Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Weekly / Vol. 59 / No. 11
March 26, 2010

2009 Pandemic Influenza A (H1N1) in Pregnant Women Requiring Intensive Care — New York City, 2009

Pregnant women are at increased risk for severe illness and complications from infection with seasonal influenza (*1–3*) and 2009 pandemic influenza A (H1N1) (*4–6*). To characterize the severity of 2009 H1N1 infection in pregnant women, the New York City Department of Health and Mental Hygiene (DOHMH) conducted active and passive surveillance for cases of 2009 H1N1 infection in pregnant women requiring intensive care. This report summarizes the results of that surveillance, which found that, during 2009, 16 pregnant women and one who was postpartum were admitted to New York City intensive-care units (ICUs). Two women died. Of the 17 women, 12 had no recognized risk factors for severe influenza complications other than pregnancy (*7*). All 17 women received antiviral treatment with oseltamivir; however, treatment was initiated ≤2 days after symptom onset in only one woman and was begun ≥5 days after symptom onset in four women. Because initiation of antiviral treatment ≤2 days after onset is associated with better outcomes (*5,6*), pregnant women should be encouraged to seek medical care immediately if they develop influenza-like symptoms, and health-care providers should initiate empiric antiviral therapy for these women as soon as possible, even if >2 days after symptom onset. Health departments and health-care providers should educate pregnant and postpartum women regarding the risks posed by influenza and highlight the effectiveness and safety of influenza vaccination. Obstetricians and other health-care providers should offer influenza vaccination to their pregnant patients.

To identify cases of 2009 H1N1 infection in pregnant and postpartum women, beginning April 25, 2009, DOHMH conducted surveillance for hospitalizations and deaths during three separate periods. Surveillance methods varied as the 2009 H1N1 pandemic evolved and influenza activity changed in New York City. During April–June, DOHMH conducted citywide active surveillance for deaths from 2009 H1N1 and enhanced citywide surveillance for hospitalized cases of influenza in pregnant and postpartum women, actively requesting specimens and testing for 2009 H1N1 at the New York City Public Health Laboratory. During July–September, influenza activity was low in New York City; however, ongoing passive surveillance was conducted for hospitalized patients who tested positive for influenza A. During October–December, citywide surveillance was passive, except active surveillance was reestablished at five sentinel hospitals. During all three periods, data on pregnancy, ICU status, and vital status were collected for all patients hospitalized with 2009 H1N1 throughout New York City. Chart abstractions for all identified cases were conducted by medical epidemiologists at DOHMH. For this case series, a case was defined as severe illness with laboratory-confirmed or probable 2009 H1N1 infection* in a woman who was pregnant or postpartum (within 6 weeks of delivery), resulting in admission to an ICU or death.

During 2009, a total of 17 patients (16 pregnant women and one who was postpartum) met the case definition; nine were admitted to ICUs during April–June, and eight were admitted during October–December. No patients met the case definition during July–September. Median age of the patients was 23 years (range: 20–37 years), and median gestational age at

* In 15 of the cases, 2009 H1N1 was confirmed by real-time reverse transcription–polymerase chain reaction. Two cases with laboratory evidence of influenza A that were not subtyped were considered probable 2009 H1N1 because surveillance data indicated >90% of circulating influenza A in New York City at the time was 2009 H1N1.

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hospital admission was 34 weeks (range: 6–41 weeks) (Table). Median length of hospital stay was 12 days (range: 4–38 days). Five of the 17 women had risk factors for severe influenza complications recognized by the Advisory Committee for Immunization Practices (ACIP) other than pregnancy (*7*). One patient had asthma and cardiovascular disease (diagnosed postmortem). The other four patients had sickle cell disease, asthma, seizure disorder, and diabetes mellitus, respectively. Only one of the 17 patients had received 2009 H1N1 vaccine, according to the medical records; she had been administered H1N1 vaccine >4 weeks before hospitalization, after being administered seasonal influenza vaccine >8 weeks before hospitalization. Eleven of the 17 women were in their third trimester, including five who developed acute respiratory distress syndrome (ARDS). All 17 women received antiviral treatment with oseltamivir; however, treatment was initiated ≤2 days after symptom onset in only one woman and was begun ≥5 days after symptom onset in four women; initiation of antiviral treatment ≤2 days after onset is associated with better outcomes (*5,6*).

Four of the nine women who gave birth during their 2009 H1N1 hospitalization had an emergency cesarean delivery; eight infants were live-born (including one who died soon after birth), and one was stillborn. Six of the eight live-born infants were admitted to a neonatal ICU.

Illustrative Case Reports

Patient 1. A woman aged 27 years who was at 32 weeks' gestation (Table) went to her primary care physician during May 2009 after 1 day of fever and cough (Figure). She was treated with antibiotics for 3 days without improvement. Five days after symptom onset, she went to the emergency department, reporting persistent fevers, chills, cough, wheezing, and an episode of near-syncope. On admission she was afebrile, with a respiratory rate of 22 breaths per minute, a heart rate of 96 beats per minute, blood pressure of 100/70 mmHg, and oxygen saturation of 99% on room air. A chest radiograph revealed bilateral lobar pneumonia, and she was treated for community-acquired pneumonia. On hospital day 2, she developed fever to 102.9°F (39.4°C), tachycardia

The *MMWR* series of publications is published by the Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

Suggested citation: Centers for Disease Control and Prevention. [Article title]. MMWR 2010;59:[inclusive page numbers].

TABLE. Clinical characteristics of severe 2009 pandemic influenza A (H1N1) in 16 pregnant women and one postpartum woman hospitalized in intensive-care units (ICUs) — New York City, 2009

Patient no.	Month of hospital admission	Patient age (yrs)	Fetal gestational age at admission (wks)	Total hospital length of stay (days)	ICU length of stay (days)	Maternal outcome	No. of days from symptom onset to antiviral treatment	ACIP* risk factor	Mechanical ventilation	Diagnosis during hospital course		Infant outcome
										Pneumonia	ARDS†	
1	May	27	32	38	37	Died	6	None	Yes	Yes	Yes	Died
2	May	25	37	13	12	Discharged	5	None	Yes	Yes	Yes	NICU§
3	May	25	39	19	17	Died	3	Asthma, CVD¶	Yes	Yes	Yes	NICU
4	May	23	40	15	4	Discharged	5	Sickle cell disease	No	Yes	No	Nursery
5	May	30	6	4	2	Discharged	8	None	No	No	No	NA**
6	May	23	Postpartum††	7	7	Discharged	3	Asthma	No	Yes	No	NA
7	June	21	23	38	32	Discharged	4	Seizure disorder	Yes	Yes	No	Stillborn
8	June	28	35	33	21	Discharged	3	None	Yes	Yes	Yes	NICU
9	June	21	25	18	4	Discharged	2	None	No	No	No	NA
10	October	26	29	10	10	Discharged	3	None	No	Yes	No	NA
11	November	22	41	9	NA	Discharged	4	None	No	Yes	No	NICU
12	November	37	37	12	NA	Discharged	4	None	No	Yes	No	NA
13	November	21	34	7	5	Discharged	3	Diabetes mellitus	No	Yes	No	NICU
14	November	22	35	4	2	Discharged	3	None	No	Yes	No	NA
15	November	21	34	32	24	Discharged	7	None	Yes	Yes	Yes	NICU
16	December	27	25	10	8	Discharged	3	None	Yes	Yes	No	NA
17	December	22	10	7	7	Discharged	9	None	No	No	No	NA

* Advisory Committee on Immunization Practices recognized risk factor for severe influenza complications other than pregnancy. CDC. Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP), 2009. MMWR 2009;58(No. RR-8).
† Acute respiratory distress syndrome.
§ Neonatal ICU.
¶ Cardiovascular disease diagnosed postmortem.
** Not available. Patient was discharged before giving birth.
†† <2 weeks after delivery.

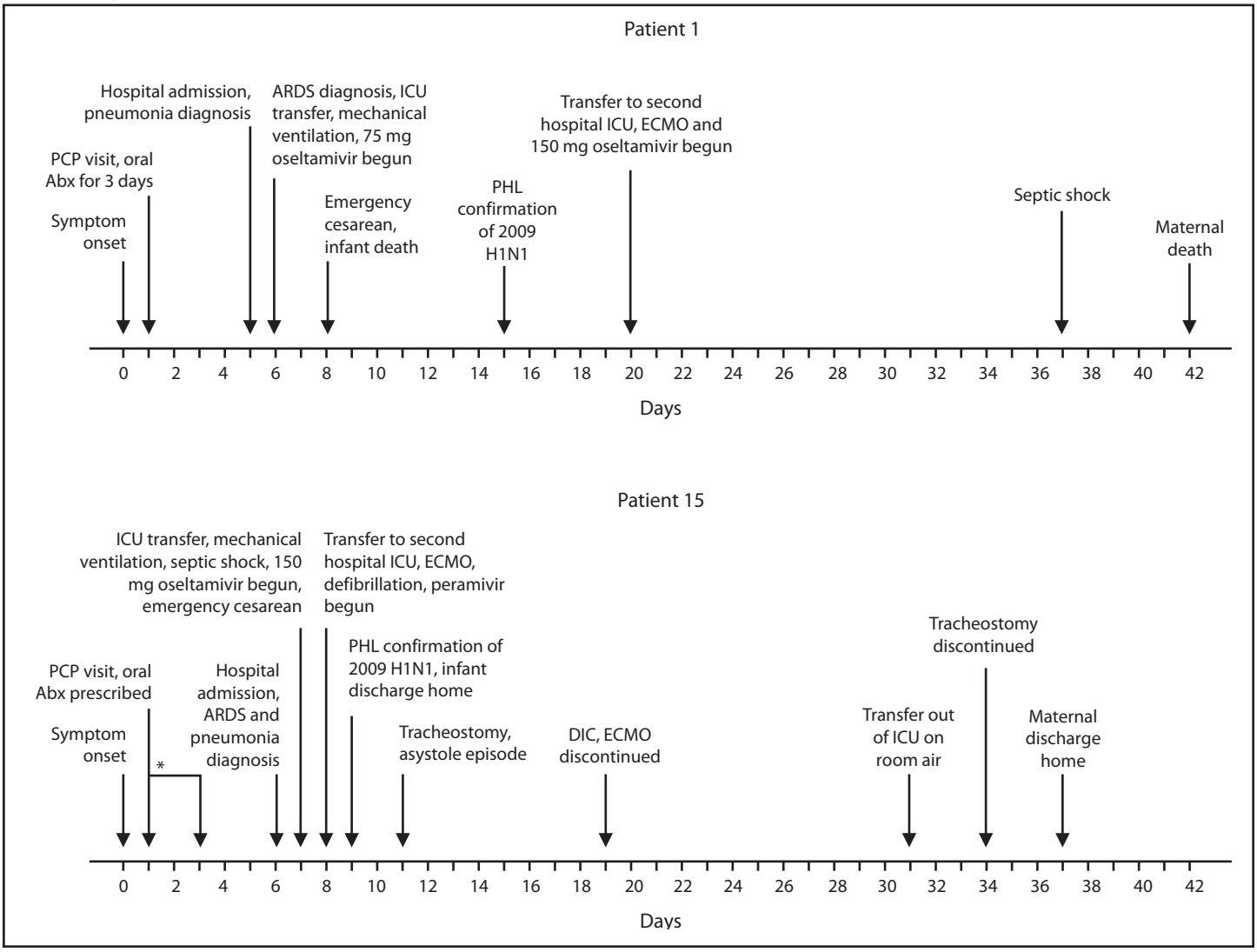
(141 beats per minute) and severe respiratory distress. ARDS was diagnosed, and the patient was transferred to the ICU for mechanical ventilation and treated empirically with oseltamivir, 75 mg twice daily. Rapid influenza diagnostic tests performed on nasopharyngeal specimens 1 day before hospital admission and on hospital day 3 were negative for influenza.

On hospital day 4, because her oxygen saturations worsened to approximately 75% despite maximal ventilation settings, an emergency cesarean delivery was performed. During the procedure, the patient was hypotensive and required multiple blood transfusions. Cultures from bronchoalveolar lavage collected the previous day grew *Acinetobacter baumanii*. On hospital day 11, diagnosis of 2009 H1N1 was confirmed from a nasopharyngeal swab specimen submitted to the DOHMH Public Health Laboratory on hospital day 3. On hospital day 16, because of refractory hypoxemia and severe ARDS, the woman was transferred to another hospital ICU for extracorporeal membrane oxygenation (ECMO), and oseltamivir was increased to 150 mg, twice daily. Her subsequent hospital course was complicated by volume overload, septic shock, and ventilator-associated pneumonia with *Klebsiella pneumoniae* and *A. baumanii*. She died on hospital day 38, a total of 42 days after symptom onset (Figure). At birth, her infant weighed 1,500 g and had Apgar scores of 1 at 1 minute and 1 at 5 minutes after birth; the infant stopped breathing, and neonatal resuscitation efforts were unsuccessful.

Patient 15. A woman aged 21 years who was at 34 weeks' gestation was admitted to a hospital during November 2009 (Table) with respiratory distress; 6 days of fever, cough, and myalgia; and 2 days of blood-tinged sputum (Figure). A few days before admission she had been prescribed antibiotics and oseltamivir by her primary-care provider but only took the antibiotics. On admission, she had a fever of 100.9°F (38.3°C), tachycardia (141 beats per minute), blood pressure of 101/66 mmHg, and a respiratory rate of 20 breaths per minute; her chest radiograph showed bilateral pulmonary infiltrates consistent with ARDS. On hospital day 2, she was transferred to the ICU for mechanical ventilation; she developed septic shock requiring vasopressors and was treated with broad-spectrum antibiotics and oseltamivir, 150 mg twice daily. Her respiratory status deteriorated and she underwent emergency cesarean delivery.

On hospital day 3, the patient was transferred to another hospital ICU for ECMO treatment of severe ARDS and septic shock. Soon after transfer, she experienced cardiac arrest with ventricular fibrillation; defibrillation was successful after less than 2 minutes of no pulse. Oseltamivir was changed to

FIGURE. Timeline of key events in two cases of severe 2009 pandemic influenza A (H1N1) in pregnant women hospitalized in intensive-care units — New York City, 2009



Abbreviations: PCP = primary-care provider, Abx = antibiotics, ICU = intensive-care unit, ARDS = acute respiratory distress syndrome, PHL = New York City Department of Health and Mental Hygiene Public Health Laboratory, ECMO = extracorporeal membrane oxygenation, DIC = disseminated intravascular coagulation.
* Date of PCP visit was not confirmed but was 1–3 days after symptom onset.

empiric intravenous peramivir and broad-spectrum antibiotics. On hospital day 4, diagnosis of 2009 H1N1 was confirmed from a nasopharyngeal swab specimen submitted to the DOHMH Public Health Laboratory on hospital day 2. Her hospital course included spontaneous pneumothoraces, hypotension requiring vasopressors, an episode of asystole, infection with *K. pneumoniae*, fevers to 107.1°F (41.7°C), disseminated intravascular coagulation, and tracheostomy placement. Her respiratory status improved, and ECMO was discontinued on hospital day 14. She was transferred from the ICU without supplemental oxygen on hospital day 26 and discharged home with physical therapy on hospital day 32. On discharge she was fully alert and walking with assistance. At birth, her infant weighed 2,080 grams and had Apgar scores of 3 at 1 minute and 6 at 5 minutes after birth. The infant required mechanical ventilation and was treated with antibiotics for suspected sepsis; oseltamivir was not administered. The infant improved and was discharged on day 3 of life.

Reported by

A Fine, MD, C Dentinger, MS, TF Johnson, MD, A Kossowski, MD, L Steiner-Sichel, MPH, AG Schwarz, MPH, New York City Dept of Health and Mental Hygiene. LK Hartman, MD, Oak Ridge Institute for Science and Education, Oak Ridge,

Tennessee. MA Honein, PhD, National Center on Birth Defects and Developmental Disabilities; D Jamieson, MD, National Center for Chronic Disease Prevention and Health Promotion; T Uyeki, MD, National Center for Immunization and Respiratory Diseases; T Al-Samarrai, MD, AA Creanga, MD, PhD, SB Graitcer, MD, EIS officers, CDC.

Editorial Note

An analysis of New York City 2009 H1N1 hospitalizations during May–June 2009 showed that pregnant women were 7.2 times more likely to be hospitalized and 4.3 times more likely to be admitted to an ICU than nonpregnant women (*6*). Immunologic changes, increased ventilatory demand, and decreased functional residual capacity and oncotic pressure all are postulated to predispose pregnant and postpartum women to severe respiratory complications from influenza virus infection (*5,6*).

The case series in this report highlights some delays in pregnant women seeking care and obtaining appropriate diagnosis and treatment of 2009 H1N1 virus infection in New York City, despite extensive outreach to the public and health-care providers by public health officials. The illustrative cases highlight some factors contributing to the delays, including false-negative rapid diagnostic test results and not taking oseltamivir as prescribed. In addition, only one of the 17 women was reported to have received 2009 H1N1 vaccine. Although no vaccine is 100% effective, vaccination remains the most important and effective means of preventing influenza among pregnant women.

The findings in this report are subject to at least three limitations. First, this report represents a case series rather than a population-based study, and methods of case ascertainment and influenza activity in New York City differed among the April–June, July-September, and October–December periods. The number of severe illnesses from 2009 H1N1 infection in pregnant women identified during these different periods might not be comparable for various reasons. For example, the threshold for admission to an ICU might have been lower in the fall than in the spring, given increased awareness of the potential severity of 2009 H1N1 infection in pregnant women. Second, underascertainment of cases might have occurred during all three periods because of limitations in active case-finding. Finally, 2009 H1N1 vaccine was not available until October, and the vaccination status for most of the 17 women was unknown; therefore, no conclusions can be drawn regarding the prevalence of vaccination in this group.

What is already known on this topic?

Pregnant women have an increased risk for severe illness and complications from seasonal and pandemic influenza virus infection.

What is added by this report?

During 2009 in New York City, among 17 pregnant or postpartum women who were admitted to intensive-care units with severe illness from 2009 H1N1 influenza virus infection, two maternal deaths, one infant death, and a stillbirth resulted; for some of these patients, delays in care-seeking, diagnosis, and treatment of influenza might have increased the potential for rapid clinical decline.

What are the implications for public health practice?

Health departments and health-care providers should educate pregnant and postpartum women to recognize influenza-like symptoms and seek care promptly, and emphasize the need for prompt empiric antiviral treatment when influenza is circulating in the community; obstetricians and other health-care providers should offer influenza vaccination to their pregnant patients.

All clinicians, including obstetricians and health-care providers, should maintain a high index of suspicion for influenza when surveillance data suggest that influenza is circulating in a community. Pregnant and postpartum patients should be educated to recognize influenza-like symptoms and counseled to seek care immediately and to take antiviral therapy as prescribed (*9*). Health-care providers should ensure prompt evaluation and early empiric treatment with oseltamivir, irrespective of negative rapid influenza diagnostic test results; treatment with antipyretics and antibiotics also should be considered when indicated (*5,8,10*).

For pregnant or postpartum women and for those women considering becoming pregnant, clinicians and health departments should emphasize the importance of vaccination against seasonal influenza and 2009 H1N1 to prevent life-threatening complications. Although 2009 H1N1 activity has declined in the United States, the virus is still circulating and causing illness, and increases in influenza activity remain possible. Clinicians caring for pregnant and postpartum women should continue to encourage influenza vaccination during this and subsequent years and remember the importance of prompt empiric antiviral therapy for pregnant or postpartum patients with possible 2009 H1N1 influenza.

Acknowledgments

The findings in this report are based, in part, on contributions by S Balter, MD, S Beatrice, PhD, J Fu, PhD, LE Jones, E Lee, MD, W Oleszko, PhD, JE Sackoff, PhD, E Westheimer, MSc, New York City Dept of Health and Mental Hygiene; S Chu, PhD, C Shapiro-Mendoza, PhD, and K MacFarlane, MPH, National Center for Chronic Disease Prevention and Health Promotion, CDC.

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Racial and Ethnic Differences in Breastfeeding Initiation and Duration, by State — National Immunization Survey, United States, 2004–2008

The American Academy of Pediatrics recommends exclusive breastfeeding to age 6 months and continued breastfeeding for at least the first year of life (*1*). The *Healthy People 2010* (HP2010) targets (16-19a–c) for initiating breastfeeding, breastfeeding to age 6 months, and breastfeeding to age 12 months, are 75%, 50%, and 25%, respectively. National estimates from the United States indicate substantial racial/ethnic differences in breastfeeding (*2*). To monitor state-specific progress toward achieving the HP2010 objectives for breastfeeding initiation and duration among different racial/ethnic groups, CDC analyzed 2004–2008 National Immunization Survey (NIS) data for children born during 2003–2006. This report summarizes the results of that analysis, which found that non-Hispanic blacks had a lower prevalence of breastfeeding initiation than non-Hispanic whites in all but two states; Hispanics generally had lower prevalence than non-Hispanic whites in western states and higher in eastern states. Most states were not meeting the HP2010 targets for breastfeeding duration for any racial/ethnic group. Breastfeeding should be promoted through comprehensive clinical and social supports starting in pregnancy, and including the birth, delivery, and postpartum periods.

NIS is an ongoing, random-digit–dialed survey in 50 states and the District of Columbia that includes households with children aged 19–35 months at the time of interview (*3*). Although the survey primarily is intended to estimate national, state, and selected urban area vaccination coverage rates, questions on breastfeeding initiation and duration were added to NIS in 1999. Because children are aged 19–35 months at the time of the NIS interview, each cross-sectional survey includes children born in 3 different calendar years. To maximize sample size and allow for representative state-level analyses stratified by racial/ethnic group, data from the 2004–2008 surveys were combined to create a cohort of children born during 2003–2006. Council of American Survey Research Organizations (CASRO) response rates for NIS 2004–2008 ranged from 63% to 72%.* The child's race/ethnicity, and mother's age, education, and participation in the Women, Infants, and Children (WIC) supplemental nutrition program were self-reported. Data were suppressed when sample size was <50 because of unstable estimates. Because of inadequate sample sizes for other racial/ethnic groups, analyses by state were restricted to children whose racial/ethnic groups were categorized as Hispanic, non-Hispanic white, or non-Hispanic black. Data were weighted to adjust for households with multiple telephone lines, household nonresponse, and exclusion of households without landline telephones. Estimates were adjusted using final survey weights to correct for nonresponse (*3*). T-tests were used to determine whether estimates for Hispanics and non-Hispanic blacks were significantly different ($p<0.05$) from estimates for non-Hispanic whites.

To assess breastfeeding initiation, survey participants were asked "Was [child] ever breastfed or fed breast milk?" To assess breastfeeding duration, in NIS 2004 and 2005, survey participants were asked "How long was [child] breastfed or fed breast milk?" The wording changed slightly for NIS 2006 onwards to "How old was [child's name] when [child's name] completely stopped breastfeeding or being fed breast milk?"; these changes had a minimal effect on estimates of breastfeeding duration.†

National estimates for breastfeeding initiation and duration to 6 months and 12 months were 73.4%, 41.7%, and 21.0%, respectively (Table 1). Breastfeeding estimates varied by race/ethnicity, participation in the WIC supplemental nutrition program, and mother's age and education.

In the state-specific analysis, for all but two states (Minnesota and Rhode Island), prevalence of breastfeeding initiation was lower among non-Hispanic blacks than non-Hispanic whites, although these differences were not significant in all such states (Table 2). In 13 states, the difference between non-Hispanic blacks and non-Hispanic whites was ≥20 percentage points, with the largest differences observed predominantly in southeastern states. In six states the prevalence of breastfeeding initiation among non-Hispanic

* The CASRO household response rate is the product of the resolution rate (82.3%–83.9%), the screening completion rate (90.2%–94.9%), and the interview completion rate (84.2%–92.0%).

† Additional information available at http://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm.

TABLE 1. National prevalence of breastfeeding initiation and duration to 6 months and 12 months,* by selected sociodemographic characteristics — National Immunization Survey (NIS), United States, 2004–2008†

Characteristic	No. of respondents	Breastfeeding					
		Initiation		6 months		12 months	
		%	(95% CI§)	%	(95% CI)	%	(95% CI)
Total	100,930	73.4	(72.4–74.4)	41.7	(40.7–42.7)	21.0	(20.2–21.8)
Race/Ethnicity (child)							
Hispanic	21,159	80.4	(79.5–81.3)	45.1	(43.9–46.3)	24.0	(22.9–25.1)
White, non-Hispanic	57,891	74.3	(73.7–74.9)	43.2	(42.6–43.8)	21.4	(20.9–21.9)
Black, non-Hispanic	11,476	54.4	(52.6–56.2)	26.6	(25.3–27.9)	11.7	(10.7–12.7)
American Indian/Alaska Native	3,359	69.8	(63.9–75.7)	37.1	(31.2–43.0)	19.4	(14.5–24.3)
Asian or Pacific Islander	6,683	80.9	(77.4–84.4)	52.4	(48.1–56.7)	29.7	(25.8–33.6)
Recipient of WIC¶							
Yes	43,730	66.1	(64.7–67.5)	32.7	(31.1–34.3)	16.5	(15.3–17.7)
No (but eligible)	4,924	76.5	(72.6–80.4)	50.4	(45.7–55.1)	30.1	(25.8–34.4)
No (not eligible)	47,497	82.2	(81.0–83.4)	51.7	(50.3–53.1)	25.5	(24.3–26.7)
Mother's education							
Less than high school diploma or GED**	11,889	66.2	(63.5–68.9)	35.9	(33.0–38.8)	19.9	(17.5–22.3)
High school diploma or GED	21,372	65.2	(63.2–67.2)	31.7	(29.7–33.7)	15.7	(14.1–17.3)
Some college	23,792	74.8	(73.0–76.6)	40.5	(38.5–42.5)	19.7	(17.9–21.5)
College graduate	43,877	85.4	(84.4–86.4)	56.5	(55.1–57.9)	28.6	(27.2–30.0)
Mother's age (yrs)							
<20	2,188	53.0	(46.1–59.9)	19.3	(13.8–24.8)	8.1	(4.4–11.8)
20–29	36,304	69.0	(67.4–70.6)	33.8	(32.2–35.4)	16.2	(14.8–17.6)
≥30	62,438	77.5	(76.3–78.7)	48.5	(47.1–49.9)	25.4	(24.2–26.6)

* Breastfeeding initiation was determined based on response to the question, "Was [child] ever breastfed or fed breast milk?" Breastfeeding duration was determined based on response to the question, "How long was [child] breastfed or fed breast milk?" (NIS 2004–2005) or "How old was [child's name] when [child's name] completely stopped breastfeeding or being fed breast milk?" (NIS 2006–2008).
† Among children born during 2003–2006.
§ Confidence interval.
¶ Special supplemental nutrition program for Women, Infants and Children.
** General Education Development certificate.

blacks was less than 45%. In general, compared with non-Hispanic whites, lower prevalence of breastfeeding initiation was observed among Hispanics in western states and higher prevalence was observed among Hispanics in eastern states.

Among states with sample sizes sufficient for analysis (≥50 respondents per group), Hispanics, non-Hispanic whites, and non-Hispanic blacks met the HP2010 targets§ for breastfeeding initiation of 75% in 33 of 49, 27 of 51, and one of 33 states, respectively (Figure). For breastfeeding duration, Hispanics, non-Hispanic whites, and non-Hispanic blacks met the HP2010 targets of 50% breastfeeding to 6 months in eight of 49, 14 of 51, and two of 33 states, and of 25% breastfeeding to 12 months in 12 of 49, 14 of 51, and three of 33 states, respectively.

Reported by

KS Scanlon, PhD, L Grummer-Strawn, PhD, R Li, PhD, J Chen, MS, Div of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion; N Molinari, PhD, Immunization Svcs Div, National Center for Immunization and Respiratory Diseases; CG Perrine, PhD, EIS Officer, CDC.

Editorial Note

Breastfeeding provides a wide range of benefits to the mother, child, and community, and reaching a higher prevalence of infant breastfeeding is an important public health goal. In 1984, the Surgeon General held the first Workshop on Breastfeeding. In 1990, breastfeeding targets were included in HP2000, and in 2000, the U.S. Department of Health and Human Services released *Blueprint for Action on Breastfeeding*¶ (*4*). Since 1990, national estimates of breastfeeding initiation have shown a consistent increase, and the overall national prevalence is close to reaching the HP2010 target of 75% (*4*). However, racial and ethnic differences in breastfeeding are substantial, and, as shown in this report, the national prevalence of breastfeeding initiation among non-Hispanic blacks is far from the HP2010 target. In 1990 the difference in breastfeeding initiation prevalence between

§ Additional information available at http://www.healthypeople.gov/document/pdf/volume2/16mich.pdf.

¶ Available at http://www.womenshealth.gov/breastfeeding/programs/blueprints/index.cfm.

TABLE 2. Prevalence of breastfeeding initiation and duration to 6 months and 12 months,* by state and race/ethnicity — National Immunization Survey, United States, 2004–2008†

State, Race/Ethnicity	No. of respondents	Breastfeeding					
		Initiation		6 months		12 months	
		%	(95% CI§)	%	(95% CI)	%	(95% CI)
Alabama							
Hispanic	131	72.0	(63.0–81.0)	31.7	(22.4–41.0)	15.5	(8.5–22.5)
White, non-Hispanic	1,161	65.7	(62.0–69.4)	31.2	(28.0–34.4)	13.8	(11.6–16.0)
Black, non-Hispanic	332	34.0	(27.8–40.2)¶	14.1	(9.8–18.4)¶	5.0	(2.4–7.6)¶
Alaska							
Hispanic	108	78.1	(68.7–87.5)¶	46.0	(34.9–57.1)¶	26.5	(17.5–35.5)
White, non-Hispanic	662	89.8	(87.0–92.6)	58.8	(54.4–63.2)	33.1	(29.1–37.1)
Black, non-Hispanic	—**	—		—		—	
Arizona							
Hispanic	805	81.4	(77.9–84.9)	42.1	(38.0–46.2)	23.1	(19.5–26.7)
White, non-Hispanic	1,015	84.9	(82.0–87.8)	50.8	(47.0–54.6)	23.1	(17.1–29.1)
Black, non-Hispanic	—	—		—		—	
Arkansas							
Hispanic	167	75.1	(67.2–83.0)	36.6	(28.0–45.2)	15.6	(9.2–22.0)
White, non-Hispanic	990	66.3	(62.0–70.6)	30.8	(27.1–34.5)	12.8	(10.3–15.3)
Black, non-Hispanic	150	35.6	(26.7–44.5)¶	12.5	(6.3–18.7)¶	3.7	(0.4–7.0)¶
California							
Hispanic	3,020	84.8	(82.7–86.9)	51.4	(48.4–54.4)¶	28.3	(25.6–31.0)¶
White, non-Hispanic	2,068	86.3	(83.0–89.6)	61.4	(57.3–65.5)	33.8	(30.1–37.5)
Black, non-Hispanic	263	66.7	(57.8–75.6)¶	28.5	(20.1–36.9)¶	12.3	(6.2–18.4)¶
Colorado							
Hispanic	321	78.5	(72.7–84.3)¶	38.9	(32.1–45.7)¶	17.2	(11.9–22.5)¶
White, non-Hispanic	1,002	89.4	(86.8–92.0)	57.6	(53.2–62.0)	30.1	(26.1–34.1)
Black, non-Hispanic	—	—		—		—	
Connecticut							
Hispanic	212	76.8	(70.2–83.4)	35.7	(28.8–42.6)¶	20.1	(14.2–26.0)
White, non-Hispanic	871	78.3	(74.9–81.7)	45.8	(42.1–49.5)	22.4	(19.4–25.4)
Black, non-Hispanic	72	66.8	(54.7–78.9)	29.8	(17.9–41.7)¶	18.4	(8.1–28.7)
Delaware							
Hispanic	233	74.4	(68.2–80.6)¶	38.4	(31.5–45.3)	19.6	(14.1–25.1)
White, non-Hispanic	813	67.6	(63.2–72.0)	37.7	(33.6–41.8)	16.9	(14.0–19.8)
Black, non-Hispanic	213	58.3	(50.5–66.1)	26.3	(19.7–32.9)¶	11.0	(6.8–15.2)¶
District Of Columbia							
Hispanic	239	83.7	(78.4–89.0)¶	54.6	(47.4–61.8)¶	36.5	(29.6–43.4)
White, non-Hispanic	581	97.0	(95.5–98.5)	78.9	(75.4–82.4)	42.0	(37.7–46.3)
Black, non-Hispanic	714	54.8	(50.6–59.0)¶	26.5	(23.0–30.0)¶	11.0	(8.6–13.4)¶
Florida							
Hispanic	1,380	80.5	(76.7–84.3)¶	40.1	(35.3–44.9)	21.7	(17.5–25.9)
White, non-Hispanic	1,624	72.4	(68.6–76.2)	37.7	(34.0–41.4)	18.2	(15.2–21.2)
Black, non-Hispanic	649	63.3	(56.4–70.2)¶	30.2	(23.9–36.5)¶	14.7	(9.8–19.6)
Georgia							
Hispanic	318	76.5	(70.5–82.5)	42.9	(35.7–50.1)	21.7	(15.5–27.9)
White, non-Hispanic	1,231	71.6	(67.3–75.9)	38.1	(34.2–42.0)	17.2	(14.5–19.9)
Black, non-Hispanic	498	53.2	(47.2–59.2)¶	27.3	(22.1–32.5)¶	11.8	(7.8–15.8)¶
Hawaii							
Hispanic	239	87.8	(82.4–92.3)	53.5	(46.2–60.8)	31.3	(24.7–37.9)
White, non-Hispanic	232	84.3	(78.5–90.1)	58.0	(50.0–66.0)	40.6	(33.2–48.0)
Black, non-Hispanic	—	—		—		—	
Idaho							
Hispanic	171	80.2	(73.4–87.0)	46.1	(38.3–53.9)¶	20.4	(14.3–26.5)
White, non-Hispanic	843	85.4	(82.7–88.1)	55.2	(51.4–59.0)	25.4	(22.3–28.5)
Black, non-Hispanic	—	—		—		—	
Illinois							
Hispanic	893	77.6	(73.6–81.6)	42.6	(37.9–47.3)	20.3	(16.4–24.2)
White, non-Hispanic	1,819	73.1	(69.8–76.4)	41.5	(38.1–44.9)	18.4	(15.8–21.0)
Black, non-Hispanic	649	45.9	(40.5–51.3)¶	24.9	(20.1–29.7)¶	9.1	(6.2–12.0)¶
Indiana							
Hispanic	297	72.3	(64.4–80.2)	34.2	(26.4–42.0)	22.1	(15.0–29.2)
White, non-Hispanic	1,656	66.8	(63.2–70.4)	36.1	(32.9–39.3)	18.1	(15.7–20.5)
Black, non-Hispanic	270	60.9	(52.0–69.8)	29.5	(20.8–38.2)	11.7	(5.9–17.5)¶
Iowa							
Hispanic	125	79.5	(71.0–88.0)	40.7	(31.2–50.2)	19.7	(12.3–27.1)
White, non-Hispanic	979	71.7	(68.4–75.0)	39.5	(36.0–43.0)	17.9	(15.3–20.5)
Black, non-Hispanic	—	—		—		—	

See footnotes at end of table.

TABLE 2. (*Continued*) Prevalence of breastfeeding initiation and duration to 6 months and 12 months,* by state and race/ethnicity — National Immunization Survey, United States, 2004–2008†

State, Race/Ethnicity	No. of respondents	Breastfeeding					
		Initiation		6 months		12 months	
		%	(95% CI§)	%	(95% CI)	%	(95% CI)
Kansas							
Hispanic	279	76.2	(69.9–82.5)	38.4	(30.9–45.9)	18.4	(12.3–24.5)
White, non-Hispanic	1,238	76.9	(73.7–80.1)	42.8	(39.4–46.2)	19.8	(17.2–22.4)
Black, non-Hispanic	55	63.9	(48.4–79.4)	32.8	(17.6–48.0)	19.7	(5.4–34.0)
Kentucky							
Hispanic	80	65.8	(52.0–79.6)	32.3	(21.1–43.5)	10.8	(4.0–17.6)
White, non-Hispanic	1,154	54.8	(51.3–58.3)	26.1	(23.3–28.9)	12.7	(10.6–14.8)
Black, non-Hispanic	94	36.4	(25.8–47.0)¶	11.1	(4.6–17.6)¶	2.8	(0.4–6.0)¶
Louisiana							
Hispanic	156	58.4	(47.1–69.7)	22.4	(15.0–29.8)	9.8	(5.0–14.6)
White, non-Hispanic	1,290	59.8	(56.3–63.3)	24.4	(21.8–27.0)	10.9	(9.1–12.7)
Black, non-Hispanic	556	31.8	(27.1–36.5)¶	13.6	(10.1–17.1)¶	3.8	(2.1–5.5)¶
Maine							
Hispanic	—		—		—		—
White, non-Hispanic	1,032	76.2	(73.1–79.3)	45.9	(42.5–49.3)	26.7	(23.8–29.6)
Black, non-Hispanic	—		—		—		—
Maryland							
Hispanic	284	84.4	(78.1–90.7)	46.6	(38.6–54.6)	23.4	(16.8–30.0)
White, non-Hispanic	1,191	78.0	(74.4–81.6)	46.8	(42.8–50.8)	23.7	(20.4–27.0)
Black, non-Hispanic	876	63.6	(58.4–68.8)¶	35.1	(30.2–40.0)¶	18.6	(14.6–22.6)
Massachusetts							
Hispanic	246	77.2	(69.5–84.9)	30.8	(22.7–38.9)¶	12.4	(7.5–17.3)¶
White, non-Hispanic	1,077	76.7	(73.2–80.2)	45.3	(41.5–49.1)	22.5	(19.4–25.6)
Black, non-Hispanic	149	65.9	(52.9–78.9)	52.6	(39.3–65.9)	26.1	(14.1–38.1)
Michigan							
Hispanic	220	67.0	(58.2–75.8)	30.2	(22.1–38.3)	18.8	(11.9–25.7)
White, non-Hispanic	1,147	68.5	(64.9–72.1)	35.9	(32.6–39.2)	17.2	(14.8–19.6)
Black, non-Hispanic	612	50.9	(43.1–58.7)¶	22.7	(16.1–29.3)¶	10.4	(5.4–15.4)¶
Minnesota							
Hispanic	132	84.3	(77.2–91.4)	49.3	(39.4–59.2)	30.0	(21.1–38.9)
White, non-Hispanic	1,080	80.2	(77.0–83.4)	47.7	(44.1–51.3)	23.6	(20.7–26.5)
Black, non-Hispanic	55	90.6	(83.7–97.5)¶	62.5	(48.8–76.2)¶	33.5	(19.3–47.7)
Mississippi							
Hispanic	63	65.4	(47.0–83.8)	31.8	(16.4–47.2)	15.6	(3.0–28.2)
White, non-Hispanic	939	58.4	(54.4–62.4)	24.7	(21.4–28.0)	10.4	(8.2–12.6)
Black, non-Hispanic	540	35.4	(30.6–40.2)¶	15.3	(11.6–19.0)¶	5.7	(3.4–8.0)¶
Missouri							
Hispanic	135	72.6	(62.6–82.6)	37.3	(27.4–47.2)	13.9	(7.5–20.3)
White, non-Hispanic	1,325	67.7	(64.3–71.1)	34.2	(31.1–37.3)	16.0	(13.6–18.4)
Black, non-Hispanic	196	56.9	(48.2–65.6)¶	27.1	(19.0–35.2)	12.4	(6.5–18.3)
Montana							
Hispanic	88	75.5	(65.1–85.9)¶	53.1	(41.1–65.1)	28.3	(16.9–39.7)
White, non-Hispanic	1,043	87.0	(84.4–89.6)	56.7	(53.2–60.2)	31.2	(28.0–34.4)
Black, non-Hispanic	—		—		—		—
Nebraska							
Hispanic	185	82.5	(76.3–88.7)	51.5	(43.4–59.6)	27.5	(19.7–35.3)
White, non-Hispanic	974	76.6	(73.3–79.9)	45.8	(42.2–49.4)	22.3	(19.5–25.1)
Black, non-Hispanic	—		—		—		—
Nevada							
Hispanic	576	80.8	(77.2–84.4)	43.8	(39.2–48.4)	21.2	(17.4–25.0)
White, non-Hispanic	707	77.4	(73.5–81.3)	45.7	(41.3–50.1)	22.8	(19.2–26.4)
Black, non-Hispanic	63	56.2	(42.7–69.7)¶	22.4	(11.4–33.4)¶	9.0	(1.3–16.7)¶
New Hampshire							
Hispanic	73	73.5	(59.6–87.4)	41.7	(28.8–54.6)	24.4	(13.7–35.1)
White, non-Hispanic	1,048	77.8	(74.7–80.9)	50.2	(46.8–53.6)	26.6	(23.7–29.5)
Black, non-Hispanic	—		—		—		—
New Jersey							
Hispanic	760	81.0	(76.2–85.8)¶	45.4	(39.1–51.7)	22.4	(17.2–27.6)
White, non-Hispanic	921	70.7	(66.9–74.5)	43.8	(39.8–47.8)	19.9	(16.6–23.2)
Black, non-Hispanic	422	67.5	(59.5–75.5)	40.0	(31.2–48.8)	15.1	(8.2–22.0)
New Mexico							
Hispanic	843	75.5	(71.6–79.4)¶	39.5	(35.4–43.6)¶	22.5	(19.0–26.0)¶
White, non-Hispanic	583	87.2	(83.2–91.2)	57.7	(52.4–63.0)	32.5	(27.9–37.1)
Black, non-Hispanic	—		—		—		—

See footnotes at end of table.

TABLE 2. (*Continued*) Prevalence of breastfeeding initiation and duration to 6 months and 12 months,* by state and race/ethnicity — National Immunization Survey, United States, 2004–2008†

State, Race/Ethnicity	No. of respondents	Breastfeeding					
		Initiation		6 months		12 months	
		%	(95% CI§)	%	(95% CI)	%	(95% CI)
New York							
Hispanic	701	80.3	(77.0–83.6)¶	47.4	(43.1–51.7)	27.4	(23.6–31.2)
White, non-Hispanic	1,551	73.1	(70.5–75.7)	47.5	(44.7–50.3)	26.4	(24.0–28.8)
Black, non-Hispanic	394	67.8	(61.6–74.0)	35.6	(30.1–41.1)¶	18.8	(14.3–23.3)¶
North Carolina							
Hispanic	197	84.6	(78.8–90.4)¶	48.1	(40.3–55.9)¶	23.3	(16.8–29.8)
White, non-Hispanic	862	72.4	(68.3–76.5)	39.5	(35.6–43.4)	20.1	(17.1–23.1)
Black, non-Hispanic	186	49.8	(41.4–58.2)¶	19.5	(13.3–25.7)¶	11.3	(6.3–16.3)¶
North Dakota							
Hispanic	60	71.3	(58.4–84.2)	40.9	(27.2–54.6)	17.2	(7.2–27.2)
White, non-Hispanic	1,159	72.8	(69.8–75.8)	40.9	(37.8–44.0)	19.2	(16.8–21.6)
Black, non-Hispanic	—	—		—		—	
Ohio							
Hispanic	179	61.3	(51.0–71.6)	34.2	(24.4–44.0)	15.3	(7.9–22.7)
White, non-Hispanic	1,758	64.7	(61.5–67.9)	33.4	(30.5–36.3)	14.7	(12.7–16.7)
Black, non-Hispanic	343	54.1	(46.3–61.9)¶	23.4	(16.9–29.9)¶	9.5	(5.5–13.5)¶
Oklahoma							
Hispanic	242	66.6	(58.7–74.5)¶	31.4	(24.8–38.0)	15.9	(11.2–20.6)
White, non-Hispanic	778	73.1	(69.1–77.1)	35.8	(31.9–39.7)	15.1	(12.4–17.8)
Black, non-Hispanic	100	52.4	(40.8–64.0)¶	21.2	(12.5–29.9)¶	13.7	(6.2–21.2)
Oregon							
Hispanic	234	87.3	(82.7–91.9)	64.2	(57.6–70.8)	41.9	(35.3–48.5)
White, non-Hispanic	701	90.5	(87.6–93.4)	61.7	(57.2–66.6)	35.8	(31.7–39.9)
Black, non-Hispanic	—	—		—		—	
Pennsylvania							
Hispanic	416	73.1	(67.3–78.9)	33.4	(26.9–39.9)	14.6	(9.9–19.3)¶
White, non-Hispanic	1,929	68.7	(65.8–71.6)	40.1	(37.2–43.0)	20.2	(17.8–22.6)
Black, non-Hispanic	690	54.3	(48.1–60.5)¶	23.9	(18.9–28.9)¶	10.8	(7.2–14.4)¶
Rhode Island							
Hispanic	250	75.5	(69.3–81.7)¶	32.3	(25.1–39.5)¶	17.5	(11.7–23.3)
White, non-Hispanic	905	68.4	(64.7–72.1)	40.6	(36.9–44.3)	18.8	(16.0–21.6)
Black, non-Hispanic	68	71.8	(58.9–84.7)	38.6	(24.8–52.4)	17.2	(6.7–27.7)
South Carolina							
Hispanic	187	76.7	(69.6–83.8)	46.4	(37.8–55.0)¶	21.8	(14.1–29.5)
White, non-Hispanic	1,105	71.0	(67.7–74.3)	36.3	(33.0–39.6)	15.8	(13.4–18.2)
Black, non-Hispanic	325	43.3	(37.2–49.4)¶	15.9	(11.7–20.1)¶	4.6	(2.1–7.1)¶
South Dakota							
Hispanic	75	78.3	(67.8–88.8)	45.4	(32.1–58.7)	23.9	(11.8–36.0)
White, non-Hispanic	1,193	76.4	(73.3–79.5)	44.6	(41.2–48.0)	20.7	(18.0–23.4)
Black, non-Hispanic	—	—		—		—	
Tennessee							
Hispanic	241	68.6	(58.5–78.7)	38.8	(29.0–48.6)	20.1	(12.3–27.9)
White, non-Hispanic	1,617	66.2	(62.5–69.9)	33.5	(30.3–36.7)	15.2	(13.0–17.4)
Black, non-Hispanic	467	45.4	(38.4–52.4)¶	21.1	(15.4–26.8)¶	8.1	(3.9–12.3)¶
Texas							
Hispanic	4,225	79.1	(76.9–81.3)	42.6	(39.8–45.4)	22.3	(19.9–24.7)
White, non-Hispanic	1,995	76.5	(73.1–79.9)	43.1	(39.5–46.7)	19.8	(17.1–22.5)
Black, non-Hispanic	715	54.7	(48.3–61.1)¶	24.6	(19.3–29.9)¶	7.9	(5.4–10.4)¶
Utah							
Hispanic	150	88.9	(83.3–94.5)	49.7	(40.6–58.8)¶	30.5	(22.1–38.9)
White, non-Hispanic	970	89.4	(86.8–92.0)	63.7	(60.0–67.4)	28.3	(25.0–31.6)
Black, non-Hispanic	—	—		—		—	
Vermont							
Hispanic	—	—		—		—	
White, non-Hispanic	959	83.0	(80.0–86.0)	56.6	(52.8–60.4)	34.6	(31.2–38.0)
Black, non-Hispanic	—	—		—		—	
Virginia							
Hispanic	194	80.9	(74.2–87.6)	50.3	(42.0–58.6)	26.1	(19.2–33.0)
White, non-Hispanic	994	78.3	(74.6–82.0)	47.5	(43.5–51.5)	22.7	(19.7–25.7)
Black, non-Hispanic	190	60.6	(52.5–68.7)¶	33.7	(26.0–41.4)¶	13.1	(7.7–18.5)¶
Washington							
Hispanic	510	88.5	(84.9–92.1)	57.0	(51.4–62.6)	31.5	(26.1–36.9)
White, non-Hispanic	1,597	91.0	(89.0–93.0)	59.0	(55.6–62.4)	34.2	(31.1–37.3)
Black, non-Hispanic	54	73.5	(59.5–87.5)¶	49.9	(33.9–65.9)	26.8	(12.9–40.7)

See footnotes at end of table.

TABLE 2. (*Continued*) Prevalence of breastfeeding initiation and duration to 6 months and 12 months,* by state and race/ethnicity — National Immunization Survey, United States, 2004–2008†

State, Race/Ethnicity	No. of respondents	Breastfeeding					
		Initiation		6 months		12 months	
		%	(95% CI§)	%	(95% CI)	%	(95% CI)
West Virginia							
Hispanic	52	67.8	(53.1–82.5)	34.1	(19.1–49.1)	7.4	(1.0–13.8)¶
White, non-Hispanic	1,251	56.8	(53.4–60.2)	26.4	(23.7–29.1)	12.9	(10.9–14.9)
Black, non-Hispanic	—	—		—		—	
Wisconsin							
Hispanic	244	70.0	(61.3–78.7)	40.6	(31.7–49.5)	21.6	(14.3–28.9)
White, non-Hispanic	1,265	76.6	(73.5–79.7)	44.5	(41.0–48.0)	20.8	(17.9–23.7)
Black, non-Hispanic	171	46.6	(36.8–56.4)¶	19.5	(12.4–26.6)¶	7.8	(2.8–12.8)¶
Wyoming							
Hispanic	154	81.4	(74.3–88.5)	43.3	(34.9–51.7)	21.6	(14.9–28.3)
White, non-Hispanic	1,007	84.1	(81.4–86.8)	46.4	(42.9–49.9)	21.4	(18.7–24.1)
Black, non-Hispanic	—	—		—		—	

* Breastfeeding initiation was determined based on response to the question, "Was [child] ever breastfed or fed breast milk?" Breastfeeding duration was determined based on response to the question, "How long was [child] breastfed or fed breast milk?" (NIS 2004–2005) or "How old was [child's name] when [child's name] completely stopped breastfeeding or being fed breast milk?" (NIS 2006–2008).
† Among children born during 2003–2006.
§ Confidence interval.
¶ Referent group is non-Hispanic whites. Estimate is statistically significant ($p<0.05$).
§ Not available. Data were suppressed when sample size was <50.

non-Hispanic blacks and non-Hispanic whites was 35 percentage points (*4*). The results described in this report indicate that by 2003–2006, this difference had declined to 20 percentage points nationally. However, many states still have large differences, particularly in the southeastern United States, where 13 states had a prevalence of breastfeeding initiation that was ≥20 percentage points different between non-Hispanic blacks and non-Hispanic whites.

National estimates for breastfeeding to 6 months also have increased consistently since 1990 (*4*). However, despite overall progress in breastfeeding duration, no improvement has been observed in reducing the difference between non-Hispanic blacks and non-Hispanic whites. In 1990, the difference in prevalence of breastfeeding to 6 months between non-Hispanic blacks and non-Hispanic whites was approximately 16 percentage points, the same as shown in this report for 2003–2006. Surveillance data for breastfeeding to 12 months are more limited and suggest modest increases nationally since 1999.

Many factors are associated with not breastfeeding, including younger maternal age, lower income, lower maternal education, and being unmarried (*4*). However, previous analyses, including analyses of NIS data, have shown that differences in breastfeeding between non-Hispanic blacks and non-Hispanic whites exist across most of these sociodemographic groups (*5*). For example, among women with a college degree, non-Hispanic blacks were less likely to breastfeed than non-Hispanic whites. Other possible contributors to the differences include lack of culturally relevant information and images of non-Hispanic black women breastfeeding, perceptions that breastfeeding is inferior to formula feeding, non-Hispanic black women returning to work sooner (where support for breastfeeding often is insufficient), lack of social or partner support, and lack of knowledge of the health benefits associated with breastfeeding (*6*).

The results of the analysis in this report, like previous national estimates, suggest that overall Hispanics have slightly higher rates of breastfeeding initiation than non-Hispanic whites (*2*). However, the analysis found that this relationship varied by state, with many states east of the Mississippi River

What is already known on the topic?

National estimates indicate that non-Hispanic black women are less likely to initiate breastfeeding and more likely to stop breastfeeding than Hispanic and non-Hispanic white women.

What is added by this report?

Differences in breastfeeding between Hispanics and non-Hispanic whites varied by state, and rates were lower among non-Hispanic blacks in almost all states.

What are the implications for public health practice?

Breastfeeding should be promoted through comprehensive clinical and social supports starting in pregnancy, and including the birth, delivery, and postpartum periods.

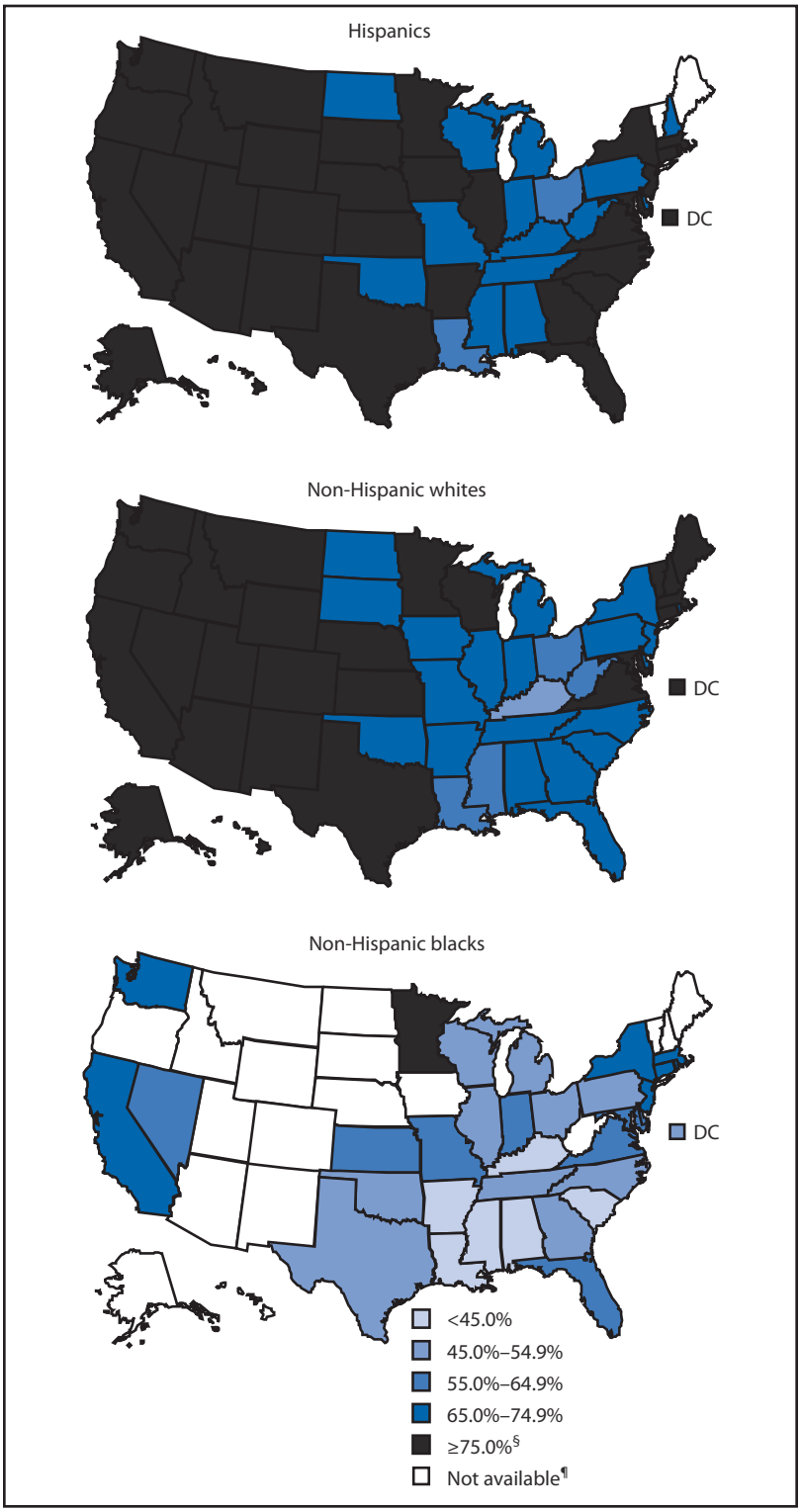
having lower estimates among Hispanics compared with non-Hispanic whites. Some of this difference might be explained by acculturation and length of residence in the United States. Previous research has shown that the longer Hispanic women live in the United States, the less likely they are to breastfeed, and the more likely they are to perceive formula feeding as acceptable (*7*).

Numerous factors contribute to a woman's decision to breastfeed, including social and cultural norms, social support, guidance and support from health-care providers, work environment, and the media. *The CDC Guide to Breastfeeding Interventions*** recommends various strategies to improve breastfeeding practices in many of these areas, allowing state and local communities to adapt the interventions that best meet their needs. A better understanding of the underlying factors contributing to the racial/ethnic differences in breastfeeding is needed to develop specific interventions for addressing the differences. In the meantime, directing some of these broader interventions at non-Hispanic black populations might help to reduce disparities in breastfeeding. For example, some studies have suggested that intention to breastfeed is lower among non-Hispanic black women because they are more comfortable with formula feeding (*8*).

The findings in this report are subject to at least three limitations. First, estimates do not control for other sociodemographic factors that might be associated with breastfeeding. For example, participation in WIC has been associated with lower breastfeeding rates, and non-Hispanic black women might be more likely to participate in WIC. However, previous analyses have shown that racial/ethnic differences in breastfeeding exist independent of other sociodemographic factors. Second, mothers were asked about their breastfeeding behaviors when their child was aged 19–35 months, which is after many women in the United States stop breastfeeding, and therefore might be subject to recall bias. However, mothers accurately recall initiation and duration of breastfeeding, especially when recall is within 3 years; whether accuracy of recall varies by race/ethnicity is unknown (*9*). Finally, NIS is a landline telephone survey; although statistical adjustments adequately compensate for noncoverage of households without

** Available at http://www.cdc.gov/breastfeeding/pdf/breastfeeding_interventions.pdf.

FIGURE. Prevalence of initiating breastfeeding* among Hispanics, non-Hispanic whites, and non-Hispanic blacks — National Immunization Survey, United States, 2004–2008†



* Breastfeeding initiation was determined based on response to the question, "Was [child] ever breastfed or fed breast milk?"
† Among children born during 2003–2006.
§ *Healthy People 2010* target for initiating breastfeeding.
¶ Data were suppressed when sample size was <50.

landline telephones, some nonresponse and noncoverage bias might remain (*10*).

To continue to work toward reducing racial/ethnic disparities in breastfeeding, CDC is reassessing strategies for promoting and supporting breastfeeding among non-Hispanic black women. In December 2009, CDC hosted a meeting with a group of experts in the area of breastfeeding among non-Hispanic black women. Outcomes from the meeting and directions forward are being finalized.

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Tick-Borne Encephalitis Among U.S. Travelers to Europe and Asia — 2000–2009

Tick-borne encephalitis virus (TBEV) is the most common arbovirus transmitted by ticks in Europe. Approximately 10,000 cases of tick-borne encephalitis (TBE) are reported annually in Europe and Russia (*1*). Although TBE is endemic in parts of China, information regarding its incidence is limited (*1,2*). TBEV is closely related to Powassan virus (POWV), another tick-borne flavivirus that is a rare cause of encephalitis in North America and Russia; TBEV and POWV can cross-react in serologic tests (*3,4*). Before 2000, two cases of TBE in North American travelers to Europe were reported (*5,6*). State health officials or clinicians send specimens from patients with unexplained encephalitis to CDC as part of routine surveillance and diagnostic testing. CDC recently reviewed all 2000–2009 laboratory records to identify cases of TBE among U.S. travelers; the five cases identified are summarized in this report. All five cases had TBEV or POWV immunoglobulin M (IgM) antibodies in serum and were confirmed as acute TBE cases by plaque-reduction neutralization tests against both viruses. All four patients who had traveled to Europe or Russia had biphasic illnesses (a common feature of TBE) and made nearly complete recoveries. The fifth patient, the first reported case of TBE in a U.S. traveler to China, had a monophasic illness with severe encephalitis and neurologic sequelae. Health-care providers should be aware of TBE, should counsel travelers about measures to reduce exposure to tick bites, and should consider the diagnosis of TBE in travelers returning from TBE-endemic countries with meningitis or encephalitis.

Case Reports

Case 1. On July 11, 2001, a previously healthy man aged 57 years was admitted to a Utah hospital with fever of 102.7°F (39.3°C), tachycardia, mental status changes, right arm tremors, and right-sided rigidity (Table 1). In June, he had traveled to eastern Russia where he noted having multiple tick bites. On June 26, 15 days before admission, he developed fever, myalgias, and cough, which improved with empiric antibiotics. Ten days before admission, the symptoms recurred and he was treated with intramuscular penicillin. Four days before admission, he developed headache, neck stiffness, and confusion, which progressed over the next few days. On admission to the hospital, the patient was disoriented and stuporous. Cerebrospinal fluid (CSF) showed lymphocytic pleocytosis and elevated protein; bacterial cultures, herpes simplex virus (HSV), and enterovirus polymerase chain reaction (PCR) were negative. Brain magnetic resonance imaging (MRI) revealed left-sided cerebral edema with ischemic changes of the thalamus and striatum. The patient was diagnosed with encephalitis of unknown etiology and treated empirically with antibiotics and corticosteroids, with resolution of fever and recovery of normal mental status the next day. He returned home after 14 days with residual right-sided weakness and rigidity and impaired cognition. His motor symptoms resolved during the next 6 months; however, he continued to experience mild cognitive impairment. Serum collected on admission tested positive for TBEV IgM and TBEV-specific neutralizing antibodies (Table 2). Serologic tests for other arboviruses and pathogens* were negative.

Case 2. On August 27, 2004, a previously healthy man aged 20 years was admitted to a Wyoming hospital with fever of 104.0°F (40.0°C), conjunctival injection, photophobia, and altered mental status (Table 1). During June–August, he had traveled in Siberia, Russia, and noted having multiple tick bites. On August 3, approximately 3 weeks before admission, he experienced fatigue, nausea, vomiting, and myalgias, which subsequently resolved. However, 8 days before admission, he developed fever and headache, which worsened until the day of admission. A CSF specimen collected on admission to the hospital showed pleocytosis and elevated protein; bacterial cultures and HSV and enterovirus PCR were negative. Brain MRI was normal. The patient was diagnosed with encephalitis of unknown etiology and treated empirically with antibiotics. He was hospitalized for 4 days and recovered fully. Serum collected on admission tested negative for TBEV IgM but positive for POWV IgM and TBEV-specific neutralizing antibodies (Table 2). Serologic tests for other arboviruses† and *Borrelia burgdorferi* were negative.

* St. Louis encephalitis and West Nile viruses; *Borrelia burgdorferi*, *Leptospria*, and *Rickettsia*.
† Chikungunya, dengue, Japanese encephalitis, snowshoe hare, Sindbis, and West Nile viruses.

TABLE 1. Characteristics of five tick-borne encephalitis cases among U.S. travelers — Europe and Asia, 2000–2009

Case no.	Age (yrs)	Sex	Travel destination	Dates of travel	Tick bite noted	Date of illness onset	Biphasic illness	Date of neurologic symptom onset	Clinical syndrome	CSF* WBC†	CSF protein§	Neuroimaging findings	Outcome
1	57	M	Russia	Jun 2001	Yes	Jun 26	Yes	Jul 7	Encephalitis	112	84	Cerebral edema with ischemic changes in the thalamus and striatum	Mild cognitive impairment
2	20	M	Russia	Jun–Aug 2004	Yes	Aug 3	Yes	Aug 19	Encephalitis	40	61	Normal	Recovered
3	46	M	Sweden	Jul–Aug 2006	Yes	Jul 25	Yes	Aug 5	Meningitis	11	55	Normal	Recovered
4	15	F	China	Jun–Jul 2007	No	Jul 4	No	Jul 9	Encephalitis	111	NA¶	Basal ganglia and thalamic lesions	Neurologic sequelae
5	14	M	Czech Republic and Russia	Jun–Aug 2008	Yes	Aug 22	Yes	Aug 30	Meningitis	54	71	Normal	Recovered

* Cerebrospinal fluid.
† White blood cells. Normal range: 0–5 WBC/mm^3.
§ Normal range: 15–45 mg/dL.
¶ Not available.

TABLE 2. Laboratory results for five tick-borne encephalitis cases among U.S. travelers — Europe and Asia, 2000–2009

	Cerebrospinal fluid			Serum				
Case no.	Day	TBEV* IgM†	POWV§ IgM	Day	TBEV IgM	POWV IgM	TBEV PRNT¶	POWV PRNT
1	15	Negative	Negative	15	Positive	Nonspecific**	5,210	<20
2	23	Negative	Negative	23	Negative	Positive	160	10
3	22	Negative	Positive	25	Positive	Positive	2,560	40
4	16	Negative	Positive	16	Negative	Positive	1,280	320
5	14	Negative	Positive	39	Positive	Positive	2,560	160

* Tick-borne encephalitis virus.
† Immunoglobulin M.
§ Powassan virus.
¶ Plaque reduction neutralization test. TBEV PRNT was performed using a chimeric virus comprised of the TBEV Far Eastern subtype (Sofjin strain) prM and E antigens inserted into a dengue virus type 4 backbone. A ratio of TBEV PRNT: POWV PRNT titers of ≥4 provides laboratory confirmation of a TBEV infection.
** Nonspecific reaction is defined as a sample that reacts with the negative antigen such that the result using the viral antigen cannot be interpreted.

Case 3. On August 19, 2006, a previously healthy man aged 46 years was admitted to a hospital in Connecticut with fever of 102.9°F (39.4°C) and headache (Table 1). During July–August, he had traveled in Sweden and noted having numerous tick bites. On July 25, approximately three and a half weeks before admission, he developed fever and diarrhea requiring a brief hospitalization. His symptoms resolved, but 2 weeks before admission, after returning to the United States, he developed headaches and fever, which subsequently worsened. On admission to the Connecticut hospital, his physical examination was remarkable for diminished deep tendon reflexes bilaterally in the lower extremities. A CSF specimen showed mild pleocytosis and elevated protein. Brain MRI was normal. He was diagnosed with meningitis of unknown etiology, was hospitalized for 3 days, and recovered fully. Serum collected on admission tested positive for POWV IgM, TBEV IgM, and TBEV-specific neutralizing antibodies (Table 2).

Case 4. On July 18, 2007, a previously healthy girl aged 15 years with acute encephalitis of unknown etiology was airlifted from a hospital in Beijing, China, and admitted to a hospital in New York City (Table 1). During June and July, she had traveled with classmates in Tianjin Province, China. She had no known tick bites. On July 4, she developed fever and diarrhea and was admitted to a local hospital. She was transferred to the Beijing hospital on July 9 for persistent fever and confusion. HSV PCR on CSF and tests for Japanese encephalitis virus antibodies in serum were negative. During the next week in the Beijing hospital, despite empiric treatment with antibiotics and acyclovir, her mental status worsened, and she experienced two seizures and developed Bell's palsy. On admission to the New York City hospital,

her physical examination showed aphasia, hemiplegia, and hyperreflexia. A specimen of CSF showed pleocytosis, and MRI revealed bilateral thalamic and basal ganglia lesions. After a prolonged hospitalization, she was transferred to a rehabilitation facility. She fully recovered cognitive function, but had residual severe dysarthria and mild bradykinesia in the limbs, which improved with dopamine-agonist medications. Serum collected on July 20 tested negative for TBEV IgM but positive for POWV IgM and TBEV-specific neutralizing antibodies (Table 2). Serologic tests for other arboviruses[§] were negative.

Case 5. On September 2, 2008, a previously healthy boy aged 14 years was admitted to a hospital in the District of Columbia with fever, headache, and vomiting. During June–August, he had traveled in the Czech Republic and Siberia, Russia, and noted having multiple tick bites. Eleven days before admission, he developed fever and sore throat, which resolved with oral penicillin. Three days before admission, he developed fever and headache, prompting his return home. During the first 3 days of hospitalization, his fever and headache persisted and he developed neck stiffness and abdominal pain. A specimen of CSF showed pleocytosis and elevated protein; bacterial cultures and HSV and enterovirus PCR were negative. Brain MRI was normal. He was diagnosed with meningitis of unknown etiology; treatment included empiric antibiotics and acyclovir. He fully recovered after an 8-day hospitalization. After consultation with CDC, a convalescent serum sample was collected on September 30, and tested positive for POWV IgM, TBEV IgM, and TBEV neutralizing antibodies (Table 2). Serologic tests for other arboviruses and pathogens[¶] were negative.

Reported by

DM Granger, MD, Univ of Utah School of Medicine and Veterans Affairs Medical Centers. BK Lopansri, MD, Loyola Univ Medical Center and Hines VA Hospital, Illinois. D Butcher, MD, Teton Internal Medicine, Jackson, Wyoming. S Wong, PhD, NP Tavakoli, PhD, PB Backenson, MS, New York State Dept of Health; M Campbell, MSc, A Fine, MD, J Ackelsberg, MD, New York City Dept of Health and Mental Hygiene; A Freedman, MD, M Fink, MD, New York Presbyterian Weill-Cornell Medical Center. H Artsob, PhD, Public Health Agency of Canada. MR Holbrook, PhD, Univ of Texas Medical Br at Galveston. RL DeBiasi, MD, Children's National Medical Center; PE Waterman, MD, Walter Reed Medical Center, Washington, DC. PE Rollin, MD, A MacNeil, PhD, Special Pathogens Br, Div of Viral and Rickettsial Diseases; AJ Panella, MPH, O Kosoy, MS, RS Lanciotti, PhD, GL Campbell, MD, JE Staples, MD, M Fischer, MD, Arboviral Diseases Br, Div of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases; KB Gibney, MBBS, B Knust, DVM, EIS officers, CDC.

Editorial Note

TBE is not a nationally notifiable disease in the United States. However, CDC assists state health departments and clinicians with the diagnosis of possible arboviral diseases, including TBE. Although testing for TBEV is available in certain specialized laboratories outside CDC, these five cases are the only TBE cases known to have been diagnosed in the United States during 2000–2009.

Of the four U.S. patients who had traveled to Europe or Russia, all noted having tick bites and had biphasic illnesses. Two had encephalitis and two had meningitis; none had neurologic sequelae. The fifth patient, who traveled to China, had a monophasic illness with severe encephalitis and neurologic sequelae and no history of tick bite. Despite the variable and cross-reactive TBEV and POWV IgM antibody findings, the virus-specific neutralizing antibody results support the diagnosis of TBE for all five cases.

TBEV includes three subtypes: European, Siberian, and Far Eastern. During the past decade, both the apparent geographic distribution and reported incidence of TBE have increased (*1,7,8*). TBEV is known to be endemic from western Europe through Siberia and parts of Asia including certain areas in China (*1,2*). However, no cases have been reported previously from Tianjin Province, China, and this is the first reported case of TBE in a U.S. traveler returning from China. Approximately one third of persons infected with TBEV develop clinical symptoms and about two thirds of patients recall having a tick bite (*9*). Typically, patients infected with the European subtype have a biphasic illness. The first (viremic) phase consists of a nonspecific febrile illness, often followed by a remission of symptoms (*7*). Approximately one third of these patients then develop the second, more severe (neuroinvasive) phase

[§] Chikungunya, dengue, Japanese encephalitis, snowshoe hare, St. Louis encephalitis, and West Nile viruses.

[¶] California serogroup, eastern equine encephalitis, St. Louis encephalitis, and western equine encephalitis viruses; *Borrelia burgdorferi*, Epstein-Barr virus, *Ehrlichia*, *Francisella tularensis*, and *Rickettsia*.

of illness, resulting in meningitis (approximately 50%), encephalitis (approximately 40%), or myelitis (approximately 10%) (*7,9*). The case-fatality ratio for the European and Siberian subtypes is approximately 1%–3%. The Far Eastern TBEV subtype typically causes a more severe monophasic illness with a case-fatality ratio of approximately 20% and neurologic sequelae in up to 80% of survivors (*7*).

For unvaccinated travelers to areas in which TBE is endemic, the estimated risk for TBE during TBEV-transmission season is approximately one case per 10,000 person-months (*10*). This estimate of risk varies according to the degree of unprotected outdoor exposure in forested areas. Cases generally occur during March and November (*10*). No specific antiviral treatment for TBE exists (*8*). The main preventive measure is avoiding tick bites** by applying insect repellents to clothing and exposed skin; wearing long-sleeved shirts, long pants, socks, and boots; and tucking pant cuffs into socks.†† No TBE vaccines are licensed or available in the United States, but two inactivated TBEV vaccines are licensed and available in Europe and Canada (*7*).

TBE should be suspected in a patient with evidence of meningitis or encephalitis who recently returned from a TBE-endemic country. Encephalitis or meningitis caused by TBE and other viruses cannot reliably be distinguished clinically. Health-care providers should contact their state or local health department for diagnostic assistance. TBEV testing can be performed at CDC's Special Pathogens Branch (telephone: 404-639-1115), and TBEV and other arboviral disease testing can be performed at CDC's Arboviral Diseases Branch (telephone: 970-221-6400).

** Recommendations regarding prevention of TBE in travelers are available at http://wwwn.cdc.gov/travel/yellowbook/2010/chapter-5/tick-borne-encephalitis.aspx.

†† Updated recommendations regarding protection against tick bites are available at http://wwwn.cdc.gov/travel/yellowbook/2010/chapter-2/protection-against-mosquitoes-ticks-insects-arthropods.aspx.

What is already known on this topic?

Tick-borne encephalitis (TBE) is endemic in parts of Europe and Asia, and rare cases in travelers from North America to Europe have been reported.

What is added by this report?

A search of CDC laboratory records identified five cases of TBE in U.S. travelers during 2000–2009; four of the cases experienced a biphasic illness with a nonspecific febrile illness before onset of neurologic symptoms. This report notes for the first time TBE in a U. S. traveler returning from China.

What are the implications for public health practice?

Health-care providers should be aware of the risk for TBE, should counsel travelers about measures to reduce exposure to tick bites during travel, and should consider the diagnosis of TBE in travelers returning from TBE-endemic countries with meningitis or encephalitis.

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Announcements

Pre-Decision Briefs for Public Health Action in the Aftermath of the Earthquake in Haiti

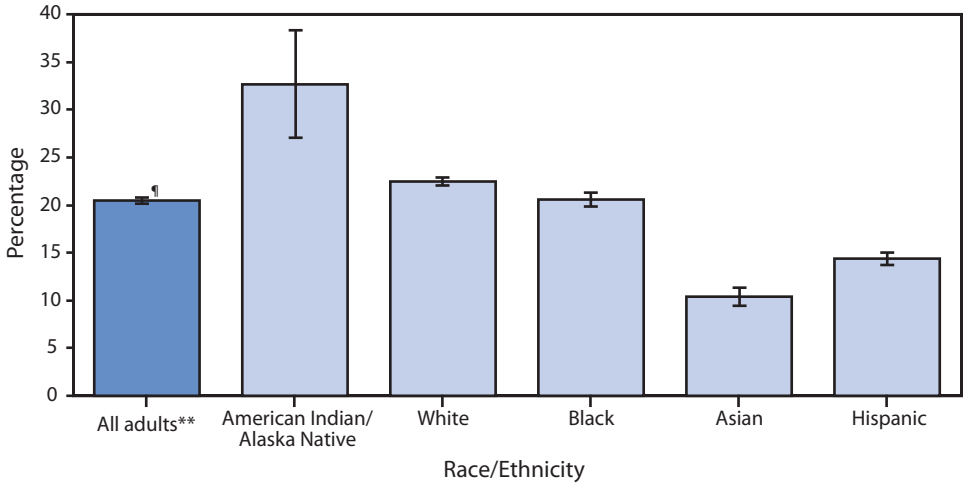
As part of CDC efforts to assist the Haitian Ministry of Public Health and Population in the aftermath of the January 12, 2010, earthquake, and to prepare for possible outbreaks or epidemics of infectious disease, subject matter experts have prepared a series of pre-decision briefs for public health action. The briefs focus on specific high-priority infectious disease threats (i.e., acute watery diarrhea, bloody diarrhea, dengue fever, diphtheria, human immunodeficiency virus/acquired immunodeficiency syndrome, leptospirosis, malaria, measles, meningococcal disease, tetanus, tuberculosis, typhoid, and paratyphoid fever). These briefs have been tailored to the current situation in Haiti and are available at http://emergency.cdc.gov/disasters/earthquakes/haiti/pre-decision_briefs.asp.

The briefs provide key recommendations with relevant background information for decision makers in the Haiti Ministry of Public Health and Population, the U.S. government, and other organizations. Each of the briefs has been reviewed by subject matter experts from outside the agency, including representatives of the Haitian Ministry of Public Health and Population and the World Health Organization.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Adults Aged ≥18 Years Who Were Current Cigarette Smokers,* by Race/Ethnicity† — National Health Interview Survey, United States, 2004–2008§



* Current smokers have smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days. Unknowns were not included in the denominators when calculating percentages.
† Race refers to persons who indicated only a single race group and are not of Hispanic ethnicity. Persons of Hispanic ethnicity might be of any race or combination of races.
§ Estimates are age adjusted using the projected 2000 U.S. population as the standard population and using four age groups: 18–24 years, 25–44 years, 45–64 years, and ≥65 years. Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. population.
¶ 95% confidence interval.
** All adults includes other races not shown separately and multiple races.

During 2004–2008, 20.5% of adults aged ≥18 years were current cigarette smokers. American Indian /Alaska Native adults (32.7%) were most likely to currently smoke cigarettes, and Asian adults (10.4%) were least likely to be current smokers.

SOURCE: Barnes PM, Adams PF, Powell-Griner E. Health characteristics of the American Indian and Alaska Native adult population, United States, 2004–2008. National health statistics reports; no. 20. Hyattsville, MD: National Center for Health Statistics; 2010. Available at http://www.cdc.gov/nchs/products/nhsr.htm.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending March 20, 2010 (11th week)*

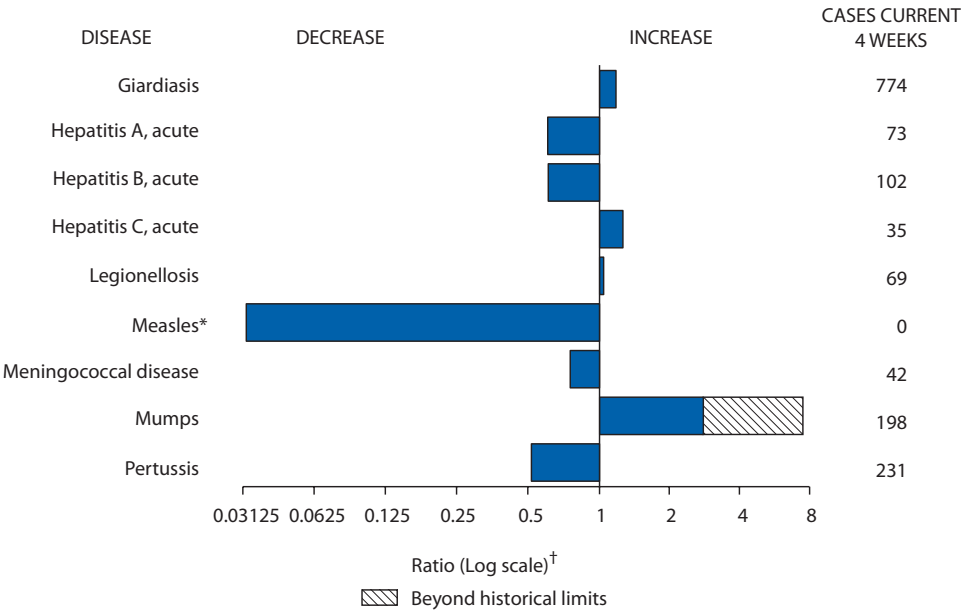
Disease	Current week	Cum 2010	5-year weekly average†	Total cases reported for previous years 2009	2008	2007	2006	2005	States reporting cases during current week (No.)
Anthrax	—	—	—	1	—	1	1	—	
Botulism, total	—	8	2	101	145	144	165	135	
foodborne	—	—	0	11	17	32	20	19	
infant	—	7	2	66	109	85	97	85	
other (wound and unspecified)	—	1	0	24	19	27	48	31	
Brucellosis	3	14	2	113	80	131	121	120	AZ (2), CA (1)
Chancroid	—	16	1	46	25	23	33	17	
Cholera	—	—	—	8	5	7	9	8	
Cyclosporiasis§	1	16	1	128	139	93	137	543	FL (1)
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup virus disease	—	—	—	56	62	55	67	80	
Eastern equine encephalitis virus disease	—	—	—	4	4	4	8	21	
Powassan virus disease	—	—	—	6	2	7	1	1	
St. Louis encephalitis virus disease	—	—	0	12	13	9	10	13	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	2	1	27	30	22	29	9	
nonserotype b	1	34	5	216	244	199	175	135	RI (1)
unknown serotype	5	54	4	231	163	180	179	217	NY (1), NYC (1), OH (1), MO (1), SC (1)
Hansen disease§	1	10	2	75	80	101	66	87	FL (1)
Hantavirus pulmonary syndrome§	—	1	0	13	18	32	40	26	
Hemolytic uremic syndrome, postdiarrheal§	2	23	3	232	330	292	288	221	NC (1), CA (1)
HIV infection, pediatric (age <13 yrs)††	—	—	3	—	—	—	—	380	
Influenza-associated pediatric mortality§,§§	1	42	4	360	90	77	43	45	MS (1)
Listeriosis	10	98	10	801	759	808	884	896	NY (2), MO (1), VA (1), NC (1), FL (1), AL (1), WA (2), CA (1)
Measles¶¶	—	3	2	65	140	43	55	66	
Meningococcal disease, invasive***:									
A, C, Y, and W-135	7	50	10	289	330	325	318	297	NC (2), OK (5)
serogroup B	—	22	5	148	188	167	193	156	
other serogroup	—	2	1	23	38	35	32	27	
unknown serogroup	9	85	17	477	616	550	651	765	NYC (1), TN (1), OK (2), CA (5)
Mumps	31	601	36	1,745	454	800	6,584	314	NY (25), PA (1), OH (2), MI (1), TX (2)
Novel influenza A virus infections†††	—	—	0	43,771	2	4	NN	NN	
Plague	—	—	0	8	3	7	17	8	
Poliomyelitis, paralytic	—	—	—	—	—	—	—	1	
Polio virus Infection, nonparalytic§	—	—	—	—	—	—	NN	NN	
Psittacosis§	—	1	0	9	8	12	21	16	
Q fever, total§,§§§	—	10	3	100	120	171	169	136	
acute	—	6	1	83	106	—	—	—	
chronic	—	4	0	17	14	—	—	—	
Rabies, human	—	—	0	4	2	1	3	2	
Rubella¶¶¶	—	1	0	3	16	12	11	11	
Rubella, congenital syndrome	—	—	0	1	—	—	1	1	
SARS-CoV§,****	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	2	21	5	148	157	132	125	129	NY (2)
Syphilis, congenital (age <1 yr)	—	20	8	327	431	430	349	329	
Tetanus	—	—	1	17	19	28	41	27	
Toxic-shock syndrome (staphylococcal)§	1	16	2	74	71	92	101	90	CA (1)
Trichinellosis	—	—	0	11	39	5	15	16	
Tularemia	—	2	0	90	123	137	95	154	
Typhoid fever	4	63	7	353	449	434	353	324	NY (1), MD (1), GA (1), CA (1)
Vancomycin-intermediate *Staphylococcus aureus*§	3	12	1	73	63	37	6	2	NY (2), MO (1)
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	—	—	2	1	3	
Vibriosis (noncholera *Vibrio* species infections)§	1	25	3	717	588	549	NN	NN	NC (1)
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 March 20, 2010 (11th 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 278 influenza-associated pediatric deaths associated with 2009 influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 268 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 133 influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.
¶¶ No measles cases were reported for the current week.
*** Data for meningococcal disease (all serogroups) are available in Table II.
††† CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. 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 March 20, 2010, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 11 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.

Notifiable Disease Data Team and 122 Cities Mortality Data Team

Patsy A. Hall-Baker
Deborah A. Adams
Willie J. Anderson
Jose Aponte
Lenee Blanton
Rosaline Dhara
Pearl C. Sharp
Michael S. Wodajo

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 20, 2010, and March 21, 2009 (11th week)*

Reporting area	*Chlamydia trachomatis* infection					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	10,590	23,056	27,380	191,473	268,515	59	117	263	864	889
New England	355	744	1,194	6,575	8,388	4	6	24	49	90
Connecticut	—	214	531	859	2,371	—	0	13	13	40
Maine†	—	48	75	488	565	2	1	4	13	4
Massachusetts	243	378	767	4,111	4,116	—	2	15	—	29
New Hampshire	—	39	60	145	473	—	1	5	5	10
Rhode Island†	81	67	244	712	621	—	0	8	5	1
Vermont†	31	23	63	260	242	2	1	9	13	6
Mid. Atlantic	2,895	3,076	4,301	32,627	33,168	14	14	38	87	97
New Jersey	253	463	630	3,363	5,615	—	0	5	—	6
New York (Upstate)	737	619	2,170	6,216	5,744	4	3	16	15	29
New York City	1,293	1,178	2,289	14,024	12,693	—	1	5	6	19
Pennsylvania	612	820	1,018	9,024	9,116	10	9	19	66	43
E.N. Central	906	3,490	4,167	19,887	44,259	16	29	55	196	229
Illinois	—	1,019	1,428	146	13,317	—	3	8	19	24
Indiana	—	389	694	685	4,746	—	5	11	14	54
Michigan	809	879	1,366	10,719	10,958	6	6	11	58	44
Ohio	97	609	986	5,543	10,789	10	7	16	63	56
Wisconsin	—	385	480	2,794	4,449	—	9	24	42	51
W.N. Central	487	1,300	1,715	10,943	15,537	2	19	61	107	84
Iowa	10	167	252	1,010	2,205	1	4	13	28	20
Kansas	35	188	573	1,836	2,297	—	2	6	11	7
Minnesota	—	266	337	1,337	3,224	—	5	34	35	13
Missouri	324	505	638	5,398	5,609	—	3	12	13	20
Nebraska†	115	98	236	1,051	1,184	1	2	9	14	12
North Dakota	3	31	92	311	368	—	0	5	—	—
South Dakota	—	39	80	—	650	—	1	10	6	12
S. Atlantic	1,959	4,504	6,207	32,362	52,179	9	17	50	176	180
Delaware	105	87	180	914	1,069	—	0	2	1	—
District of Columbia	156	120	178	988	1,621	—	0	1	—	1
Florida	565	1,410	1,671	14,039	15,993	4	7	24	67	60
Georgia	2	640	1,134	233	8,891	2	5	31	79	76
Maryland†	—	454	1,031	3,295	4,294	—	1	5	6	7
North Carolina	—	618	1,265	—	9,027	2	0	8	3	22
South Carolina†	525	528	1,421	5,894	5,171	1	1	7	7	5
Virginia†	517	620	926	6,249	5,234	—	1	7	9	8
West Virginia	89	67	137	750	879	—	0	2	4	1
E.S. Central	1,572	1,705	2,254	16,526	20,138	1	4	10	39	29
Alabama†	3	454	629	3,421	5,379	—	1	5	11	8
Kentucky	318	223	642	2,709	2,711	1	1	4	13	6
Mississippi	573	468	839	4,190	5,512	—	0	3	4	4
Tennessee†	678	569	734	6,206	6,536	—	1	5	11	11
W.S. Central	572	3,052	5,786	29,425	35,119	4	8	39	49	43
Arkansas†	261	269	416	3,054	3,467	—	1	5	9	4
Louisiana	—	496	1,055	2,922	6,905	—	0	6	7	5
Oklahoma	311	211	2,713	3,681	1,601	2	2	9	8	10
Texas†	—	2,011	3,214	19,768	23,146	2	6	29	25	24
Mountain	327	1,371	2,097	11,844	15,348	4	10	25	82	60
Arizona	—	487	755	2,803	4,985	—	0	3	3	6
Colorado	141	359	689	3,962	2,990	2	2	10	22	14
Idaho†	—	49	184	318	827	2	2	7	19	6
Montana†	23	54	79	564	739	—	1	4	12	4
Nevada†	156	169	478	1,793	2,424	—	0	2	2	—
New Mexico†	—	172	257	1,007	1,511	—	2	8	12	22
Utah	7	113	154	1,047	1,437	—	0	4	7	2
Wyoming†	—	36	69	350	435	—	0	2	5	6
Pacific	1,517	3,463	4,818	31,284	44,379	5	13	26	79	77
Alaska	—	97	128	871	1,182	—	0	1	1	1
California	1,234	2,623	3,910	24,863	34,708	5	7	17	49	40
Hawaii	—	120	147	1,065	1,294	—	0	1	—	—
Oregon	—	215	468	1,367	2,153	—	3	10	17	31
Washington	283	391	525	3,118	5,042	—	1	13	12	5
American Samoa	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	172	126	331	1,274	1,663	N	0	0	N	N
U.S. Virgin Islands	—	10	21	52	83	—	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 March 20, 2010, and March 21, 2009 (11th 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	4	11	NN	—	0	0	—	NN
New England	—	0	1	2	NN	—	0	0	—	NN
Connecticut	—	0	0	—	NN	—	0	0	—	NN
Maine§	—	0	1	2	NN	—	0	0	—	NN
Massachusetts	—	0	0	—	NN	—	0	0	—	NN
New Hampshire	—	0	0	—	NN	—	0	0	—	NN
Rhode Island§	—	0	0	—	NN	—	0	0	—	NN
Vermont§	—	0	0	—	NN	—	0	0	—	NN
Mid. Atlantic	—	0	2	4	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	2	4	NN	—	0	0	—	NN
E.N. Central	—	0	1	1	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	1	1	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	1	1	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	1	1	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	1	1	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	1	1	NN	—	0	0	—	NN
Utah	—	0	0	—	NN	—	0	0	—	NN
Wyoming§	—	0	0	—	NN	—	0	0	—	NN
Pacific	—	0	2	2	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	2	2	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

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.
† 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 March 20, 2010, and March 21, 2009 (11th week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	2	11	58	22	30	—	13	66	8	17	—	2	13	2	3
New England	—	0	4	1	1	—	2	21	4	11	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	11	—	—	—	0	1	—	—
Maine§	—	0	1	1	—	—	0	3	2	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	3	—	1	—	0	1	—	—
Rhode Island§	—	0	4	—	1	—	0	20	2	10	—	0	1	—	—
Vermont§	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	2	17	3	4	—	3	22	1	—	—	0	2	—	—
New Jersey	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	1	17	2	2	—	3	21	1	—	—	0	1	—	—
New York City	—	0	3	—	1	—	0	1	—	—	—	0	2	—	—
Pennsylvania	—	0	1	1	1	—	0	0	—	—	—	0	0	—	—
E.N. Central	—	1	8	—	1	—	3	22	1	2	—	1	9	—	1
Illinois	—	0	4	—	—	—	0	1	—	—	—	0	1	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	8	—	—
Michigan	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Ohio	—	0	2	—	1	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	0	5	—	—	—	3	22	1	2	—	0	3	—	1
W.N. Central	—	2	23	1	1	—	0	41	—	—	—	0	5	1	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	3	—	1	—	0	41	—	—	—	0	5	—	—
Missouri	—	1	22	1	—	—	0	1	—	—	—	0	3	1	—
Nebraska§	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	2	4	19	16	20	—	0	2	2	3	—	0	2	1	—
Delaware	—	0	2	1	1	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	1	1	2	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	2	3	3	—	0	1	1	1	—	0	0	—	—
Maryland§	—	1	4	4	4	—	0	1	—	1	—	0	1	—	—
North Carolina	2	0	4	7	9	—	0	1	1	1	—	0	0	—	—
South Carolina§	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
Virginia§	—	1	13	—	—	—	0	1	—	—	—	0	2	1	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	1	11	—	2	—	0	1	—	1	—	0	5	—	2
Alabama§	—	0	3	—	—	—	0	1	—	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Tennessee§	—	1	10	—	2	—	0	1	—	1	—	0	5	—	2
W.S. Central	—	0	9	1	—	—	0	1	—	—	—	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	2	1	—	—	0	1	—	—	—	0	0	—	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	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	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2009 and 2010 are provisional.
† Cumulative total *E. ewingii* cases reported 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 March 20, 2010, and March 21, 2009 (11th 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	234	329	596	2,827	3,218	2,357	5,476	6,891	43,449	65,221	22	54	141	531	743
New England	4	29	64	147	271	29	92	174	793	1,029	1	3	19	9	37
Connecticut	—	6	15	51	55	—	45	106	245	470	—	0	13	—	10
Maine§	3	4	13	36	40	—	3	11	46	27	—	0	2	1	3
Massachusetts	—	12	36	—	109	22	39	81	411	444	—	1	8	—	19
New Hampshire	—	3	12	22	24	—	2	6	27	21	—	0	2	4	4
Rhode Island§	—	1	6	10	11	6	6	19	55	57	1	0	2	3	—
Vermont§	1	4	14	28	32	1	1	5	9	10	—	0	1	1	1
Mid. Atlantic	29	61	101	456	614	579	616	871	6,711	6,651	3	12	26	136	118
New Jersey	—	0	12	—	94	66	94	134	878	1,049	—	2	7	12	17
New York (Upstate)	20	25	81	210	214	120	100	353	939	1,116	2	3	18	42	31
New York City	5	15	26	120	172	244	219	417	2,727	2,378	1	2	11	21	17
Pennsylvania	4	16	36	126	134	149	196	275	2,167	2,108	—	4	10	61	53
E.N. Central	21	45	75	412	495	190	1,072	1,357	5,528	13,698	2	10	29	69	179
Illinois	—	10	21	71	106	—	329	417	48	4,088	—	3	11	16	36
Indiana	N	0	7	N	N	—	117	209	227	1,620	—	1	5	12	17
Michigan	6	13	25	118	129	165	256	503	3,077	3,544	1	0	4	4	5
Ohio	15	16	28	174	160	25	203	361	1,603	3,266	1	2	6	24	29
Wisconsin	—	8	17	49	100	—	90	146	573	1,180	—	2	21	13	92
W.N. Central	16	24	155	206	247	120	272	361	2,208	3,357	2	2	21	26	35
Iowa	3	5	15	53	59	1	30	46	132	353	—	0	0	—	—
Kansas	—	3	14	39	28	5	41	85	319	613	—	0	2	4	6
Minnesota	—	0	135	—	1	—	41	64	203	512	—	0	17	3	7
Missouri	5	9	27	63	104	80	123	172	1,312	1,462	2	1	6	15	15
Nebraska§	8	3	9	45	33	34	22	54	222	318	—	0	3	2	6
North Dakota	—	0	8	—	2	—	2	14	20	16	—	0	2	2	1
South Dakota	—	0	5	6	20	—	2	14	—	83	—	0	0	—	—
S. Atlantic	86	72	107	758	752	564	1,339	1,790	9,072	15,486	10	11	31	122	193
Delaware	—	1	3	9	4	27	18	37	207	196	—	0	1	2	1
District of Columbia	—	0	2	4	13	48	46	88	397	659	—	0	1	—	—
Florida	42	36	59	357	391	159	408	476	3,855	4,535	3	4	10	40	63
Georgia	27	11	67	204	181	—	210	415	87	2,998	—	3	9	40	39
Maryland§	5	5	12	58	58	—	126	241	933	1,164	—	1	6	8	24
North Carolina	N	0	0	N	N	—	216	377	—	3,009	3	0	17	3	20
South Carolina§	1	2	8	16	18	168	162	412	1,747	1,567	3	1	7	25	13
Virginia§	11	8	36	101	79	159	159	272	1,756	1,228	—	0	3	—	22
West Virginia	—	1	5	9	8	3	9	18	90	130	1	0	4	4	11
E.S. Central	2	7	22	49	80	362	475	649	4,474	5,918	—	3	12	32	43
Alabama§	2	4	13	24	40	1	131	187	969	1,629	—	0	4	4	10
Kentucky	N	0	0	N	N	53	66	156	753	762	—	0	5	4	5
Mississippi	N	0	0	N	N	174	140	249	1,189	1,723	—	0	2	3	3
Tennessee§	—	4	18	25	40	134	153	206	1,563	1,804	—	2	10	21	25
W.S. Central	5	7	19	64	73	178	897	1,552	7,776	10,138	3	2	10	32	31
Arkansas§	2	3	9	19	23	88	84	139	857	1,019	1	0	3	4	6
Louisiana	—	1	7	23	37	—	162	343	910	2,259	—	0	2	6	6
Oklahoma	3	3	10	22	13	90	64	613	960	562	2	1	7	20	18
Texas§	N	0	0	N	N	—	562	951	5,049	6,298	—	0	2	2	1
Mountain	32	26	61	305	248	31	163	239	1,354	1,935	1	5	15	89	70
Arizona	3	4	11	33	28	—	57	93	349	575	—	1	9	35	30
Colorado	22	9	26	151	78	6	40	99	464	606	1	1	6	23	17
Idaho§	2	3	10	40	25	—	1	8	6	24	—	0	1	2	1
Montana§	2	2	11	21	22	1	1	6	25	18	—	0	1	—	1
Nevada§	3	1	10	12	6	23	27	94	328	441	—	0	2	4	4
New Mexico§	—	1	8	7	22	—	21	36	134	187	—	1	5	12	8
Utah	—	5	13	30	55	1	5	13	41	74	—	1	4	8	9
Wyoming§	—	1	5	11	12	—	1	7	7	10	—	0	2	5	—
Pacific	39	51	156	430	438	304	531	627	5,533	7,009	—	2	9	16	37
Alaska	—	2	7	9	15	—	19	32	207	190	—	0	3	6	3
California	29	33	60	303	318	268	439	548	4,704	5,828	—	0	4	—	10
Hawaii	—	0	2	—	6	—	12	24	129	130	—	0	5	—	12
Oregon	—	8	18	60	64	—	19	43	106	275	—	1	4	8	11
Washington	10	7	103	58	35	36	39	64	387	586	—	0	4	2	1
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	1	10	2	31	10	4	24	52	39	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	2	7	8	23	N	0	0	N	N

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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.
† 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 March 20, 2010, and March 21, 2009 (11th 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	25	36	58	256	401	24	58	101	465	794	10	17	40	116	170
New England	—	2	5	12	23	—	1	4	6	10	—	1	5	2	10
Connecticut	—	0	2	7	6	—	0	3	3	3	—	1	4	2	7
Maine†	—	0	1	1	1	—	0	2	3	2	—	0	1	—	—
Massachusetts	—	1	4	—	13	—	0	2	—	4	—	0	1	—	2
New Hampshire	—	0	1	—	1	—	0	1	—	1	—	0	0	—	—
Rhode Island†	—	0	4	4	2	—	0	0	—	—	—	0	0	—	—
Vermont†	—	0	1	—	—	—	0	0	—	—	—	0	0	—	1
Mid. Atlantic	2	4	10	32	56	3	5	16	39	85	—	2	7	12	17
New Jersey	—	0	5	2	16	—	1	6	4	22	—	0	1	—	1
New York (Upstate)	1	1	3	9	7	—	1	6	7	15	—	1	4	10	5
New York City	1	2	5	13	17	1	1	5	15	18	—	0	0	—	—
Pennsylvania	—	1	6	8	16	2	1	6	13	30	—	0	4	2	11
E.N. Central	4	4	19	29	68	2	7	15	63	120	1	4	12	26	35
Illinois	—	2	13	1	23	—	1	7	11	23	—	0	1	—	3
Indiana	—	0	4	2	6	—	1	5	8	19	—	0	4	4	1
Michigan	2	1	4	11	18	2	2	6	22	31	1	3	10	21	19
Ohio	2	0	4	10	14	—	1	4	22	37	—	0	3	1	11
Wisconsin	—	0	2	5	7	—	0	4	—	10	—	0	2	—	1
W.N. Central	1	2	7	8	17	1	3	10	29	41	1	0	7	5	6
Iowa	—	0	3	4	—	—	0	3	4	9	—	0	4	—	1
Kansas	—	0	2	2	1	—	0	2	1	1	—	0	0	—	1
Minnesota	—	0	4	—	5	—	0	9	—	5	—	0	6	—	—
Missouri	1	0	3	2	6	1	1	5	17	19	1	0	2	4	3
Nebraska†	—	0	3	—	5	—	0	2	7	6	—	0	1	—	1
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	1	—	1	—	0	1	1	—
S. Atlantic	5	8	14	61	88	7	15	32	139	249	4	3	12	24	38
Delaware	—	0	1	2	—	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	27	47	1	5	13	58	72	1	1	4	11	4
Georgia	—	1	4	8	12	—	3	7	35	43	—	0	2	1	9
Maryland†	—	0	3	2	10	2	1	6	15	32	—	1	3	5	8
North Carolina	1	0	7	3	9	—	0	12	2	76	3	0	10	3	6
South Carolina†	—	1	4	11	6	1	1	4	9	4	—	0	1	—	—
Virginia†	2	1	3	7	4	3	1	13	14	13	—	0	2	3	4
West Virginia	—	0	2	1	—	—	0	19	6	9	—	0	2	1	7
E.S. Central	2	1	3	9	9	3	7	13	65	85	2	2	5	20	27
Alabama†	—	0	2	2	1	—	1	5	17	25	—	0	2	1	3
Kentucky	1	0	2	4	1	2	2	6	24	18	1	1	5	17	13
Mississippi	—	0	1	—	4	—	1	2	3	5	—	0	0	—	—
Tennessee†	1	0	2	3	3	1	3	6	21	37	1	0	3	2	11
W.S. Central	5	3	18	32	37	2	9	22	48	105	—	1	6	8	11
Arkansas†	—	0	2	—	4	—	1	4	1	10	—	0	1	—	1
Louisiana	—	0	1	1	2	—	0	4	10	12	—	0	1	—	2
Oklahoma	—	0	3	1	1	—	2	8	8	19	—	0	4	2	1
Texas†	5	3	18	30	30	2	6	16	29	64	—	0	4	6	7
Mountain	2	2	9	31	27	1	2	5	17	37	—	1	4	5	13
Arizona	2	1	5	20	12	—	0	3	5	17	—	0	0	—	—
Colorado	—	1	5	6	7	—	0	2	1	7	—	0	3	—	8
Idaho†	—	0	1	2	—	—	0	2	1	1	—	0	2	3	—
Montana†	—	0	1	—	2	—	0	1	—	—	—	0	0	—	—
Nevada†	—	0	2	2	—	1	0	3	8	5	—	0	1	—	—
New Mexico†	—	0	1	1	3	—	0	1	1	4	—	0	1	—	5
Utah	—	0	2	—	3	—	0	1	1	3	—	0	2	2	—
Wyoming†	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
Pacific	4	5	16	42	76	5	6	25	59	62	2	1	6	14	13
Alaska	—	0	1	—	2	—	0	1	1	—	—	0	2	—	—
California	4	4	15	38	63	5	4	17	49	52	1	1	4	5	8
Hawaii	—	0	2	—	2	—	0	1	—	1	—	0	0	—	—
Oregon	—	0	2	2	5	—	1	4	5	5	—	0	3	5	2
Washington	—	1	4	2	4	—	0	8	4	4	1	0	6	4	3
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	2	9	—	0	5	3	3	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 20, 2010, and March 21, 2009 (11th 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	15	56	164	327	360	63	385	2,053	1,225	1,758	13	22	73	210	197
New England	—	2	18	8	13	15	73	498	57	290	—	1	4	1	9
Connecticut	—	0	5	3	5	—	0	0	—	—	—	0	3	—	—
Maine†	—	0	3	—	—	15	11	76	41	21	—	0	1	—	—
Massachusetts	—	1	9	—	7	—	30	335	—	170	—	0	3	—	8
New Hampshire	—	0	2	1	—	—	19	93	3	76	—	0	1	1	—
Rhode Island†	—	0	4	3	—	—	1	28	4	2	—	0	1	—	—
Vermont†	—	0	1	1	1	—	5	42	9	21	—	0	1	—	1
Mid. Atlantic	4	16	69	68	96	17	205	1,138	704	864	2	7	13	55	36
New Jersey	—	1	13	—	14	—	41	389	89	306	—	0	1	—	—
New York (Upstate)	2	5	29	25	32	14	52	414	148	211	1	1	4	16	10
New York City	—	3	20	14	8	—	3	31	—	21	—	4	11	29	21
Pennsylvania	2	6	25	29	42	3	107	647	467	326	1	1	4	10	5
E.N. Central	1	10	39	55	78	—	23	223	53	97	1	3	11	17	26
Illinois	—	1	10	1	9	—	1	11	—	2	—	1	5	5	10
Indiana	—	1	5	4	9	—	1	7	6	4	—	0	4	1	5
Michigan	—	2	13	10	12	—	1	9	2	1	—	0	3	3	4
Ohio	1	5	17	38	37	—	1	5	4	2	1	0	6	8	7
Wisconsin	—	1	5	2	11	—	20	205	41	88	—	0	1	—	—
W.N. Central	—	2	12	9	7	—	5	196	1	15	—	1	8	14	9
Iowa	—	0	2	—	3	—	0	14	—	6	—	0	1	2	4
Kansas	—	0	1	1	2	—	0	2	—	4	—	0	1	3	1
Minnesota	—	0	11	3	—	—	0	196	—	4	—	0	8	3	1
Missouri	—	1	5	3	1	—	0	1	—	—	—	0	1	2	3
Nebraska†	—	0	2	2	—	—	0	3	1	—	—	0	2	4	—
North Dakota	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	0	—	1	—	0	1	—	—
S. Atlantic	3	11	22	72	77	26	68	253	359	460	7	6	16	60	79
Delaware	—	0	5	3	—	2	13	65	100	85	—	0	1	1	1
District of Columbia	—	0	2	—	1	—	0	5	1	2	—	0	1	1	4
Florida	1	4	10	30	30	—	2	11	11	6	6	2	7	32	20
Georgia	—	1	4	8	15	—	0	5	1	12	—	1	5	2	14
Maryland†	—	3	12	16	13	7	29	134	153	272	—	1	13	11	23
North Carolina	—	0	5	—	12	1	0	14	9	8	1	0	3	2	11
South Carolina†	—	0	2	1	1	—	1	3	4	3	—	0	1	1	1
Virginia†	2	1	6	13	5	16	11	79	70	63	—	1	5	10	5
West Virginia	—	0	2	1	—	—	0	33	10	9	—	0	2	—	—
E.S. Central	2	2	12	20	18	—	1	4	6	3	—	0	3	3	8
Alabama†	—	0	2	3	3	—	0	1	—	—	—	0	3	1	1
Kentucky	—	1	3	5	7	—	0	1	1	—	—	0	3	2	—
Mississippi	—	0	2	2	—	—	0	0	—	—	—	0	1	—	—
Tennessee†	2	1	9	10	8	—	1	4	5	3	—	0	1	—	7
W.S. Central	—	2	7	12	11	—	4	29	1	4	1	1	29	31	5
Arkansas†	—	0	1	1	—	—	0	0	—	—	—	0	1	1	—
Louisiana	—	0	2	1	1	—	0	0	—	—	—	0	1	—	1
Oklahoma	—	0	2	—	1	—	0	0	—	—	1	0	1	2	—
Texas†	—	1	7	10	9	—	4	29	1	4	—	1	29	28	4
Mountain	—	3	8	19	25	—	1	4	4	3	—	0	6	7	3
Arizona	—	1	5	9	8	—	0	1	—	—	—	0	2	2	—
Colorado	—	0	4	2	2	—	0	1	1	—	—	0	3	—	1
Idaho†	—	0	2	—	1	—	0	3	1	1	—	0	1	—	—
Montana†	—	0	1	1	4	—	0	1	—	—	—	0	3	—	—
Nevada†	—	0	2	5	4	—	0	1	1	1	—	0	1	2	—
New Mexico†	—	0	2	1	—	—	0	1	—	—	—	0	0	—	—
Utah	—	0	4	1	6	—	0	1	1	1	—	0	1	3	2
Wyoming†	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Pacific	5	3	19	64	35	5	4	10	40	22	2	2	17	22	22
Alaska	—	0	0	—	1	—	0	1	1	2	—	0	1	—	1
California	4	3	19	62	28	5	2	9	31	17	1	2	12	16	15
Hawaii	—	0	0	—	1	N	0	0	N	N	—	0	0	—	1
Oregon	—	0	2	—	3	—	1	4	8	3	—	0	2	—	2
Washington	1	0	4	2	2	—	0	3	—	—	1	0	4	6	3
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	—	N	0	0	N	N	—	0	1	1	1
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 20, 2010, and March 21, 2009 (11th week)*

Reporting area	Meningococcal disease, invasive† All groups					Pertussis					Rabies, animal				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	16	16	33	159	241	46	272	1,475	1,491	2,542	28	62	139	383	724
New England	—	0	2	—	11	—	11	24	10	138	3	6	24	48	56
Connecticut	—	0	2	—	1	—	1	4	—	7	—	1	22	19	21
Maine§	—	0	1	—	1	—	1	10	2	25	1	1	4	14	9
Massachusetts	—	0	1	—	7	—	6	16	—	84	—	0	0	—	—
New Hampshire	—	0	1	—	1	—	1	7	2	12	—	0	3	3	6
Rhode Island§	—	0	1	—	1	—	0	8	4	4	—	0	5	1	7
Vermont§	—	0	1	—	—	—	0	1	2	6	2	1	5	11	13
Mid. Atlantic	1	2	6	12	21	8	21	39	113	214	14	10	23	106	113
New Jersey	—	0	2	—	2	—	2	8	8	56	—	0	0	—	—
New York (Upstate)	—	0	3	2	3	5	5	29	46	31	14	8	22	83	57
New York City	1	0	2	5	4	—	0	11	—	12	—	0	8	23	—
Pennsylvania	—	1	3	5	12	3	9	29	59	115	—	0	16	—	56
E.N. Central	—	2	9	23	53	19	54	100	433	620	—	2	19	6	7
Illinois	—	1	4	5	11	—	11	29	46	150	—	1	9	1	1
Indiana	—	0	3	6	12	—	6	15	19	86	—	0	7	—	1
Michigan	—	0	5	2	7	1	15	41	138	133	—	1	6	3	5
Ohio	—	1	3	7	13	18	19	49	225	226	—	0	5	2	—
Wisconsin	—	0	1	3	10	—	1	12	5	25	N	0	0	N	N
W.N. Central	—	1	6	9	20	—	31	572	122	427	1	7	18	29	51
Iowa	—	0	2	1	1	—	3	10	24	38	—	0	3	—	6
Kansas	—	0	2	1	5	—	4	12	26	39	—	1	6	12	22
Minnesota	—	0	2	1	4	—	0	567	—	—	—	0	11	8	5
Missouri	—	0	3	5	8	—	13	47	57	294	—	1	5	1	3
Nebraska§	—	0	1	1	2	—	2	9	12	49	1	1	6	8	9
North Dakota	—	0	1	—	—	—	0	12	—	1	—	0	7	—	2
South Dakota	—	0	1	—	—	—	0	6	3	6	—	0	4	—	4
S. Atlantic	2	3	10	36	41	11	28	66	162	355	7	22	103	159	402
Delaware	—	0	1	1	—	—	0	2	—	4	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	1	1	3	—	0	0	—	—
Florida	—	1	4	16	18	3	7	29	42	82	—	0	8	29	156
Georgia	—	0	2	4	6	1	4	11	35	63	—	0	72	—	88
Maryland§	—	0	1	1	1	—	3	8	28	22	6	7	15	67	57
North Carolina	2	0	10	2	9	—	0	21	—	117	N	0	4	N	N
South Carolina§	—	0	1	3	3	5	4	18	36	32	—	0	0	—	—
Virginia§	—	0	2	8	4	—	3	15	16	29	—	10	26	50	89
West Virginia	—	0	2	1	—	2	0	5	4	3	1	2	6	13	12
E.S. Central	1	0	4	6	7	2	14	30	140	144	—	1	6	—	34
Alabama§	—	0	2	1	1	1	5	19	39	24	—	0	0	—	—
Kentucky	—	0	1	2	1	—	3	15	48	71	—	0	2	—	14
Mississippi	—	0	1	1	1	—	1	6	10	18	—	0	1	—	—
Tennessee§	1	0	2	2	4	1	4	9	43	31	—	0	4	—	20
W.S. Central	7	1	8	26	22	—	68	690	323	253	1	0	13	8	9
Arkansas§	—	0	2	2	3	—	6	28	11	27	1	0	10	6	6
Louisiana	—	0	3	5	8	—	1	8	6	21	—	0	0	—	—
Oklahoma	7	0	2	11	2	—	0	32	1	7	—	0	13	2	3
Texas§	—	1	7	8	9	—	58	662	305	198	—	0	1	—	—
Mountain	—	1	4	12	19	1	16	39	122	238	—	1	6	6	22
Arizona	—	0	2	4	3	—	5	16	27	36	N	0	0	N	N
Colorado	—	0	3	3	6	—	4	10	19	63	—	0	0	—	—
Idaho§	—	0	1	1	4	1	1	19	39	19	—	0	1	1	—
Montana§	—	0	2	1	2	—	1	6	5	5	—	0	4	—	9
Nevada§	—	0	1	1	1	—	0	3	1	2	—	0	1	—	—
New Mexico§	—	0	1	2	1	—	1	6	23	25	—	0	2	2	7
Utah	—	0	1	—	1	—	2	11	7	86	—	0	2	—	—
Wyoming§	—	0	2	—	1	—	0	5	1	2	—	0	4	3	6
Pacific	5	3	13	35	47	5	24	44	66	153	2	4	13	21	30
Alaska	—	0	2	—	2	—	0	4	5	20	—	0	2	7	10
California	5	2	10	25	25	—	11	25	8	60	2	4	11	13	20
Hawaii	—	0	1	—	1	—	0	3	—	6	—	0	0	—	—
Oregon	—	0	4	7	13	—	4	12	30	44	—	0	3	1	—
Washington	—	0	6	3	6	5	5	36	23	23	—	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	—	—	—	1	3	13	11
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 March 20, 2010, and March 21, 2009 (11th 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	259	910	1,390	4,511	6,871	30	84	172	313	615	142	281	503	2,059	3,165
New England	3	31	91	112	668	—	3	30	9	86	—	4	27	16	82
Connecticut	—	0	55	55	429	—	0	5	5	67	—	0	9	9	43
Maine§	1	2	7	14	20	—	0	3	—	—	—	0	2	2	2
Massachusetts	—	20	47	—	161	—	2	7	—	10	—	3	27	—	31
New Hampshire	1	3	44	21	29	—	1	3	4	9	—	0	4	3	1
Rhode Island§	1	2	12	17	19	—	0	26	—	—	—	0	7	1	4
Vermont§	—	1	5	5	10	—	0	3	—	—	—	0	1	1	1
Mid. Atlantic	27	98	208	553	746	3	7	22	34	57	16	47	86	335	619
New Jersey	—	17	47	51	134	—	1	5	1	15	—	6	27	27	209
New York (Upstate)	13	23	78	139	166	3	3	11	14	18	3	4	19	35	32
New York City	—	23	47	153	193	—	1	5	7	12	—	7	15	53	105
Pennsylvania	14	29	66	210	253	—	2	8	12	12	13	25	63	220	273
E.N. Central	17	91	159	469	961	3	13	36	39	117	2	37	75	231	719
Illinois	—	24	52	120	273	—	3	6	5	46	—	10	52	129	147
Indiana	—	9	24	35	82	—	1	9	2	13	—	1	5	1	22
Michigan	2	17	34	108	170	1	3	8	17	12	1	4	10	32	78
Ohio	15	24	52	172	254	2	2	11	9	18	1	12	46	57	382
Wisconsin	—	11	30	34	182	—	4	21	6	28	—	5	26	12	90
W.N. Central	16	43	86	286	512	2	12	39	49	53	48	29	86	524	99
Iowa	1	6	16	37	68	—	2	14	6	13	—	0	5	10	27
Kansas	—	6	22	46	58	—	1	5	5	3	—	3	13	32	36
Minnesota	—	11	30	70	102	—	2	19	14	16	—	1	7	8	12
Missouri	13	12	30	94	77	—	2	10	17	14	48	23	72	470	16
Nebraska§	2	5	12	30	135	2	1	6	6	7	—	0	3	4	7
North Dakota	—	0	21	2	5	—	0	3	—	—	—	0	2	—	—
South Dakota	—	1	9	7	67	—	0	12	1	—	—	0	1	—	1
S. Atlantic	94	280	453	1,559	1,675	5	12	22	67	111	29	41	79	309	485
Delaware	1	2	9	12	5	—	0	2	—	2	1	3	10	24	5
District of Columbia	—	0	3	6	12	—	0	0	—	1	1	0	1	2	5
Florida	44	133	278	746	670	3	3	7	27	32	11	10	18	117	99
Georgia	6	45	98	245	273	—	1	4	8	10	13	12	29	105	111
Maryland§	7	15	32	109	131	—	2	6	9	17	1	5	17	18	89
North Carolina	16	14	89	205	300	1	0	11	3	36	2	3	27	12	87
South Carolina§	5	16	67	87	125	—	0	3	1	3	—	1	6	14	40
Virginia§	11	20	68	124	133	1	3	7	19	9	—	3	15	17	44
West Virginia	4	3	23	25	26	—	0	5	—	1	—	0	2	—	5
E.S. Central	9	52	113	239	392	3	4	10	17	29	1	12	46	69	178
Alabama§	4	14	39	76	128	2	1	4	7	5	—	2	9	7	48
Kentucky	1	7	18	51	75	—	1	4	1	8	—	3	25	34	21
Mississippi	2	14	45	33	89	—	0	1	3	2	—	1	4	2	7
Tennessee§	2	14	33	79	100	1	1	8	6	14	1	5	16	26	102
W.S. Central	8	104	444	233	525	2	5	39	16	31	31	53	157	308	524
Arkansas§	5	10	25	31	73	1	1	4	5	5	—	5	15	10	46
Louisiana	—	8	43	68	76	—	0	1	3	—	—	1	7	13	51
Oklahoma	3	11	30	45	59	—	0	6	1	4	6	6	19	48	31
Texas§	—	58	425	89	317	1	4	39	7	22	25	37	139	237	396
Mountain	9	51	120	375	467	1	7	28	36	75	1	18	43	104	235
Arizona	—	20	57	123	176	—	1	5	8	5	—	13	37	61	160
Colorado	8	11	33	112	101	1	2	11	6	48	1	2	6	22	23
Idaho§	—	3	10	24	30	—	1	7	7	6	—	0	1	3	—
Montana§	—	2	7	21	22	—	0	7	3	1	—	0	4	2	2
Nevada§	1	3	11	25	26	—	0	3	1	1	—	1	7	3	22
New Mexico§	—	5	27	36	41	—	1	3	6	8	—	1	8	10	23
Utah	—	5	14	22	61	—	1	11	5	5	—	0	4	3	5
Wyoming§	—	1	9	12	10	—	0	2	—	1	—	0	1	—	—
Pacific	76	123	345	685	925	11	9	73	46	56	14	22	61	163	224
Alaska	—	1	7	13	10	—	0	0	—	—	—	0	2	—	1
California	60	93	200	557	715	3	4	23	29	45	14	17	40	148	186
Hawaii	—	5	61	—	52	—	0	2	—	2	—	0	4	—	6
Oregon	—	8	19	44	76	—	1	11	4	2	—	1	4	6	10
Washington	16	12	133	71	72	8	2	48	13	7	—	2	19	9	21
American Samoa	—	1	1	1	—	—	0	0	—	—	—	0	0	—	3
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	3	5	19	46	111	—	0	0	—	—	—	0	2	—	2
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.
† 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 March 20, 2010, and March 21, 2009 (11th week)*

Reporting area	Spotted Fever Rickettsiosis (including RMSF)†									
	Confirmed					Probable				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	1	2	9	15	7	1	17	73	52	146
New England	—	0	1	—	—	—	0	2	—	1
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	0	—	—	—	0	2	—	1
Massachusetts	—	0	1	—	—	—	0	1	—	—
New Hampshire	—	0	0	—	—	—	0	1	—	—
Rhode Island§	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	1	—	—	—	0	0	—	—
Mid. Atlantic	—	0	3	2	—	—	1	6	1	5
New Jersey	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	1	—	—	—	0	3	—	—
New York City	—	0	1	—	—	—	0	4	1	4
Pennsylvania	—	0	2	2	—	—	0	2	—	1
E.N. Central	—	0	2	—	1	—	1	7	—	7
Illinois	—	0	1	—	—	—	0	6	—	4
Indiana	—	0	2	—	—	—	0	2	—	—
Michigan	—	0	1	—	1	—	0	1	—	—
Ohio	—	0	0	—	—	—	0	4	—	3
Wisconsin	—	0	0	—	—	—	0	1	—	—
W.N. Central	—	0	3	—	1	—	3	27	4	2
Iowa	—	0	1	—	—	—	0	1	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	1	—	—
Missouri	—	0	1	—	—	—	3	26	4	2
Nebraska§	—	0	2	—	1	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—
S. Atlantic	1	1	8	8	4	1	5	25	29	115
Delaware	—	0	1	1	—	—	0	3	2	1
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	1	0	1	1	—	—	0	2	—	1
Georgia	—	1	7	5	4	—	0	0	—	—
Maryland§	—	0	1	—	—	—	0	3	—	8
North Carolina	—	0	1	1	—	1	2	24	23	91
South Carolina§	—	0	1	—	—	—	0	4	2	5
Virginia§	—	0	1	—	—	—	0	5	2	8
West Virginia	—	0	0	—	—	—	0	1	—	1
E.S. Central	—	0	2	1	1	—	4	15	2	10
Alabama§	—	0	1	—	—	—	1	7	1	4
Kentucky	—	0	1	1	—	—	0	0	—	—
Mississippi	—	0	0	—	1	—	0	1	—	—
Tennessee§	—	0	2	—	—	—	2	14	1	6
W.S. Central	—	0	3	1	—	—	1	25	4	4
Arkansas§	—	0	0	—	—	—	0	14	—	1
Louisiana	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	3	—	—	—	0	24	—	—
Texas§	—	0	1	1	—	—	0	11	4	3
Mountain	—	0	2	3	—	—	0	6	12	2
Arizona	—	0	2	3	—	—	0	6	12	—
Colorado	—	0	1	—	—	—	0	0	—	—
Idaho§	—	0	0	—	—	—	0	1	—	—
Montana§	—	0	1	—	—	—	0	2	—	—
Nevada§	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	0	0	—	—	—	0	0	—	1
Utah	—	0	0	—	—	—	0	0	—	1
Wyoming§	—	0	1	—	—	—	0	1	—	—
Pacific	—	0	1	—	—	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	—	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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* 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 March 20, 2010, and March 21, 2009 (11th 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	174	55	362	3,158	939	28	46	120	498	632	81	259	344	1,834	3,053
New England	6	1	50	98	18	—	1	23	8	16	—	6	21	73	77
Connecticut	—	0	50	—	—	—	0	22	—	—	—	1	9	11	17
Maine§	2	0	4	23	3	—	0	2	3	—	—	0	2	5	1
Massachusetts	—	0	1	—	1	—	0	5	—	12	—	5	12	46	48
New Hampshire	1	0	6	34	5	—	0	2	3	2	—	0	1	2	7
Rhode Island§	—	0	5	15	5	—	0	1	2	—	—	0	5	7	4
Vermont§	3	0	6	26	4	—	0	1	—	2	—	0	2	2	—
Mid. Atlantic	9	4	25	169	43	2	5	43	58	53	27	33	50	339	410
New Jersey	—	0	4	15	—	—	1	4	9	12	2	3	13	40	58
New York (Upstate)	3	2	18	47	17	2	2	19	34	30	3	2	11	16	21
New York City	—	0	1	—	2	—	0	23	—	6	16	20	39	214	259
Pennsylvania	6	2	19	107	24	—	0	5	15	5	6	7	14	69	72
E.N. Central	22	13	64	452	190	5	7	13	73	115	1	25	52	111	282
Illinois	—	0	0	—	—	—	0	4	—	14	—	11	36	7	149
Indiana	—	5	17	100	68	—	1	4	13	20	—	2	9	7	32
Michigan	10	0	26	148	9	1	1	5	24	20	—	4	13	46	43
Ohio	12	8	18	113	113	4	2	7	27	45	1	7	13	51	43
Wisconsin	—	0	20	91	—	—	1	3	9	16	—	0	3	—	15
W.N. Central	3	3	40	196	45	1	3	13	41	39	—	5	12	31	71
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	—	8
Kansas	—	1	5	19	23	—	0	2	4	8	—	0	3	1	3
Minnesota	—	0	35	97	—	—	0	10	17	10	—	1	3	9	18
Missouri	1	1	8	34	19	1	0	5	15	16	—	3	8	20	40
Nebraska§	2	0	7	42	—	—	0	2	4	1	—	0	2	1	1
North Dakota	—	0	3	—	3	—	0	3	—	—	—	0	1	—	1
South Dakota	—	0	2	4	—	—	0	2	1	4	—	0	1	—	—
S. Atlantic	83	26	118	951	475	13	10	23	138	182	25	64	161	462	613
Delaware	—	0	3	7	5	—	0	2	—	—	—	0	3	1	7
District of Columbia	1	0	3	10	—	—	0	1	3	—	1	3	8	21	42
Florida	60	14	91	515	291	7	3	19	68	68	5	19	32	159	246
Georgia	8	8	17	134	150	1	3	9	35	54	—	14	112	33	82
Maryland§	9	0	25	120	2	5	1	7	15	21	—	6	12	41	58
North Carolina	—	0	0	—	—	—	0	0	—	—	15	10	31	121	104
South Carolina§	4	0	24	132	—	—	1	4	14	17	—	2	6	29	15
Virginia§	—	0	0	—	—	—	0	4	—	18	4	6	15	57	57
West Virginia	1	1	19	33	27	—	0	3	3	4	—	0	2	—	2
E.S. Central	9	4	49	311	95	1	2	9	32	41	11	20	38	153	258
Alabama§	—	0	0	—	—	—	0	0	—	—	—	6	18	30	106
Kentucky	—	1	5	14	28	—	0	2	2	4	2	1	13	22	12
Mississippi	1	0	5	23	3	—	0	2	5	6	6	4	17	30	37
Tennessee§	8	2	43	274	64	1	2	7	25	31	3	8	14	71	103
W.S. Central	10	1	56	367	32	—	6	36	60	86	8	48	74	320	610
Arkansas§	8	1	8	45	13	—	0	4	8	10	8	6	16	56	32
Louisiana	—	0	8	23	19	—	0	2	7	15	—	11	27	64	216
Oklahoma	—	0	5	16	—	—	1	5	16	12	—	1	6	8	22
Texas§	2	0	49	283	—	—	4	32	29	49	—	31	46	192	340
Mountain	30	2	67	546	39	6	5	13	75	88	2	7	18	50	105
Arizona	13	0	40	276	—	4	2	6	34	43	—	3	9	13	44
Colorado	15	0	20	151	—	2	1	4	19	16	2	1	5	24	25
Idaho§	—	0	1	3	—	—	0	2	1	2	—	0	1	—	2
Montana§	—	0	1	4	—	—	0	0	—	—	—	0	1	—	—
Nevada§	1	1	4	24	9	—	0	2	3	1	—	1	10	10	19
New Mexico§	—	0	8	43	—	—	0	4	11	5	—	1	4	3	11
Utah	—	1	9	41	25	—	1	6	7	21	—	0	2	—	4
Wyoming§	1	0	2	4	5	—	0	1	—	—	—	0	1	—	—
Pacific	2	0	15	68	2	—	0	7	13	12	7	43	61	295	627
Alaska	—	0	10	32	—	—	0	5	10	7	—	0	0	—	—
California	2	0	10	36	—	—	0	2	3	—	6	39	55	267	570
Hawaii	—	0	1	—	2	—	0	2	—	5	—	0	2	5	12
Oregon	—	0	0	—	—	—	0	0	—	—	—	1	5	6	8
Washington	—	0	0	—	—	—	0	0	—	—	1	2	7	17	37
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	6	3	17	48	40
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 March 6, 2010, and March 7, 2009 (9th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	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	219	285	639	3,032	5,549	—	1	46	2	—	—	0	49	—	—
New England	5	14	33	118	189	—	0	0	—	—	—	0	0	—	—
Connecticut	1	8	23	43	108	—	0	0	—	—	—	0	0	—	—
Maine¶	—	0	15	30	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	4	3	10	32	52	—	0	0	—	—	—	0	0	—	—
Rhode Island¶**	—	0	1	1	4	—	0	0	—	—	—	0	0	—	—
Vermont¶**	—	0	4	12	25	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	22	24	55	227	467	—	0	2	—	—	—	0	1	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Pennsylvania	22	24	55	227	467	—	0	0	—	—	—	0	0	—	—
E.N. Central	68	111	205	1,264	2,091	—	0	4	—	—	—	0	3	—	—
Illinois	9	27	56	299	532	—	0	3	—	—	—	0	0	—	—
Indiana**	—	7	35	162	122	—	0	1	—	—	—	0	1	—	—
Michigan	26	36	84	380	617	—	0	1	—	—	—	0	0	—	—
Ohio	33	29	85	354	657	—	0	0	—	—	—	0	2	—	—
Wisconsin	—	8	57	69	163	—	0	1	—	—	—	0	0	—	—
W.N. Central	1	10	41	87	361	—	0	5	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Kansas**	—	2	19	1	80	—	0	1	—	—	—	0	2	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
Missouri	1	6	31	76	250	—	0	2	—	—	—	0	1	—	—
Nebraska¶**	N	0	0	N	N	—	0	2	—	—	—	0	6	—	—
North Dakota	—	0	26	8	26	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	2	5	—	0	3	—	—	—	0	2	—	—
S. Atlantic	52	25	95	428	630	—	0	4	—	—	—	0	1	—	—
Delaware**	—	0	2	2	2	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	3	—	8	—	0	0	—	—	—	0	0	—	—
Florida	25	14	61	226	368	—	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	33	42	116	—	0	2	—	—	—	0	0	—	—
Virginia¶**	9	0	11	67	28	—	0	1	—	—	—	0	0	—	—
West Virginia	18	8	32	91	108	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	7	29	58	142	—	0	6	2	—	—	0	4	—	—
Alabama¶**	—	7	27	58	141	—	0	0	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	—	1	—	0	5	2	—	—	0	4	—	—
Tennessee¶	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
W.S. Central	68	68	261	568	1,128	—	0	19	—	—	—	0	6	—	—
Arkansas¶**	—	0	23	16	40	—	0	1	—	—	—	0	0	—	—
Louisiana	—	1	7	18	15	—	0	2	—	—	—	0	4	—	—
Oklahoma	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Texas¶**	68	67	245	534	1,073	—	0	16	—	—	—	0	4	—	—
Mountain	3	21	62	278	500	—	0	12	—	—	—	0	17	—	—
Arizona	—	0	0	—	—	—	0	4	—	—	—	0	2	—	—
Colorado**	—	8	22	102	185	—	0	7	—	—	—	0	14	—	—
Idaho¶	N	0	0	N	N	—	0	3	—	—	—	0	5	—	—
Montana¶**	1	0	17	63	70	—	0	1	—	—	—	0	1	—	—
Nevada¶	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New Mexico¶**	—	0	12	20	66	—	0	2	—	—	—	0	1	—	—
Utah	2	8	32	92	179	—	0	1	—	—	—	0	1	—	—
Wyoming¶**	—	0	1	1	—	—	0	1	—	—	—	0	2	—	—
Pacific	—	1	5	4	41	—	0	12	—	—	—	0	12	—	—
Alaska	—	0	4	4	25	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	8	—	—	—	0	6	—	—
Hawaii	—	0	4	—	16	—	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	4	5	26	52	118	—	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).
** Contains data that was reported via Health Level Seven (HL7) messages.

TABLE III. Deaths in 122 U.S. cities,* week ending March 20, 2010 (11th week)

Reporting area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
New England	561	410	112	18	6	14	61
Boston, MA	141	98	32	7	2	2	15
Bridgeport, CT	34	28	4	1	—	1	6
Cambridge, MA	16	13	2	—	—	—	2
Fall River, MA	33	27	5	1	—	—	2
Hartford, CT	49	27	15	3	1	3	5
Lowell, MA	30	25	5	—	—	—	3
Lynn, MA	12	6	6	—	—	—	1
New Bedford, MA	19	13	6	—	—	—	2
New Haven, CT	25	21	1	1	1	1	4
Providence, RI	57	43	11	2	—	1	4
Somerville, MA	4	2	2	—	—	—	—
Springfield, MA	39	26	5	2	2	4	4
Waterbury, CT	29	22	7	—	—	—	4
Worcester, MA	73	59	11	1	—	2	9
Mid. Atlantic	1,898	1,302	444	88	37	26	86
Albany, NY	45	33	5	1	2	4	—
Allentown, PA	18	11	5	1	1	—	—
Buffalo, NY	74	55	16	3	—	—	7
Camden, NJ	35	23	8	2	—	2	—
Elizabeth, NJ	13	6	4	1	2	—	1
Erie, PA	47	36	7	3	1	—	4
Jersey City, NJ	39	25	11	3	—	—	2
New York City, NY	1,028	723	227	43	22	13	39
Newark, NJ	38	18	15	4	1	—	4
Paterson, NJ	6	4	2	—	—	—	1
Philadelphia, PA	254	158	68	19	6	3	10
Pittsburgh, PA§	34	20	12	1	—	—	3
Reading, PA	43	25	14	2	—	2	5
Rochester, NY	83	60	19	3	—	1	6
Schenectady, NY	24	17	6	1	—	—	1
Scranton, PA	22	19	3	—	—	—	—
Syracuse, NY	55	42	12	1	—	—	2
Trenton, NJ	19	10	7	—	1	1	1
Utica, NY	7	6	1	—	—	—	—
Yonkers, NY	14	11	2	—	1	—	—
E.N. Central	2,101	1,406	494	112	52	37	144
Akron, OH	46	27	13	2	1	3	5
Canton, OH	45	36	8	1	—	—	5
Chicago, IL	290	171	83	21	11	4	7
Cincinnati, OH	114	70	32	7	2	3	13
Cleveland, OH	233	163	53	13	1	3	10
Columbus, OH	279	180	76	11	3	9	38
Dayton, OH	138	101	25	9	1	2	12
Detroit, MI	150	84	42	9	13	2	4
Evansville, IN	34	30	3	—	1	—	3
Fort Wayne, IN	84	56	19	7	2	—	2
Gary, IN	14	9	3	—	—	2	3
Grand Rapids, MI	44	36	6	1	1	—	4
Indianapolis, IN	188	116	45	16	6	5	14
Lansing, MI	39	30	8	1	—	—	4
Milwaukee, WI	120	77	34	4	5	—	7
Peoria, IL	49	39	8	1	1	—	3
Rockford, IL	54	44	6	3	—	1	4
South Bend, IN	9	9	—	—	—	—	—
Toledo, OH	100	68	22	5	3	2	2
Youngstown, OH	71	60	8	1	1	1	4
W.N. Central	623	413	156	29	16	9	52
Des Moines, IA	91	57	26	5	2	1	8
Duluth, MN	39	27	9	1	2	—	1
Kansas City, KS	36	26	8	2	—	—	—
Kansas City, MO	115	72	31	6	4	2	9
Lincoln, NE	47	36	11	—	—	—	9
Minneapolis, MN	72	37	25	5	1	4	7
Omaha, NE	69	50	16	1	2	—	8
St. Louis, MO	3	1	1	—	1	—	1
St. Paul, MN	58	43	10	4	1	—	6
Wichita, KS	93	64	19	5	3	2	3
S. Atlantic	1,188	781	290	76	14	27	80
Atlanta, GA	112	70	29	7	2	4	11
Baltimore, MD	129	79	33	12	3	2	10
Charlotte, NC	108	67	32	6	1	2	9
Jacksonville, FL	176	115	49	8	3	1	18
Miami, FL	90	55	25	8	1	1	4
Norfolk, VA	82	62	15	2	1	2	2
Richmond, VA	63	35	21	6	—	1	3
Savannah, GA	61	47	11	2	1	—	3
St. Petersburg, FL	54	42	6	4	—	2	2
Tampa, FL	239	165	49	15	2	8	13
Washington, D.C.	53	28	15	6	—	4	1
Wilmington, DE	21	16	5	—	—	—	4
E.S. Central	890	572	230	57	15	16	75
Birmingham, AL	172	108	43	9	5	7	15
Chattanooga, TN	63	44	18	1	—	—	5
Knoxville, TN	105	67	34	3	1	—	6
Lexington, KY	89	56	19	10	2	2	11
Memphis, TN	155	103	35	9	3	5	16
Mobile, AL	119	82	22	12	3	—	9
Montgomery, AL	30	20	8	1	1	—	4
Nashville, TN	157	92	51	12	—	2	9
W.S. Central	1,263	788	335	71	28	41	86
Austin, TX	112	75	24	6	4	3	10
Baton Rouge, LA	55	37	11	4	1	2	1
Corpus Christi, TX	74	46	18	6	4	—	4
Dallas, TX	206	121	56	10	10	9	10
El Paso, TX	48	33	12	3	—	—	3
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	186	102	63	9	1	11	18
Little Rock, AR	65	38	19	4	—	4	4
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	302	183	83	19	6	11	23
Shreveport, LA	73	53	15	2	2	1	2
Tulsa, OK	142	100	34	8	—	—	11
Mountain	1,114	764	240	60	27	21	91
Albuquerque, NM	133	89	27	7	9	1	15
Boise, ID	39	32	5	—	1	1	3
Colorado Springs, CO	73	50	15	7	—	1	2
Denver, CO	97	75	14	3	2	3	12
Las Vegas, NV	218	150	48	11	2	7	22
Ogden, UT	26	18	5	2	1	—	3
Phoenix, AZ	196	112	61	14	4	4	10
Pueblo, CO	33	22	11	—	—	—	3
Salt Lake City, UT	140	97	27	8	5	3	11
Tucson, AZ	159	119	27	8	3	1	10
Pacific	1,768	1,283	363	65	36	20	198
Berkeley, CA	16	12	3	—	1	—	4
Fresno, CA	131	103	23	2	1	2	21
Glendale, CA	40	32	7	—	—	1	9
Honolulu, HI	73	56	13	4	—	—	5
Long Beach, CA	69	52	12	1	3	1	9
Los Angeles, CA	270	192	56	12	3	7	31
Pasadena, CA	34	25	4	3	1	1	6
Portland, OR	99	62	26	5	4	2	2
Sacramento, CA	231	171	46	8	6	—	35
San Diego, CA	156	119	28	5	2	2	15
San Francisco, CA	102	72	22	5	—	2	12
San Jose, CA	199	142	50	4	2	1	23
Santa Cruz, CA	37	29	7	1	—	—	1
Seattle, WA	132	92	28	6	5	1	6
Spokane, WA	63	43	15	3	2	—	4
Tacoma, WA	116	81	23	6	6	—	15
Total¶	11,406	7,719	2,664	576	231	211	873

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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Data presented by the Notifiable Disease Data Team and 122 Cities Mortality Data Team in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to *mmwrq@cdc.gov.*

☆ U.S. Government Printing Office: 2010-623-026/41236 Region IV ISSN: 0149-2195