	44	11	1	3	2	4
Norfolk, VA	51	37	9	2	1	2	1
Richmond, VA	50	29	11	5	2	3	3
Savannah, GA	67	38	20	5	2	2	3
St. Petersburg, FL	67	47	12	6	1	1	8
Tampa, FL	211	134	62	6	5	4	7
Washington, D.C.	98	65	19	8	1	5	1
Wilmington, DE	19	14	4	—	1	—	2
E.S. Central	1,077	709	272	48	24	24	98
Birmingham, AL	225	139	63	10	11	2	22
Chattanooga, TN	85	55	19	7	—	4	6
Knoxville, TN	130	89	32	4	2	3	10
Lexington, KY	114	77	29	4	3	1	5
Memphis, TN	213	145	51	7	4	6	30
Mobile, AL	67	46	16	2	1	2	4
Montgomery, AL	55	38	13	3	1	—	4
Nashville, TN	188	120	49	11	2	6	17
W.S. Central	1,431	952	364	70	24	21	109
Austin, TX	99	62	31	2	3	1	4
Baton Rouge, LA	70	53	12	3	2	—	—
Corpus Christi, TX	70	53	13	2	2	—	11
Dallas, TX	255	149	79	13	5	9	22
El Paso, TX	81	60	18	1	—	2	3
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	242	161	63	8	5	5	20
Little Rock, AR	79	58	19	2	—	—	5
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	282	167	80	25	7	3	23
Shreveport, LA	90	69	18	3	—	—	10
Tulsa, OK	163	120	31	11	—	1	11
Mountain	1,021	711	215	49	23	22	68
Albuquerque, NM	126	91	24	7	2	2	9
Boise, ID	57	40	10	1	3	3	2
Colorado Springs, CO	42	29	8	1	2	2	2
Denver, CO	113	72	27	6	3	5	7
Las Vegas, NV	295	197	77	13	4	4	25
Ogden, UT	38	29	5	3	—	1	1
Phoenix, AZ	U	U	U	U	U	U	U
Pueblo, CO	39	26	9	4	—	—	2
Salt Lake City, UT	130	94	21	6	4	5	13
Tucson, AZ	181	133	34	8	5	—	7
Pacific	1,881	1,318	420	75	44	24	199
Berkeley, CA	18	14	2	—	2	—	1
Fresno, CA	136	97	26	5	4	4	18
Glendale, CA	41	34	6	—	1	—	7
Honolulu, HI	57	39	14	3	—	1	5
Long Beach, CA	63	36	20	3	3	1	6
Los Angeles, CA	280	174	68	17	16	5	42
Pasadena, CA	20	13	4	3	—	—	—
Portland, OR	145	95	43	3	1	3	10
Sacramento, CA	206	162	31	9	3	1	27
San Diego, CA	177	128	36	6	2	5	17
San Francisco, CA	144	102	35	5	2	—	18
San Jose, CA	239	179	47	8	4	1	29
Santa Cruz, CA	36	23	10	1	2	—	5
Seattle, WA	137	91	34	6	3	3	10
Spokane, WA	79	53	23	2	1	—	3
Tacoma, WA	103	78	21	4	—	—	1
Total¶	12,170	8,344	2,787	591	233	214	967

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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