

Prevalence of Coronary Heart Disease — United States, 2006–2010

Age-adjusted mortality rates for coronary heart disease (CHD) have declined steadily in the United States since the 1960s (1). Multiple factors likely have contributed to this decline in CHD deaths, including greater control of risk factors, resulting in declining incidence of CHD, and improved treatment (2). Greater control of risk factors and declining incidence can reduce CHD prevalence, whereas improved treatment that results in lower mortality rates and more persons living with CHD can increase prevalence. To estimate state-specific CHD prevalence and recent trends by age, sex, race/ethnicity, and education, CDC analyzed data from Behavioral Risk Factor Surveillance System (BRFSS) surveys for the period 2006–2010. This report summarizes the results of that analysis, which determined that, although self-reported CHD prevalence declined overall, substantial differences in prevalence existed by age, sex, race/ethnicity, education, and state of residence. These data can enable state and national health agencies to monitor CHD prevalence as a measure of progress toward meeting the *Healthy People 2020* objective to reduce the U.S. rate of CHD deaths 20% from the 2007 baseline (3).

BRFSS is a state-based, random-digit-dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥18 years (4). The survey is administered in all 50 states, the District of Columbia (DC), and the U.S. territories of Guam, Puerto Rico, and the U.S. Virgin Islands. Since 2005, BRFSS has included two questions related to coronary heart disease: “Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?” and “Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?” Participants who answered “yes” to either of the questions were defined as having self-reported CHD. Those who answered “no” to both questions were defined as not having CHD. Those who answered “don’t know,” refused to answer the questions, or for whom responses were missing were excluded.

CHD prevalence data were analyzed by age group, sex, education, state, and racial/ethnic population (Hispanic, white,

black, Asian or Native Hawaiian/Other Pacific Islander, or American Indian/Alaska Native).^{*} All estimates were weighted to the state population, and analyses were conducted using statistical software to account for the complex sampling design. Age-adjusted prevalence of CHD, standardized to the 2000 U.S. standard population, was estimated for each year during the period 2006–2010. Orthogonal polynomial coefficients, which were calculated recursively, were used to determine the significance of linear trends. The number of BRFSS respondents ranged from 347,790 in 2006 to 444,927 in 2010 for all states. Sample sizes for states (including DC) ranged from 1,964 in Alaska in 2010 to 39,549 in Florida in 2007. Median BRFSS response rate during 2006–2010 was 52.3%.

From 2006 to 2010, age-adjusted CHD prevalence in the United States declined overall from 6.7% to 6.0% (Table 1). Similar declines were observed across age group, sex, and education categories. Among racial/ethnic populations,

^{*}All respondents categorized by race were non-Hispanic. Hispanic respondents might be of any race.

INSIDE

- 1382 Progress Toward Implementation of Human Papillomavirus Vaccination — the Americas, 2006–2010
- 1385 Establishment of a Viral Hepatitis Surveillance System — Pakistan, 2009–2011
- 1391 Recommendation of the Advisory Committee on Immunization Practices (ACIP) for Use of Quadrivalent Meningococcal Conjugate Vaccine (MenACWY-D) Among Children Aged 9 Through 23 Months at Increased Risk for Invasive Meningococcal Disease
- 1393 Notes from the Field: Q Fever Outbreak Associated with Goat Farms — Washington and Montana, 2011
- 1394 Announcements
- 1396 QuickStats



What is already known on this topic?

The 2005 Behavioral Risk Factor Surveillance System survey found a prevalence of coronary heart disease (CHD) in the United States of 6.5% among adults aged ≥ 18 years and certain disparities in prevalence by sex, race, education, and state of residence.

What is added by this report?

From 2006 to 2010, CHD prevalence overall in the United States decreased from 6.7% to 6.0%. Prevalence varied substantially by sex (men, 7.8%, versus women, 4.6%), race (American Indians/Alaska Natives, 11.6%, versus Asians or Native Hawaiians/Other Pacific Islanders, 3.9%), education (those with less than a high school education, 9.2%, versus those with more than a college degree, 4.6%), and state of residence, with prevalence generally greater in the South, the highest in Kentucky (8.2%) and the lowest in Hawaii (3.7%).

What are the implications for public health practice?

Prevention programs can be targeted at the states and populations with the greatest prevalence of CHD to meet the *Healthy People 2020* objective of reducing the U.S. CHD death rate by 20%.

declines from 2006 to 2010 were observed among whites (6.4% to 5.8%) and Hispanics (6.9% to 6.1%) (Table 1).

In 2010, the prevalence of CHD was greatest among persons aged ≥ 65 years (19.8%), followed by those aged 45–64 years (7.1%) and those aged 18–44 years (1.2%). CHD prevalence was greater among men (7.8%) than women (4.6%), and among those with less than a high school education (9.2%), compared

with high school graduates (6.7%), those with some college (6.2%), and those with more than a college degree (4.6%) (Table 1). Among racial/ethnic populations, CHD prevalence was greatest among American Indians/Alaska Natives (11.6%), followed by blacks (6.5%), Hispanics (6.1%), whites (5.8%), and Asians or Native Hawaiians/Other Pacific Islanders (3.9%). By race and sex in 2010, the greatest male prevalences were among American Indian/Alaska Natives (14.3%) and whites (7.7%), and the greatest female prevalences were among American Indian/Alaska Natives (8.4%) and blacks (5.9%) (Table 1).

By state, from 2006 to 2010, the greatest statistically significant linear declines in age-adjusted CHD prevalence were 23.1% in West Virginia (from 10.4% to 8.0%) and 22.1% in Missouri (from 7.7% to 6.0%) (Table 2). Although five states showed an increase in CHD prevalence from 2006 to 2010, none of the five showed a statistically significant linear increase. In 2010, CHD prevalence ranged from 3.7% in Hawaii and 3.8% in DC to 8.0% in West Virginia and 8.2% in Kentucky, with the greatest regional prevalences generally observed in the South (Figure).

Reported by

Jing Fang, MD, Kate M. Shaw, MS, Nora L. Keenan, PhD, Div for Heart Disease and Stroke Prevention, National Center for Chronic Disease Prevention and Health Promotion.
Corresponding contributor: *Jing Fang, jfang@cdc.gov, 770-488-5142.*

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* 2011;60:[inclusive page numbers].

Centers for Disease Control and Prevention

Thomas R. Frieden, MD, MPH, *Director*
Harold W. Jaffe, MD, MA, *Associate Director for Science*
James W. Stephens, PhD, *Director, Office of Science Quality*
Stephen B. Thacker, MD, MSc, *Deputy Director for Surveillance, Epidemiology, and Laboratory Services*
Stephanie Zaza, MD, MPH, *Director, Epidemiology and Analysis Program Office*

MMWR Editorial and Production Staff

Ronald L. Moolenaar, MD, MPH, *Editor, MMWR Series*
John S. Moran, MD, MPH, *Deputy Editor, MMWR Series*
Robert A. Gunn, MD, MPH, *Associate Editor, MMWR Series*
Teresa F. Rutledge, *Managing Editor, MMWR Series*
Douglas W. Weatherwax, *Lead Technical Writer-Editor*
Donald G. Meadows, MA, Jude C. Rutledge, *Writer-Editors*
Martha F. Boyd, *Lead Visual Information Specialist*
Maureen A. Leahy, Julia C. Martinroe,
Stephen R. Spriggs, Terraye M. Starr
Visual Information Specialists
Quang M. Doan, MBA, Phyllis H. King
Information Technology Specialists

MMWR Editorial Board

William L. Roper, MD, MPH, Chapel Hill, NC, *Chairman*
Virginia A. Caine, MD, Indianapolis, IN
Jonathan E. Fielding, MD, MPH, MBA, Los Angeles, CA
David W. Fleming, MD, Seattle, WA
William E. Halperin, MD, DrPH, MPH, Newark, NJ
King K. Holmes, MD, PhD, Seattle, WA
Deborah Holtzman, PhD, Atlanta, GA
John K. Iglehart, Bethesda, MD
Dennis G. Maki, MD, Madison, WI
Patricia Quinlisk, MD, MPH, Des Moines, IA
Patrick L. Remington, MD, MPH, Madison, WI
Barbara K. Rimer, DrPH, Chapel Hill, NC
John V. Rullan, MD, MPH, San Juan, PR
William Schaffner, MD, Nashville, TN
Anne Schuchat, MD, Atlanta, GA
Dixie E. Snider, MD, MPH, Atlanta, GA
John W. Ward, MD, Atlanta, GA

TABLE 1. Age-adjusted prevalence* of coronary heart disease,† by selected characteristics — Behavioral Risk Factor Surveillance System, United States, 2006–2010

Characteristic	2006		2007		2008		2009		2010		p value for linear trend	% change from 2006 to 2010
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)		
Total	6.7	(6.5–6.9)	6.2	(6.1–6.4)	6.3	(6.2–6.5)	5.8	(5.7–5.9)	6.0	(5.9–6.1)	<0.01	-10.4
Age group (yrs)												
18–44	1.6	(1.4–1.8)	1.5	(1.4–1.7)	1.4	(1.3–1.5)	1.2	(1.1–1.4)	1.2	(1.1–1.4)	<0.01	-25.0
45–64	7.7	(7.4–8.0)	7.2	(6.9–7.4)	7.2	(7.0–7.5)	6.8	(6.6–7.0)	7.1	(6.9–7.3)	<0.01	-7.8
≥65	21.1	(20.5–21.6)	19.8	(19.3–20.2)	20.6	(20.2–21.0)	18.7	(18.3–19.0)	19.8	(19.5–20.2)	<0.01	-6.2
Sex												
Men	8.5	(8.3–8.8)	8.0	(7.8–8.2)	8.2	(8.0–8.4)	7.5	(7.3–7.7)	7.8	(7.6–7.9)	<0.01	-8.2
Women	5.2	(5.0–5.4)	4.8	(4.7–5.0)	4.9	(4.7–5.0)	4.4	(4.2–4.5)	4.6	(4.5–4.7)	<0.01	-11.5
Race/Ethnicity[§]												
Overall												
White	6.4	(6.3–6.6)	6.0	(5.9–6.1)	6.1	(6.0–6.2)	5.6	(5.5–5.7)	5.8	(5.7–5.9)	<0.01	-9.4
Black	6.4	(5.9–6.9)	6.3	(5.8–6.8)	6.3	(5.9–6.7)	5.8	(5.4–6.3)	6.5	(6.1–6.9)	0.68	1.6
Hispanic	6.9	(6.2–7.8)	6.8	(6.2–7.6)	6.9	(6.3–7.6)	5.7	(5.2–6.3)	6.1	(5.6–6.6)	0.01	-11.6
Asian or Native Hawaiian/ Other Pacific Islander	5.1	(3.8–6.8)	3.1	(2.4–4.0)	4.8	(3.8–6.0)	4.2	(3.4–5.2)	3.9	(3.3–4.7)	0.47	-23.5
American Indian/Alaska Native	11.3	(9.5–13.5)	12.0	(10.4–13.8)	11.1	(9.7–12.6)	9.8	(8.4–11.5)	11.6	(10.1–13.4)	0.58	2.7
Men												
White	8.4	(8.1–8.7)	7.9	(7.7–8.1)	8.2	(8.0–8.4)	7.5	(7.3–7.7)	7.7	(7.5–7.9)	<0.01	-8.4
Black	7.3	(6.5–8.3)	6.4	(5.7–7.2)	6.3	(5.6–7.2)	6.4	(5.6–7.3)	7.3	(6.6–8.0)	0.94	-0.8
Hispanic	8.0	(6.8–9.5)	8.5	(7.3–9.9)	7.6	(6.7–8.7)	6.6	(5.8–7.5)	7.2	(6.4–8.2)	0.06	-10.1
Asian or Native Hawaiian/ Other Pacific Islander	7.0	(4.9–9.8)	3.9	(2.9–5.3)	6.7	(5.1–8.8)	6.0	(4.7–7.7)	5.4	(4.4–6.7)	0.73	-22.1
American Indian/Alaska Native	13.4	(10.5–16.8)	13.0	(10.7–15.6)	12.7	(10.6–15.1)	10.2	(8.0–12.8)	14.3	(11.8–17.2)	0.84	7.2
Women												
White	4.8	(4.7–5.0)	4.4	(4.3–4.5)	4.4	(4.3–4.5)	4.0	(3.9–4.2)	4.2	(4.1–4.3)	<0.01	-12.7
Black	5.7	(5.2–6.3)	6.2	(5.7–6.8)	6.3	(5.8–6.8)	5.5	(5.0–6.0)	5.9	(5.4–6.3)	0.56	2.7
Hispanic	6.1	(5.2–7.2)	5.6	(4.9–6.4)	6.3	(5.6–7.1)	4.9	(4.3–5.5)	5.3	(4.7–5.9)	0.05	-14.3
Asian or Native Hawaiian/ Other Pacific Islander	3.3	(2.1–5.2)	2.3	(1.4–3.6)	2.7	(1.9–3.9)	2.1	(1.4–3.0)	2.3	(1.7–3.2)	0.22	-30.6
American Indian/Alaska Native	9.2	(7.3–11.5)	10.9	(9.0–13.2)	9.1	(7.5–11.1)	9.3	(7.7–11.2)	8.4	(6.8–10.4)	0.32	-8.5
Education												
Less than high school diploma	10.3	(9.7–11.1)	9.4	(8.8–10.0)	9.6	(9.1–10.1)	8.8	(8.3–9.2)	9.2	(8.7–9.6)	<0.01	-10.7
High school diploma	7.2	(7.0–7.5)	6.8	(6.6–7.1)	6.8	(6.6–7.0)	6.2	(6.0–6.5)	6.7	(6.5–7.0)	<0.01	-6.9
Some college	6.7	(6.4–7.0)	6.4	(6.1–6.6)	6.5	(6.3–6.7)	6.0	(5.8–6.3)	6.2	(6.0–6.4)	<0.01	-7.5
More than college degree	5.2	(4.9–5.4)	4.7	(4.5–4.9)	5.0	(4.8–5.2)	4.4	(4.3–4.6)	4.6	(4.5–4.8)	<0.01	-11.5

Abbreviation: CI = confidence interval.

* Weighted estimates, age-adjusted to the 2000 U.S. standard population.

† Respondents were asked, “Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?” and “Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?” Refused, don’t know, and missing responses were excluded from analysis.

§ All respondents categorized by race were non-Hispanic. Hispanic respondents might be of any race.

Editorial Note

During the past half century, the CHD mortality rate has declined continuously (1); a *Healthy People 2020* objective is to lower the death rate 20%, from a baseline of 126.0 per 100,000 population in 2007 to 100.8. The decline in the mortality rate suggests that more persons are living with CHD, which should result in an increase in the prevalence of CHD, not a decrease as described in this report. However, the decline in prevalence in this report was affected not only by CHD mortality but also by CHD incidence, which is decreased by the prevention and control of CHD risk factors. Given that CHD mortality is declining, the observed decline in prevalence of CHD in this study suggests that CHD incidence also has declined.

Although no national-level surveillance of CHD incidence is conducted in the United States, a decline in CHD incidence from 1980 to 1992 was observed in a population-based study (5). Additionally, a 2007 report attributed 47% of the decline in CHD mortality to improvements in treatment and 44% to a reduction in risk factors (6). Because improvements in treatment would tend to increase CHD prevalence, the decline in prevalence is consistent with the reported decline in the prevalence of a population at high risk (i.e., persons with uncontrolled hypertension, uncontrolled high levels of low-density lipoprotein cholesterol, and current smokers), as noted in the recent report on the U.S. Department of Health and Human Services Million Hearts initiative (7).

TABLE 2. Age-adjusted prevalence* of coronary heart disease,† by state‡ — Behavioral Risk Factor Surveillance System, United States, 2006–2010

State	2006		2007		2008		2009		2010		p value for linear trend	% change from 2006 to 2010
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)		
Alabama	9.2	(8.0–10.5)	7.3	(6.7–8.0)	7.8	(7.1–8.6)	7.4	(6.5–8.3)	7.4	(6.7–8.1)	0.02	-19.6
Alaska	6.3	(4.9–7.9)	4.6	(3.6–6.0)	5.5	(4.5–6.8)	6.2	(5.0–7.7)	4.7	(3.7–6.1)	0.49	-25.4
Arizona	7.0	(5.9–8.3)	6.9	(5.8–8.3)	6.8	(5.7–8.0)	6.0	(5.2–6.9)	5.6	(4.9–6.4)	0.02	-20.0
Arkansas	7.7	(7.1–8.4)	7.3	(6.6–7.9)	7.9	(7.2–8.7)	7.3	(6.5–8.3)	7.1	(6.4–7.9)	0.34	-7.8
California	6.3	(5.6–7.1)	4.9	(4.4–5.6)	5.2	(4.8–5.7)	5.1	(4.8–5.5)	5.4	(5.1–5.8)	0.10	-14.3
Colorado	4.9	(4.4–5.4)	4.7	(4.3–5.1)	4.6	(4.3–5.0)	4.8	(4.4–5.3)	5.0	(4.5–5.5)	0.69	2.0
Connecticut	5.0	(4.6–5.5)	4.8	(4.3–5.3)	4.7	(4.3–5.3)	4.6	(4.1–5.1)	4.4	(4.0–4.9)	0.07	-12.0
Delaware	6.5	(5.7–7.4)	7.1	(6.3–8.0)	6.6	(5.8–7.4)	5.9	(5.2–6.6)	5.8	(5.2–6.5)	0.03	-10.8
District of Columbia	4.9	(4.2–5.7)	4.6	(3.9–5.4)	4.1	(3.5–4.8)	3.3	(2.8–3.9)	3.8	(3.2–4.4)	<0.01	-18.4
Florida	6.8	(6.1–7.4)	6.1	(5.8–6.5)	6.8	(6.1–7.5)	6.3	(5.6–7.0)	6.3	(5.9–6.7)	0.36	-7.4
Georgia	6.7	(6.1–7.3)	7.0	(6.3–7.7)	6.6	(5.9–7.3)	6.1	(5.3–7.1)	6.2	(5.6–6.8)	0.08	-7.5
Hawaii	4.7	(4.1–5.3)	4.5	(4.0–5.1)	4.5	(3.9–5.2)	4.0	(3.4–4.6)	3.7	(3.2–4.3)	<0.01	-21.3
Idaho	5.6	(5.1–6.3)	6.3	(5.7–7.1)	6.2	(5.5–6.9)	5.7	(5.1–6.4)	5.3	(4.8–5.8)	0.14	-5.4
Illinois	6.5	(5.8–7.3)	5.7	(5.1–6.4)	6.4	(5.7–7.1)	5.3	(4.8–5.9)	5.9	(5.2–6.6)	0.14	-9.2
Indiana	7.4	(6.8–8.0)	7.7	(6.8–8.7)	6.9	(6.2–7.7)	7.0	(6.4–7.7)	6.9	(6.4–7.5)	0.13	-6.8
Iowa	6.2	(5.6–7.0)	5.7	(5.1–6.3)	5.9	(5.3–6.6)	5.1	(4.6–5.6)	5.2	(4.7–5.7)	<0.01	-16.1
Kansas	6.2	(5.7–6.7)	6.2	(5.7–6.7)	5.4	(5.0–5.8)	5.6	(5.3–5.9)	5.9	(5.4–6.4)	0.16	-4.8
Kentucky	9.0	(8.2–9.9)	8.5	(7.8–9.2)	7.9	(7.3–8.6)	8.4	(7.7–9.2)	8.2	(7.4–9.0)	0.17	-8.9
Louisiana	7.2	(6.6–7.9)	7.4	(6.7–8.3)	8.0	(7.3–8.8)	7.1	(6.6–7.7)	7.8	(7.1–8.6)	0.47	8.3
Maine	5.6	(5.0–6.3)	6.4	(5.8–7.0)	6.5	(6.0–7.2)	5.9	(5.5–6.5)	6.4	(5.8–7.0)	0.26	14.3
Maryland	6.7	(6.1–7.3)	5.6	(5.0–6.3)	6.3	(5.8–6.8)	5.3	(4.7–5.9)	5.3	(4.9–5.9)	<0.01	-20.9
Massachusetts	5.7	(5.2–6.2)	5.5	(5.1–5.8)	5.4	(5.0–5.9)	5.6	(5.2–6.0)	5.5	(5.1–5.9)	0.63	-3.5
Michigan	7.5	(6.8–8.2)	7.2	(6.7–7.8)	6.6	(6.1–7.1)	6.3	(5.9–6.8)	7.1	(6.6–7.6)	0.07	-5.3
Minnesota	5.4	(4.9–6.1)	5.3	(4.7–5.9)	6.2	(5.5–6.9)	4.8	(4.3–5.3)	4.9	(4.4–5.4)	0.06	-9.3
Mississippi	7.6	(6.9–8.3)	6.8	(6.3–7.4)	6.6	(6.1–7.2)	6.7	(6.3–7.3)	7.4	(6.7–8.1)	0.71	-2.6
Missouri	7.7	(6.9–8.7)	6.5	(5.8–7.2)	7.1	(6.4–7.8)	5.9	(5.3–6.6)	6.0	(5.4–6.7)	<0.01	-22.1
Montana	5.3	(4.7–6.0)	5.4	(4.8–6.0)	5.8	(5.2–6.4)	5.1	(4.6–5.8)	5.5	(5.0–6.1)	0.84	3.8
Nebraska	6.0	(5.5–6.6)	5.3	(4.8–5.9)	5.6	(5.2–6.1)	5.1	(4.7–5.5)	5.4	(4.9–5.9)	0.07	-10.0
Nevada	7.6	(6.6–8.7)	6.5	(5.6–7.6)	6.5	(5.6–7.4)	6.7	(5.9–7.7)	6.4	(5.5–7.5)	0.16	-15.8
New Hampshire	6.1	(5.6–6.7)	6.0	(5.4–6.7)	5.7	(5.1–6.3)	4.9	(4.4–5.5)	5.4	(4.9–6.0)	<0.01	-11.5
New Jersey	6.3	(5.9–6.8)	6.6	(5.5–7.9)	6.1	(5.6–6.7)	5.4	(4.8–5.9)	5.4	(4.9–5.9)	<0.01	-14.3
New Mexico	5.6	(5.0–6.3)	5.6	(5.0–6.3)	5.6	(4.9–6.3)	5.0	(4.6–5.5)	6.2	(5.3–7.2)	0.68	10.7
New York	5.9	(5.3–6.6)	5.8	(5.2–6.4)	5.6	(5.1–6.2)	5.2	(4.7–5.8)	5.7	(5.2–6.2)	0.25	-3.4
North Carolina	7.4	(6.9–7.9)	7.1	(6.7–7.6)	6.4	(5.9–6.8)	6.6	(5.8–7.5)	6.7	(6.2–7.2)	0.03	-9.5
North Dakota	5.2	(4.6–5.8)	5.5	(5.0–6.1)	5.4	(4.8–6.0)	5.1	(4.5–5.6)	5.6	(5.1–6.3)	0.58	7.7
Ohio	7.5	(6.5–8.8)	7.2	(6.7–7.7)	7.1	(6.6–7.6)	6.0	(5.5–6.5)	6.2	(5.6–6.7)	<0.01	-17.3
Oklahoma	8.5	(7.8–9.2)	8.0	(7.4–8.7)	7.6	(7.1–8.2)	7.2	(6.7–7.9)	7.6	(7.0–8.2)	0.01	-10.6
Oregon	5.4	(4.8–6.0)	4.9	(4.3–5.5)	5.3	(4.6–6.0)	5.4	(4.7–6.2)	4.8	(4.4–5.3)	0.55	-11.1
Pennsylvania	6.7	(6.1–7.4)	6.5	(5.8–7.3)	6.6	(6.1–7.1)	5.9	(5.5–6.5)	5.9	(5.4–6.3)	0.01	-11.9
Rhode Island	6.0	(5.3–6.8)	5.8	(5.1–6.5)	5.7	(5.2–6.4)	5.7	(5.1–6.3)	5.5	(4.9–6.2)	0.34	-8.3
South Carolina	6.7	(6.1–7.2)	6.1	(5.6–6.6)	6.4	(5.9–7.0)	6.4	(5.8–7.0)	6.2	(5.6–6.8)	0.44	-7.5
South Dakota	6.5	(6.0–7.1)	6.0	(5.4–6.5)	6.2	(5.7–6.8)	5.3	(4.8–5.8)	5.8	(5.3–6.4)	0.02	-10.8
Tennessee	8.2	(7.3–9.2)	7.6	(6.6–8.8)	8.2	(7.4–9.1)	6.3	(5.7–7.0)	6.9	(6.2–7.6)	<0.01	-15.9
Texas	7.2	(6.3–8.1)	7.1	(6.6–7.6)	6.8	(6.3–7.5)	5.5	(5.0–6.0)	6.8	(6.2–7.3)	0.04	-5.6
Utah	5.3	(4.7–6.0)	5.1	(4.5–5.8)	5.9	(5.2–6.7)	4.7	(4.3–5.2)	4.9	(4.5–5.4)	0.18	-7.5
Vermont	6.0	(5.5–6.6)	5.7	(5.0–6.5)	5.6	(5.1–6.2)	4.9	(4.4–5.4)	5.1	(4.6–5.5)	<0.01	-15.0
Virginia	6.5	(5.7–7.3)	6.1	(5.4–6.9)	6.3	(5.5–7.2)	5.4	(4.8–6.1)	5.7	(5.1–6.4)	0.07	-12.3
Washington	5.4	(5.1–5.8)	5.2	(4.9–5.5)	5.0	(4.7–5.4)	4.8	(4.5–5.1)	4.8	(4.5–5.1)	<0.01	-11.1
West Virginia	10.4	(9.5–11.3)	9.5	(8.7–10.4)	10.5	(9.6–11.4)	8.9	(8.1–9.6)	8.0	(7.3–8.8)	<0.01	-23.1
Wisconsin	5.7	(5.1–6.4)	5.3	(4.7–6.0)	6.3	(5.6–7.1)	5.4	(4.7–6.2)	4.9	(4.3–5.7)	0.16	-14.0
Wyoming	6.2	(5.5–6.9)	5.6	(5.0–6.2)	5.9	(5.4–6.4)	5.9	(5.1–6.9)	5.8	(5.3–6.5)	0.80	-6.5

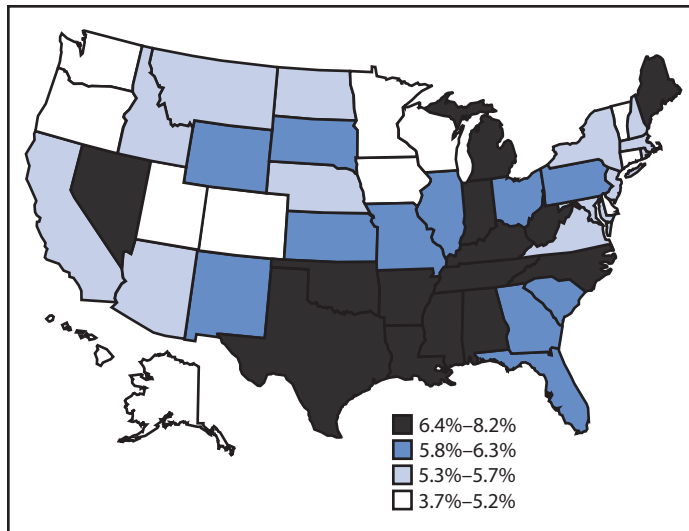
Abbreviation: CI = confidence interval.

* Weighted estimates, age-adjusted to the 2000 U.S. standard population.

† Respondents were asked, "Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?" and "Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?" Refused, don't know, and missing responses were excluded from analysis.

‡ Including the District of Columbia.

FIGURE. Age-adjusted prevalence of coronary heart disease among adults — Behavioral Risk Factor Surveillance System, United States, 2010



This report estimates a national CHD prevalence of 6.0%. In 2007, CDC estimated the national prevalence of CHD at 6.5%, based on data from the 2005 BRFSS survey (8). Since 2005, the prevalence of self-reported CHD has shown a significant decline. In the only other recent report estimating CHD prevalence, data from the 2005–2008 National Health and Nutrition Examination Survey were used to calculate an estimate of 7.0%, slightly greater than the BRFSS estimates but including a slightly older population: U.S. adults aged ≥ 20 years (9).

This report is subject to at least six limitations. First, BRFSS is a telephone survey that excludes persons living in institutions, nursing homes, long-term care facilities, and correctional institutions, and results might not be applicable to these populations. Second, the 52.3% median response rate might further limit generalizability of the findings, if the sociodemographics of nonrespondents differed from respondents. Third, these BRFSS surveys included only persons with landline telephones. The increasing number of households with cellular telephones only might make BRFSS increasingly less representative of the general U.S. adult population. Fourth, BRFSS is conducted in English and Spanish and excludes persons who cannot speak either one of those languages. Fifth, BRFSS data are self-reported and subject to recall bias and social desirability effects. However, should bias exist, no evidence suggests that it would confound trend estimates by

fluctuating from year to year. Finally, no data were collected regarding CHD incidence, which might have shown its effect on the finding for CHD prevalence.

The CDC National Heart Disease and Stroke Prevention Program funds 41 states and DC, with a focus on developing and sustaining population-based strategies that target an identified area of a state or segment of the population (10). The goal of the program is to increase state capacity to address the issues related to control and prevention of heart disease, stroke, and related risk factors (e.g., hypertension and high levels of low-density lipoprotein cholesterol). Examples of preventive interventions include the enhancement of clinical-based management of treatment for hypertension and high cholesterol and the promotion of patient use of home blood pressure monitoring. The data from this report can help health planners develop more targeted prevention programs for states and populations with greater CHD prevalence (e.g., American Indian/Alaska Native men and black women). Development of effective prevention programs targeting populations with greater CHD prevalence should reduce risk factors and CHD incidence, which will continue the decline in both CHD prevalence and CHD deaths.

References

- Xu JQ, Kochanek KD, Murphy SL, Tejada-Vera B. Deaths: final data for 2007. *Natl Vital Stat Rep* 2009;58(19).
- Wijeyesundera HC, Machado M, Farahati F, et al. Association of temporal trends in risk factors and treatment uptake with coronary heart disease mortality, 1994–2005. *JAMA* 2010;303:1841–7.
- US Department of Health and Human Services. HDS-2: Reduce coronary heart disease deaths. *Healthy People 2020*. Washington, DC: US Department of Health and Human Services; 2011. Available at <http://www.healthypeople.gov/hp2020>. Accessed October 7, 2011.
- CDC. Behavioral Risk Factor Surveillance System. Available at <http://www.cdc.gov/brfss>. Accessed October 7, 2011.
- Hu FB, Stampfer MJ, Manson JE, et al. Trends in the incidence of coronary heart disease and changes in diet and lifestyle in women. *N Engl J Med* 2000;343:530–7.
- Ford ES, Ajani UA, Croft JB, et al. Explaining the decrease in U.S. deaths from coronary disease, 1980–2000. *N Engl J Med* 2007; 356:2388–98.
- CDC. Million Hearts: strategies to reduce the prevalence of leading cardiovascular disease risk factors—United States, 2011. *MMWR* 2011;60:1248–51.
- CDC. Prevalence of heart disease—United States, 2005. *MMWR* 2007;56:113–8.
- Roger VL, Go AS, Lloyd-Jones DM, et al. Heart disease and stroke statistics—2011 update: a report from the American Heart Association. *Circulation* 2011;123:e18–209.
- CDC. National Heart Disease and Stroke Prevention Program. Atlanta, GA: US Department of Health and Human Services, CDC; 2011. Available at http://www.cdc.gov/dhdsp/programs/nhdsp_program/index.htm. Accessed October 7, 2011.

Progress Toward Implementation of Human Papillomavirus Vaccination — the Americas, 2006–2010

Cervical cancer is a major cause of morbidity and mortality in the Americas, where an estimated 80,574 new cases and 36,058 deaths were reported in 2008, with 85% of this burden occurring in Latin America and the Caribbean (1). Two oncogenic human papillomavirus (HPV) types (16 and 18) cause approximately 70% of cervical cancers and a substantial proportion of other HPV-related cancers (2). HPV vaccination provides an opportunity to greatly reduce cervical cancer burden through primary prevention of HPV infection. This report summarizes the progress toward HPV vaccine introduction in the Americas, focusing on countries that have introduced the vaccine in national or regional immunization programs. As of January 2011, four countries in the Americas had introduced HPV vaccine. Overcoming issues related to financing and delivery of HPV vaccine remains a key public health challenge to more widespread implementation of HPV vaccination in the Americas.

Two brands of HPV vaccine are available. Both are effective against oncogenic types HPV 16 and 18: a quadrivalent vaccine (Gardasil, Merck & Co., Inc.) and a bivalent vaccine (Cervarix, GlaxoSmithKline). Quadrivalent HPV vaccine is also effective against nononcogenic types HPV 6 and 11, which cause most genital warts. Pre- and post-licensure studies have shown that both vaccines are safe and well tolerated (3,4). Because HPV infections are acquired soon after initiation of sexual activity, HPV vaccine is most effective if administered before onset of sexual activity. The World Health Organization (WHO) recommends a 3-dose vaccine schedule, completed over the course of 6 months, for a likely primary target population of girls within the age range of 9 or 10 years through 13 years (3).

In April 2009, WHO issued a position statement recommending that routine HPV vaccination of females be included in national immunization programs, provided that 1) cervical cancer and/or HPV-related diseases constitute a public health priority; 2) vaccine introduction is programmatically feasible; 3) sustainable financing can be secured; and 4) cost-effectiveness of vaccination strategies in the country or region is considered. Preferably, HPV vaccines should be introduced as part of a coordinated strategy to prevent cervical cancer and should not undermine or divert funding from effective cervical cancer screening programs (3).

Information on HPV vaccine introduction in the United States and Canada was reviewed. Information about Latin America and the Caribbean was obtained through the Pan

American Health Organization (PAHO), which, as part of ongoing cooperation with its member states, monitors HPV vaccine introduction in the region.* Country-specific information was verified by representatives of PAHO member states. As of January 2011, four countries in the Americas had included HPV vaccine in their immunization programs: the United States, Canada, Panama, and Mexico (Table). HPV vaccination coverage varied widely. For the 3-dose vaccination series, coverage among girls aged 13–17 years in the United States was 32% in 2010; in parts of Canada, $\geq 80\%$ coverage has been reported among girls in the target age ranges.

In the United States, HPV vaccine has been available since 2006. HPV vaccine administration occurs mainly through pediatric and family medicine primary-care providers; a publicly funded program, Vaccines for Children, provides vaccine at no charge to children aged ≤ 18 years who are uninsured or meet eligibility criteria. Coverage rates have increased each year since introduction in 2006. In 2010, overall coverage among girls aged 13–17 years was 48.7% for ≥ 1 dose of HPV vaccine and 32.0% for 3 doses (5).

In Canada, HPV vaccine has been available since 2006. School-based HPV vaccination programs delivered by public health agencies began in 2007, and all provinces and territories had publicly funded programs in place by 2009 (6). Year of introduction, target age groups, and dosing schedules varied across provinces and territories; however, all offered HPV vaccine, free of charge, to girls in at least one of grades 4 to 9 (ages 9–15 years) (6). Ten of the 13 jurisdictions offered the vaccine to more than one grade as part of a time-limited catch-up program (7). Although most provinces and territories followed a 0-, 2-, 6-month dosing schedule, Quebec implemented a different approach; the first 2 vaccine doses were administered in grade 4 (ages 9–10 years), and the third dose in grade 9 (ages 14–15 years) (7). In September 2010, British Columbia also began using an extended dosing schedule. Series coverage varied nationally among jurisdictions that reported, with a range of 80% to 85% in the Atlantic (eastern) provinces to 51% in Ontario, after the first year of the program.

*PAHO countries include Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, the United States, Uruguay, and Venezuela.

TABLE. Implementation of human papillomavirus (HPV) vaccination in national immunization programs, by country and selected characteristics — the Americas, 2006–2010

Country	Year of implementation	Target population and age group	Catch-up age group	Geographic scope
United States*	2006	Females, 11–12 yrs	13–26 yrs	National
Canada†	2007	Females, 9–15 yrs	Varies	National
Panama	2008	Females, 10 yrs	None	National
Mexico‡	2008	Females, 9–12 yrs	Varies	Partial (5%)

* In the United States, quadrivalent HPV vaccine is approved by the Food and Drug Administration for use in females and males; the Advisory Committee on Immunization Practices (ACIP) states that quadrivalent HPV vaccine may be given to males aged 9–26 years, but currently it is not part of the routine immunization schedule for males.

† In Canada, quadrivalent HPV vaccine is approved for use in both females and males aged 9–26 years and females up to age 45 years by Health Canada; no recommendations from the National Advisory Committee on Immunization currently exist for women aged >26 years or for males of any age. Target ages vary across provinces and territories; the upper catch-up age in some jurisdictions ranges from 15 to 26 years.

‡ In Mexico, target age and catch-up age ranges varied by year, with an upper catch-up age as high as 16 years.

In Panama, the Ministry of Health added bivalent HPV vaccine to the national immunization program in 2008 for a target population of girls aged 10 years (8). Vaccine has been delivered through adolescent health services in both clinics and schools. Coverage rates have improved since vaccine introduction in 2008. In 2009, 1-dose coverage among girls aged 10 years was 89%, and 3-dose coverage was 46% (8). In 2010, 3-dose coverage was 67%.

In Mexico, HPV vaccine was introduced in 2008 to 125 targeted municipalities (comprising approximately 5% of Mexico's population) with the lowest human development index, which were estimated to have the highest incidence of cervical cancer (8). Quadrivalent HPV vaccine was delivered via mobile health clinics to girls aged 12–16 years in these municipalities using a 0-, 2-, 6-month dosing schedule (8). In 2008, 1-dose coverage among girls in the target age range within these municipalities was 98%, and 3-dose coverage was 81%. In 2009, Mexico expanded its HPV vaccination program to include 182 municipalities with the lowest human development index and changed to an extended dosing schedule that targets girls aged 9–12 years for the first 2 doses, delivered 6 months apart, followed by the third dose 60 months later. Using the extended dosing schedule, 1-dose coverage was 85%, and 2-dose coverage was 67%; 3-dose coverage at 60 months is yet to be measured. In 2011, Mexico's National Immunization Council approved a nationwide expansion of its HPV vaccination program to include school-based vaccination of all girls aged 9 years.

What is already known on this topic?

Cervical cancer is a major cause of morbidity and mortality in the Americas, where an estimated 80,574 new cases and 36,058 deaths were reported in 2008. Human papillomavirus (HPV) vaccines are safe and effective, and HPV vaccination offers an opportunity to reduce the substantial burden of cervical cancer.

What is added by this report?

This report summarizes the progress toward HPV vaccine introduction in the Americas. As of January 2011, four (11%) of the 35 countries in the Americas had included HPV vaccine in national or regional immunization programs: the United States, Canada, Panama, and Mexico. HPV vaccination coverage varied widely. For the 3-dose vaccination series, coverage among girls aged 13–17 years in the United States was 32% in 2010; in parts of Canada, ≥80% coverage has been reported among girls in the target age ranges.

What are the implications for public health practice?

Overcoming issues related to financing and delivery of HPV vaccine remain key public health challenges to more widespread implementation of HPV vaccination, especially in regions with a disproportionate burden of cervical cancers.

Reported by

*Andrea S. Vicari, DVM, PhD, Lara G. Dilsa, Pan American Health Organization. Shelley Deeks, MD, Surveillance and Epidemiology, Ontario Agency for Health Protection and Promotion, Ontario, Canada. Susana P. Cerón Mireles, MD, Mirella Loustalot Lacllette San Román, MD, Raquel Espinosa Romero, MD, National Center for Gender Equity and Reproductive Health; Maria del Carmen Domínguez Mulato, MD, Vesta Richardson López-Collada, MD, National Center for Child and Adolescent Health, Ministry of Health, Mexico. Yadira de Moltó, MD, Itzel S. de Hewitt, Ministry of Health, Panama. Mona Saraiya, MD, Div of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion; Terri Hyde, MD, Global Immunization Div, National Center for Immunization and Respiratory Diseases; Lauri E. Markowitz, MD, Eileen F. Dunne, MD, Elissa Meites, MD, Diya Surie, Div of Sexually Transmitted Diseases, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC. **Corresponding contributor:** Elissa Meites, emeites@cdc.gov, 404-639-8368.*

Editorial Note

HPV vaccines are safe and effective, and HPV vaccination offers an opportunity to reduce the substantial burden of cervical cancer for women in the Americas. Although progress has been made in HPV vaccine introduction in the Americas, only four of 35 (11%) PAHO countries included the vaccine in their immunization programs as of January 2011. Several

important challenges to implementation of HPV vaccination in the Americas exist, including cost, competing demands for the introduction of other new vaccines, and limited health-care delivery systems that reach adolescents.

HPV vaccines are among the most expensive vaccines available, and current prices in high-income countries[†] are not affordable for low- and middle-income countries. As with other new vaccines, international cooperation aims to increase HPV vaccine affordability by reducing the cost per dose. For instance, PAHO's Revolving Fund for vaccine procurement is a mechanism that aggregates vaccine purchases by countries in Latin America and the Caribbean and thus achieves economies of scale. Under this fund, HPV vaccine was first offered in 2010; the price per dose for participating countries in mid-2011 was \$14 (U.S. dollars). The GAVI Alliance (formerly the Global Alliance for Vaccines and Immunization) is a public-private partnership that provides financing and programmatic support for vaccine introduction in low-income countries. As of October 2011, GAVI had not committed funds for HPV vaccination, and only three Latin American and Caribbean countries (Guyana, Haiti, and Nicaragua) were GAVI-eligible, limiting the potential impact of this program in the Americas. Access to HPV vaccine at more affordable prices is critical for widespread introduction and long-term sustainability of this vaccine in Latin America and the Caribbean, where most countries are considered middle-income.

Another important challenge for implementation of HPV vaccination is limited experience in health-care delivery to adolescents. Historically, most immunization programs have focused on infant vaccination and therefore are less experienced with accessing and vaccinating adolescents. Some countries in the region have participated in demonstration projects to explore options for vaccine delivery. HPV vaccination projects, including school-based implementation projects, have been piloted in Bermuda, Bolivia, Cayman Islands, Haiti, and Peru. In addition to Mexico, the governments of Argentina, Guyana, Peru, and Suriname have been planning to implement national HPV vaccination programs in 2011. Efforts to identify the most effective and affordable strategies for vaccine delivery continue to be investigated (9). Although some countries are

using an extended 3-dose schedule, PAHO/WHO and CDC recommend a 3-dose schedule administered over 6 months.

The pace of global introduction of vaccines can be slow. For example, worldwide introduction of hepatitis B vaccine took approximately 20 years. During the past 4 years, several countries in Latin America have introduced rotavirus and/or pneumococcal conjugate vaccines, marking the first time that new vaccines were introduced in middle- and low-income countries at the same time as in high-income countries (10). Additional strategies are needed to overcome challenges to increasing HPV vaccine introduction, especially in regions with a disproportionate burden of cervical cancers. New opportunities to focus on health issues for women could support prioritization of this vaccine for Latin America and the Caribbean.

References

1. Arbyn M, Castellsagué X, de Sanjosé S, et al. Worldwide burden of cervical cancer in 2008. *Ann Oncol* 2011; April 6. [Epub ahead of print].
2. de Sanjosé S, Quint WG, Alemany L, et al. Human papillomavirus genotype attribution in invasive cervical cancer: a retrospective cross-sectional worldwide study. *Lancet Oncol* 2010;11:1048–56.
3. World Health Organization. Human papillomavirus vaccines. WHO position paper. *Wkly Epidemiol Rec* 2009;84:118–31.
4. Gee J, Naleway A, Shui I, et al. Monitoring the safety of quadrivalent human papillomavirus vaccine: findings from the Vaccine Safety Datalink. *Vaccine* 2011 (in press).
5. CDC. National and state vaccination coverage among adolescents aged 13 through 17 years—United States, 2010. *MMWR* 2011;60:1117–23.
6. Colucci R, Hryniuk W, Savage C. HPV vaccination programs in Canada: are we hitting the mark? Report card on cancer in Canada, 2008. Toronto, Canada: Cancer Advocacy Coalition of Canada; 2008. Available at <http://www.canceradvocacy.ca/reportcard/2008/HPV%20Vaccination%20Programs%20in%20Canada.pdf>. Accessed October 12, 2011.
7. Public Health Agency of Canada. Publicly funded immunization programs in Canada: routine schedule for infants and children including special programs and catch-up programs (as of September 2011). Ottawa, Canada: Public Health Agency of Canada; 2011. Available at <http://www.phac-aspc.gc.ca/im/ptimprog-progimpt/table-1-eng.php>. Accessed October 12, 2011.
8. Pan American Health Organization. New technologies for cervical cancer prevention: from scientific evidence to program planning. Report of the Latin American Subregional Meeting on Cervical Cancer Prevention, Panama City, Panama, June 2–3, 2010.
9. LaMontagne DS, Barge S, Le NT, et al. Human papillomavirus vaccine delivery strategies that achieved high coverage in low- and middle-income countries. *Bull World Health Organ* 2011; September 1. [Epub ahead of print].
10. de Oliveira LH, Danovaro-Holliday MC, Sanwogou NJ, Ruiz-Matus C, Tambini G, Andrus JK. Progress in the introduction of the rotavirus vaccine in Latin America and the Caribbean: four years of accumulated experience. *Pediatr Infect Dis J* 2011;30(1 Suppl):S61–6.

[†] Additional information available at <http://www.cdc.gov/vaccines/programs/vfc/cdc-vac-price-list.htm>.

Establishment of a Viral Hepatitis Surveillance System — Pakistan, 2009–2011

Hepatitis A is thought to infect almost all persons living in Pakistan by age 15 years (1), and hepatitis E is responsible for sporadic infections and outbreaks (2). The prevalence of hepatitis B virus (HBV) infection is estimated at 2.5% and the prevalence of hepatitis C virus (HCV) infection, estimated at 4.8%, is one of the highest rates in the world (3). Hepatitis surveillance in Pakistan has been syndromic, failing to confirm infection, distinguish among viruses, or collect information on risk factors. To understand the epidemiology of viral hepatitis in Pakistan more clearly, the Ministry of Health (MOH) asked the Pakistan Field Epidemiology and Laboratory Training Program (FELTP) to establish a hepatitis sentinel surveillance system in five large public hospitals in four provinces and Islamabad Capital Territory. This report describes the implementation of the viral hepatitis surveillance system in Pakistan and summarizes major findings from June 2010 through March 2011. A total of 712 cases of viral hepatitis were reported; newly reported HCV infection accounted for 53.2% of reported cases, followed by acute hepatitis A (19.8%), acute hepatitis E (12.2%), and newly reported HBV infection (10.8%). A history of health-care-related exposures, particularly receipt of therapeutic injections and infusions, commonly were reported by persons infected with HBV and HCV, and most patients reported drinking unboiled water. These findings point to the need for improved provider and community education about risks associated with unsafe injections, strengthening infection control practices in health facilities, increasing hepatitis B vaccination coverage, and improving access to clean drinking water in Pakistan.

Several studies have demonstrated the substantial burden of viral hepatitis in Pakistan (1–4). In response, MOH launched a National Program for Hepatitis Prevention and Control (NPHPC) in 2005. The program focused primarily on screening and treatment for HCV infection and did not establish laboratory-based viral hepatitis surveillance. At that time, hepatitis surveillance in Pakistan was syndromic, failing to provide laboratory confirmation of infection or information on the type of hepatitis virus, and failing to collect information on risk factors.

In August 2009, to monitor the effectiveness of NPHPC's activities and guide implementation of evidence-based prevention interventions, the Pakistan FELTP launched a hepatitis sentinel site surveillance system in collaboration with CDC's Division of Viral Hepatitis. Criteria for site selection were based on geographic distribution, patient load, capacity for laboratory testing, ability to conduct data entry, and capacity for transmitting viral hepatitis data to the National Institute of Health in Islamabad, where FELTP is housed.

Five public sector tertiary-care hospitals,* located in four provincial headquarters (Lahore, Peshawar, Karachi, and Quetta) and in Islamabad (the federal capital), were selected as sentinel sites for viral hepatitis surveillance. Staff members at each site were trained to identify cases of viral hepatitis from the pediatric and adult outpatient and inpatient departments using a range of criteria (e.g., specific symptoms and elevated liver enzymes in the blood, as detected by hospital-based laboratories). For those suspected cases, additional data were collected from consenting patients using a standard investigation form. The case reporting form was comprehensive, allowing for collection of information regarding patient demographics, symptoms, and risk-factor exposures during the 6 months before illness onset. Enzyme-linked immunoassay (ELISA) test kits were used to test serologic specimens for all types of viral hepatitis. Laboratory data were interpreted and cases classified based on preestablished case definitions† for each type of viral hepatitis. Data were entered into a database and transmitted to the FELTP office for analysis. Each month, viral hepatitis data were shared with NPHPC, sentinel surveillance sites, and federal and provincial health authorities. The hepatitis surveillance system was fully operational by June 2010.

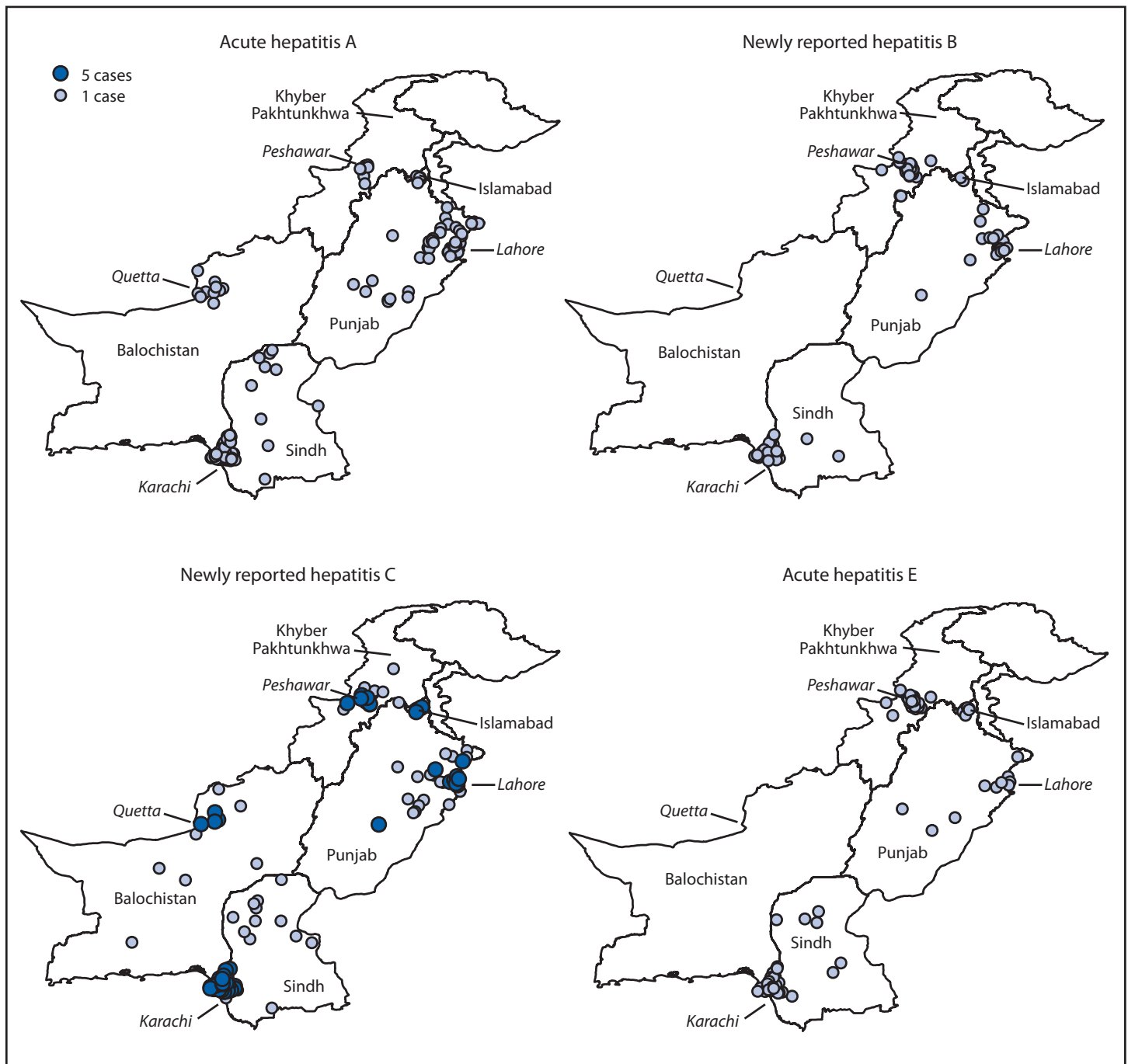
During June 2010–March 2011, a total of 712 cases of viral hepatitis were reported by the five sentinel sites. Newly reported hepatitis C was the most common cause of viral hepatitis, accounting for 53.2% of cases, followed by acute hepatitis A (19.8%), acute hepatitis E (12.2%), and newly reported hepatitis B (10.8%). In addition, among patients, 28 (3.9%) had evidence of HBV and HCV coinfection, and 11 (14.3%) of those with HBV infection had evidence of coinfection with hepatitis D.

Most persons reported with viral hepatitis resided near the reporting hospital, all of which were in large cities (Figure). For all types of viral hepatitis, nearly twice as many cases

* Sentinel surveillance sites included King Edward Medical University in Lahore, Punjab Province; Hyattabad Medical Complex in Peshawar, Khyber Pakhtunkhwa Province; Civil Hospital in Karachi, Sindh Province; Bolan Medical Complex in Quetta, Balochistan Province; and Federal Government Services Hospital in Islamabad Capital Territory.

† A confirmed case of viral hepatitis was defined as 1) discrete onset of symptoms and 2) jaundice or elevated liver enzymes, along with 3) positive laboratory criteria. Laboratory criteria for each type of hepatitis were as follows: acute hepatitis A: immunoglobulin M antibody to hepatitis A virus (IgM anti-HAV) positive; newly reported hepatitis B: antibody to hepatitis B core antigen (anti-HBc) positive and hepatitis B surface antigen (HBsAg) positive; newly reported hepatitis C: antibodies to hepatitis C virus (anti-HCV) positive and IgM anti-HAV negative and anti-HBc negative and IgM antibody to hepatitis E virus (IgM anti-HEV) negative; hepatitis D coinfection: newly reported hepatitis B that is antibody to hepatitis D virus (anti-HDV) positive; acute hepatitis E: IgM antibody to hepatitis E virus positive.

FIGURE. Geographic distribution of reported viral hepatitis cases, by virus type — Pakistan, June 2010–March 2011



were reported among males than females. Most reported cases occurred among persons aged 20–39 years (365 cases; 53.3%), although some variation occurred by type of hepatitis. Of 24 women with acute hepatitis E infection, 75% were of childbearing age (15–49 years), but information regarding pregnancy status was unavailable. Hospitalization rates ranged from 7.1% for acute hepatitis A infection to 10.4% for newly reported HBV infection (Table 1). No deaths were

reported among persons with any type of viral hepatitis. Of the 25 persons with any type of hepatitis who reported being vaccinated against HBV, two (8%) were aged ≤ 5 years, three (12%) were aged 6–19 years, and 20 (80%) were aged ≥ 20 years. Of the 13 hepatitis cases reported among children aged ≤ 5 years, only two of the children previously were vaccinated against HBV, including one child with newly reported HBV infection.

TABLE 1. Number and percentage* of confirmed, newly reported viral hepatitis cases, by virus type and selected characteristics — Pakistan, June 2010–March 2011

Characteristic	Acute hepatitis A		Newly reported hepatitis B		Newly reported hepatitis C		Acute hepatitis E		Total†	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Sex										
Male	98	(69.5)	51	(66.2)	235	(62.0)	63	(72.4)	447	(65.3)
Female	42	(30.5)	26	(33.8)	144	(38.0)	24	(27.6)	236	(34.5)
Age group (yrs)										
≤5	6	(4.3)	2	(2.6)	4	(1.1)	1	(1.1)	13	(1.9)
6–19	18	(12.8)	13	(16.9)	21	(5.5)	19	(21.8)	71	(10.4)
20–29	59	(41.8)	30	(39.0)	92	(24.3)	27	(31.0)	208	(30.4)
30–39	23	(16.3)	20	(26.0)	97	(25.6)	17	(19.5)	157	(22.9)
40–49	17	(12.1)	7	(9.1)	91	(24.0)	14	(16.1)	129	(18.8)
50–59	12	(8.5)	3	(3.9)	47	(12.4)	5	(5.7)	67	(9.8)
≥60	5	(3.5)	2	(2.6)	27	(7.1)	4	(4.6)	38	(5.5)
Surveillance site										
Karachi	67	(47.5)	28	(36.4)	204	(53.8)	41	(47.1)	340	(49.7)
Lahore	46	(32.6)	18	(23.4)	67	(17.7)	10	(11.5)	141	(20.6)
Peshawar	8	(5.7)	29	(37.7)	44	(11.6)	30	(34.5)	111	(16.2)
Islamabad	9	(6.4)	2	(2.6)	33	(8.7)	6	(6.9)	50	(7.3)
Quetta	11	(7.8)	0	(0.0)	31	(8.2)	0	(0.0)	42	(6.1)
Jaundice										
Yes	40	(28.4)	16	(20.8)	82	(21.6)	38	(43.7)	176	(25.7)
No	100	(70.9)	61	(79.2)	296	(78.1)	48	(55.2)	505	(73.8)
Elevated ALT‡										
Yes	105	(74.5)	66	(85.7)	310	(81.8)	69	(79.3)	550	(80.4)
No	30	(21.3)	10	(13.0)	58	(15.3)	16	(18.4)	114	(16.7)
Hospitalized										
Yes	10	(7.1)	8	(10.4)	37	(9.8)	9	(10.3)	64	(9.4)
No	64	(45.4)	41	(53.2)	138	(36.4)	37	(42.5)	280	(40.9)
Vaccinated against hepatitis B										
Yes	5	(3.5)	4	(5.2)	12	(3.2)	4	(4.6)	25	(3.6)
No	134	(95.0)	73	(94.8)	366	(96.6)	82	(94.3)	447	(65.4)
Total	141	(100)	77	(100)	379	(100)	87	(100)	684	(100)

* Percentages might not add up to 100% because of missing data.

† Total includes persons reported with acute hepatitis A, newly reported hepatitis B, newly reported hepatitis C, and acute hepatitis E. The 28 cases reported with hepatitis B and C coinfection were excluded because the viral hepatitis type corresponding to the acute stage of infection could not be determined.

‡ Alanine aminotransferase.

Drinking unboiled water during the past 6 months was commonly reported by persons with all types of viral hepatitis. HBV-infected case patients reported having undergone surgery and dental procedures, and exposure to therapeutic injections, intravenous infusions, and skin piercing more commonly than did those with other types of viral hepatitis (Table 2).

Reported by

Rana M. Safdar, MBBS, Muhammad Salman, MBBS, Rana J. Asghar, MBBS, Abdullah K. Soomro, MBBS, Field Epidemiology and Laboratory Training Program; Aftab Mohsin, MBBS, National Program for the Prevention and Control of Hepatitis; Birjees M. Kazi, MBBS, National Institute of Health, Ministry of Health, Pakistan. Henry Walke, MD, Nabil Ahmed, MPH, Div of Public Health Systems and Workforce Development, Center for Global Health; Francisco Auerhoff, MD, Div of Viral

Hepatitis, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; Rania A. Tohme, MD, EIS Officer, CDC. **Corresponding contributors:** Rania A. Tohme, rtohme@cdc.gov, 404-718-8577; Muhammad Salman, salman14m@yahoo.com, +92-333-538-4248.

Editorial Note

This report describes the establishment of the first sentinel surveillance system for viral hepatitis in Pakistan. Findings indicate that all types of viral hepatitis are highly prevalent in Pakistan, with newly reported HCV infection being the most frequently reported in this system. Continued transmission of enteric viral hepatitis A and E in Pakistan, as revealed by sentinel surveillance, can be attributed to lack of sanitation. Because most drinking water in Pakistan is contaminated, persons are encouraged to boil their drinking water. However, as revealed

TABLE 2. Percentage* of hepatitis cases with reported hepatitis risk factors occurring ≤6 months before symptom onset, by virus type and risk factors — Pakistan, June 2010–March 2011

Risk factor	Acute hepatitis A (n = 141)		Newly reported hepatitis B (n = 77)		Newly reported hepatitis C (n = 379)		Acute hepatitis E (n = 87)		p value [§]
	%	(95% CI) [†]	%	(95% CI)	%	(95% CI)	%	(95% CI)	
Contact with jaundiced person									
Yes	19.2	(12.7–25.7)	14.3	(6.5–22.1)	23.7	(19.4–27.9)	16.1	(8.4–23.8)	0.20
No	80.1	(73.5–86.7)	85.7	(77.9–93.5)	74.9	(70.5–79.3)	78.2	(69.5–86.9)	
Unknown	0.7	(0.0–2.1)	0.0	(0.0–0.0)	1.3	(0.2–2.4)	5.7	(0.8–10.6)	
Drinking unboiled water (yes)[¶]	87.9	(82.5–93.3)	88.3	(81.1–95.5)	87.9	(84.6–91.2)	82.8	(74.9–90.7)	0.60
Blood transfusion (yes)[¶]	2.8	(0.1–5.5)	2.6	(0.0–6.2)	3.4	(1.6–5.2)	1.1	(0.0–3.3)	0.70
History of surgery (yes)[¶]	2.1	(0.0–4.5)	14.3	(6.5–22.1)	7.7	(5.1–10.4)	6.9	(1.6–12.2)	0.01
Visit to dentist (yes)[¶]	9.2	(4.4–14.0)	24.7	(15.1–34.3)	18.6	(14.7–22.5)	13.8	(6.6–21.1)	0.01
Therapeutic injections									
Yes	46.8	(38.6–55.0)	62.3	(51.5–73.1)	44.1	(39.1–49.1)	57.5	(47.1–67.9)	0.03
No	21.3	(14.5–28.1)	13.0	(5.5–20.5)	17.2	(13.4–21.0)	9.2	(3.1–15.3)	
Unknown	31.9	(24.2–39.6)	24.7	(15.1–34.3)	38.8	(33.9–43.7)	33.3	(23.4–43.2)	
Intravenous infusions									
Yes	24.1	(17.0–31.2)	40.3	(29.3–51.3)	26.9	(22.4–31.4)	39.1	(28.9–49.4)	0.02
No	44.0	(35.8–52.2)	35.1	(24.4–45.8)	34.3	(29.5–39.1)	27.6	(18.2–37.0)	
Unknown	31.9	(24.2–39.6)	24.7	(15.1–34.3)	38.8	(33.9–43.7)	33.3	(23.4–43.2)	
Injection drug use (yes)[¶]	0.7	(0.0–2.1)	0.0	(0.0–0.0)	0.3	(0.0–0.8)	0.0	(0.0–0.0)	0.70
Skin piercing (yes)[¶]	4.3	(0.9–7.7)	18.2	(9.5–26.8)	6.1	(3.7–8.5)	13.8	(6.5–21.1)	<0.01
Tattooing and acupuncture (yes)[¶]	1.4	(0.0–3.3)	3.9	(0.0–8.2)	0.5	(0.0–1.2)	2.3	(0.0–5.5)	0.09
Visit to barber (men)[¶]	92.8	(88.5–97.1)	82.4	(73.9–90.9)	91.5	(88.7–94.3)	87.3	(80.3–94.3)	0.10
Visit to beauty parlor (women)[¶]	23.2	(16.2–30.2)	19.2	(10.4–28.0)	8.3	(5.5–11.1)	8.3	(2.5–14.1)	0.03

* Percentages might not total 100% because multiple risk factors might have been reported for a single case.

[†] Confidence interval.

[§] Test for difference in percentage of reported risk factor between different types of viral hepatitis.

[¶] All case reports included a response for this risk factor.

by sentinel surveillance, the majority of persons infected with any type of viral hepatitis reported drinking unboiled water, likely because of practicality and cost. Previous studies indicated that almost all persons living in Pakistan have been infected with hepatitis A virus by age 15 years (1). Although acute hepatitis A is usually a self-limited asymptomatic or mild illness in children, it can cause severe symptoms in adults. Reports of acute hepatitis A infections among persons aged >30 years might demonstrate an epidemiologic shift in age of infection, likely resulting from improved sanitation in some areas. Similar findings have been reported in a recent systematic review, which suggested a decrease in hepatitis A endemicity in the South Asia region that includes Pakistan (5). Furthermore, high prevalence of acute hepatitis E infection among women of childbearing age is an indicator of frequent exposure in a population at high risk for mortality from infection. These data underscore the need for improved access to safe drinking water in Pakistan to decrease hepatitis A and E transmission.

Surveillance data also revealed that despite initiation of childhood hepatitis B vaccination in 2002, the majority of children with hepatitis reported to the surveillance system

were not vaccinated and cases of HBV infection were reported among persons aged <10 years, including children aged ≤5 years. In Pakistan, the first dose of hepatitis B vaccine is given at age 6 weeks as part of the pentavalent vaccine, which provides immunization against diphtheria, tetanus, pertussis, HBV, and *Haemophilus influenzae* type b infections. Three-dose vaccine coverage in 2009 was reported to be >85% among children aged 12–23 months, although the demographic and health survey conducted in 2005 reported a coverage of 57% (6). Based on the findings in this report and the coverage survey data, routine coverage needs to be improved, and implementation of the hepatitis B birth dose to prevent infection among infants should be considered.

Data obtained through this system point to several potential opportunities to improve viral hepatitis control and prevention, particularly in injection safety and infection control. Consistent with previous studies, HBV and HCV infections were associated with a history of medical injections and procedures, suggesting that unsafe injection practices and health-care procedures contribute to transmission of HBV and HCV in Pakistan (3,4,7), although these practices also were

What is already known on this topic?

Viral hepatitis is a major public health problem in Pakistan, but an effective surveillance system had not been established. Hepatitis surveillance is essential to monitor trends and determine risk factors associated with transmission of each type of viral hepatitis in Pakistan, identify and respond to outbreaks, and help guide implementation of evidence-based prevention interventions.

What is added by this report?

A recently established hepatitis sentinel site surveillance system in Pakistan identified ongoing transmission of all types of viral hepatitis with a high proportion of newly reported hepatitis C infections. Health-care exposures, particularly receipt of therapeutic injections and infusions, were potential risk factors for newly reported hepatitis B and C infections.

What are the implications for public health practice?

Ongoing transmission of hepatitis in Pakistan might be prevented by educating health-care providers and the public about the risk for transmission of hepatitis B and C through unsafe and unnecessary injections, by promoting proper infection control practices and hepatitis B vaccination for infants, and by improving access to clean drinking water. Continued improvement and expansion of hepatitis surveillance would improve disease characterization, data quality, and long-term sustainability of control efforts.

commonly reported among hepatitis A and E patients. Use of therapeutic injections is a common practice in Pakistan, with an estimated four to eight injections per person per year, one of the highest rates in the world (4). These injections frequently are unnecessary and are administered for common, minor complaints such as fever and fatigue (4). The high demand for these injections is driven by the popular but erroneous belief that medications administered by injection are more effective than those given orally, and by economic incentives for health-care providers, who can charge patients more for medicines administered by injection (8). In Pakistan, injections often are given by unqualified practitioners using unsterile syringes, which increases the risk for transmission of bloodborne infections, including viral hepatitis (4,7). Addressing unsafe injections is essential to curb the ongoing epidemic of HCV infection in this country.

Since 2000, a significant increase in injection drug use also has been reported in Pakistan (9), and high prevalence rates of HCV infection have been reported among injection drug users (IDUs) (60%–93%) (4). However, only one case of hepatitis C reported through the surveillance system involved a reported IDU. This finding might be explained by the social stigma associated with admitting to such a behavior.

This report is subject to at least four limitations. First, because sentinel hospital sites are public hospitals located in large cities, the catchment population for the surveillance sites mainly includes the urban poor. Persons with acute hepatitis who seek care in the private sector and sites run by nongovernmental organizations (NGOs), which account for 70% of health-care services in Pakistan and provide services for high-risk groups (e.g., IDUs, men who have sex with men, and persons with human immunodeficiency virus) (10) might not be captured in this surveillance system. Second, surveillance data only represent persons who came to a health-care facility and received viral hepatitis testing; infected persons with mild disease not requiring medical attention or lacking access to or failing to receive medical care were not included, leading to a likely underreporting of the number of persons with hepatitis infection. Third, because of resource constraints and lack of diagnostic capabilities, immunoglobulin M antibody to hepatitis B core antigen (IgM anti-HBc) testing was not available, which limited the ability to distinguish acute from chronic HBV infection; identification of HBV infections was therefore solely based on acute symptoms and elevation of liver enzymes, along with positive hepatitis B surface antigen (HBsAg) and total anti-HBc. Similarly, lack of confirmatory testing using high signal-to-cut-off ratios, nucleic acid testing, or recombinant immunoblot assay for cases of HCV infection reported to the surveillance system, based on positive ELISA test results, might have led to an overestimation of the number of newly reported HCV infections. Finally, the associations between risk factors and hepatitis infections might be confounded by differences in the age distribution of persons with various types of hepatitis infection.

Despite these challenges, the hepatitis sentinel surveillance system provided Pakistan's health authorities with valuable information regarding the epidemiology of viral hepatitis and could serve as a foundation for strengthening hepatitis control in the country. Even in the United States, availability of complete and accurate information on hepatitis risk factors is difficult to achieve through a national surveillance system; most data on hepatitis risk factors are now based on enhanced sentinel surveillance from the Emerging Infections Program and previously were based on data from just six sentinel counties (of the more than 3,000 counties in the United States). However, representativeness of the Pakistan viral hepatitis surveillance system would improve with the addition of surveillance sites in the private sector and NGOs. Improving laboratory testing capacity and quality assurance of serologic testing would improve data quality. Ultimately, addressing

the actual burden of viral hepatitis in Pakistan will require a national surveillance system with adequate laboratory testing capacity and resources that could be incorporated with the proposed Integrated Disease Surveillance and Response System in Pakistan to provide long-term sustainability.

Data collected through Pakistan's sentinel surveillance system show that viral hepatitis remains a major public health problem in Pakistan. The data support the need for educating health-care providers and the public about the risk for HBV and HCV transmission through unsafe and unnecessary injections, promoting proper infection control practices and hepatitis B vaccination for infants, and improving access to clean water to prevent further transmission of hepatitis A and hepatitis E in Pakistan. Surveillance plays a key role in the identification of gaps and weaknesses in prevention and control efforts, providing useful information for decision makers and improving outbreak detection and response.

Acknowledgments

Jamshed Maqbool, MS, Jmail A. Ansari, MBBS, Zeeshan Hamid, MBBS; other Field Epidemiology and Laboratory Training Program staff members; Muhammad Munir, MBBS, King Edward Medical Univ, Lahore; Ghulam Sarwar Pirkani, MBBS, Bolan Medical Complex Hospital, Quetta; Fazle Raziq, MBBS, Hyatabad Medical Complex, Peshawar; Shakeel Malick, MBBS, Civil Hospital Karachi; staff members at the sentinel sites, Pakistan. Ryan Novak, PhD, Joseph Perz, DrPH, CDC.

References

1. Bosan A, Qureshi H, Bike KM, Ahmad I, Hafiz R. A review of hepatitis viral infections in Pakistan. *J Pak Med Assoc* 2010;60:1045–58.
2. Khan A, Tanaka Y, Kurbanov F, et al. Investigating an outbreak of acute viral hepatitis caused by hepatitis E virus variants in Karachi, South Pakistan. *J Med Virol* 2011;83:622–9.
3. Qureshi H, Bile KM, Jooma R, Alam SE, Afridi HUR. Prevalence of hepatitis B and C viral infections in Pakistan: findings of a national survey appealing for effective prevention and control measures. *East Mediterr Health J* 2010;16(Suppl):S15–23.
4. Ali SA, Donahue RMJ, Qureshi H, Vermund SH. Hepatitis B and hepatitis C in Pakistan: prevalence and risk factors. *Int J Infect Dis* 2009;13:9–19.
5. Jacobsen KH, Wiersma ST. Hepatitis A virus seroprevalence by age and world region, 1995 and 2005. *Vaccine* 2010;28:6653–7.
6. World Health Organization. WHO vaccine-preventable diseases: monitoring system—2010 global summary. Geneva, Switzerland: World Health Organization; 2010. Available at http://www.who.int/immunization/documents/who_ivb_2010/en/index.html. Accessed October 12, 2011.
7. Usman HR, Akhtar S, Rahbar MH, Hamid S, Moattar T, Luby SP. Injections in health care settings: a risk factor for acute hepatitis B virus infection in Karachi, Pakistan. *Epidemiol Infect* 2003;130:293–300.
8. Janjua NZ, Hutin YJ, Akhtar S, Ahmad K. Population beliefs about the efficacy of injections in Pakistan's Sindh province. *Public Health* 2006;120:824–33.
9. United Nations Office on Drug and Crime. Illicit drug trends in Pakistan. Islamabad, Pakistan: United Nations Office on Drug and Crime; 2008. Available at http://www.unodc.org/documents/regional/central-asia/Illicit%20Drug%20Trends%20Report_Pakistan_rev1.pdf. Accessed May 23, 2011.
10. Ejaz I, Shaikh BT, Rizvi N. NGOs and government partnerships for health systems strengthening: a qualitative study presenting viewpoints of government, NGOs and donors in Pakistan. *BMC Health Serv Res* 2011;11:122.

Recommendation of the Advisory Committee on Immunization Practices (ACIP) for Use of Quadrivalent Meningococcal Conjugate Vaccine (MenACWY-D) Among Children Aged 9 Through 23 Months at Increased Risk for Invasive Meningococcal Disease

In April 2011, the Food and Drug Administration approved the use of a quadrivalent meningococcal conjugate vaccine (MenACWY-D) (Menactra, Sanofi Pasteur) as a 2-dose primary series among children aged 9 through 23 months (1). Vaccination with meningococcal polysaccharide vaccine (MPSV4) is not recommended for children aged <2 years because of low immunogenicity and short duration of protection in this age group (2).

The Advisory Committee on Immunization Practices (ACIP) Meningococcal Vaccine Work Group reviewed data from four clinical studies on the safety and immunogenicity of MenACWY-D in healthy children aged 9 through 23 months. The pivotal immunogenicity study was a Phase III, multicenter, U.S. trial measuring seroresponse 30 days after 2 doses of MenACWY-D. Antibody titers were measured using a serum bactericidal assay containing human complement (hSBA). Seroresponse was defined as the proportion of subjects with hSBA titers of $\geq 1:8$, the accepted measure of protection. The first dose of MenACWY-D was administered alone at age 9 months, followed by a second dose administered alone ($n = 404$) or concomitantly with measles, mumps, rubella, and varicella vaccine ($n = 302$) or 7-valent pneumococcal conjugate vaccine (PCV7) ($n = 422$) at age 12 months. The percentage of subjects with hSBA titers $\geq 1:8$ was $>90\%$ for all meningococcal serogroups except serogroup W135 ($>80\%$) (3).

Immune responses to childhood vaccines recommended by ACIP at age 12 months, administered concomitantly with MenACWY-D, were evaluated in a separate randomized, multicenter, U.S. trial. After coadministration of MenACWY-D and PCV7, lower geometric mean concentrations (GMCs) of antipneumococcal immunoglobulin G (IgG) were observed compared with corresponding IgG GMCs when PCV7 was administered without MenACWY-D. The noninferiority criteria (twofold differences in IgG GMCs) for the prespecified pneumococcal endpoints were not met for serotypes 4, 6B, and 18C (3). However, the IgG antibody responses to the seven pneumococcal vaccine serotypes were still robust. For an individual, the clinical relevance of decreased pneumococcal antibody responses to three of seven vaccine serotypes is not known. No data are available on the immune responses to coadministered MenACWY-D and a CRM197-based 13-valent pneumococcal conjugate vaccine (PCV13). The most common solicited adverse events for MenACWY-D included

injection site tenderness and irritability; no serious adverse events were attributed to MenACWY-D (3).

Antibody persistence and response to a MenACWY-D booster dose was evaluated among 60 subjects who received 2 doses of MenACWY-D as part of a Phase II clinical study (4). hSBA titers were measured approximately 3 years after dose 2, which was administered at either 12 or 15 months of age. Before receiving a booster dose, $<50\%$ of subjects had maintained hSBA titers $\geq 1:8$ for any of the meningococcal serogroups. After booster immunization, $\geq 98\%$ of subjects had hSBA titers $\geq 1:8$ to each of the serogroups.

After review of these clinical data at the June 2011 meeting, ACIP recommended that children aged 9 through 23 months with certain risk factors for meningococcal disease receive a 2-dose series of MenACWY-D, 3 months apart. This includes children who have persistent complement component deficiencies (e.g., C5–C9, properdin, factor H, or factor D), children who are traveling to or residents of countries where meningococcal disease is hyperendemic or epidemic, and children who are in a defined risk group during a community or institutional meningococcal outbreak (2). Because of their high risk for invasive pneumococcal disease, children with functional or anatomic asplenia should be vaccinated with MenACWY-D beginning at age 2 years to avoid interference with the immunologic response to the infant series of PCV. If children aged ≥ 2 years with functional or anatomic asplenia have not yet received all recommended doses of PCV, they should receive all recommended doses separated from MenACWY-D by at least 4 weeks.

A 2-dose primary series is required for any child with the risk factors described in this report whose first dose was received before their second birthday. If dose 2 was not received on schedule (3 months after dose 1), it should be administered at the next available opportunity. The minimum interval between doses is 8 weeks. Children who received the 2-dose series at age 9 through 23 months and are at prolonged, increased risk should receive a booster 3 years after completing the primary series. After this initial booster, persons who remain in one of the increased risk groups should continue to receive a booster dose at 5-year intervals (Table). Recommendations for use of MenACWY-D among persons aged 2 through 55 years have been published previously and remain unchanged (2,5,6).

TABLE. Summary of MenACWY-D recommendations for children aged 9 through 23 months at high risk for invasive meningococcal disease — Advisory Committee on Immunization Practices (ACIP)

Risk group	Primary series	Booster dose
Children aged 9 through 23 months at high risk for invasive meningococcal disease (except children with functional or anatomic asplenia)*	2 doses, 3 months apart	Initial booster 3 years after completing the primary series [†]
	Catch-up dose if dose 2 is not received on schedule: at the earliest opportunity	Continued boosters at 5-year intervals after the initial booster [†]
Children at high risk for invasive meningococcal disease with functional or anatomic asplenia	2 doses, 2 months apart, beginning at age 2 years and ≥4 weeks after completion of PCV13 vaccine series	Initial booster 3 years after completing the primary series [†]
		Continued boosters at 5-year intervals after the initial booster [†]

Abbreviations: MenACWY-D = quadrivalent meningococcal conjugate vaccine; PCV13 = 13-valent pneumococcal conjugate vaccine.

* Children who have persistent complement component deficiencies (e.g., C5–C9, properdin, factor H, or factor D), children who are traveling to or residents of countries where meningococcal disease is hyperendemic or epidemic, and children who are in a defined risk group during a community or institutional meningococcal outbreak.

[†] If the person remains at increased risk.

References

1. Food and Drug Administration. April 22, 2011 approval letter—Menactra. Silver Spring, MD: US Department of Health and Human Services, Food and Drug Administration; 2011. Available at <http://www.fda.gov/biologicsbloodvaccines/vaccines/approvedproducts/ucm252511.htm>. Accessed October 4, 2011.
2. CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2005;54(No. RR-7).
3. Food and Drug Administration. Product approval information: package insert. Menactra (meningococcal (groups A, C, Y and W-135) polysaccharide diphtheria toxoid conjugate vaccine). Sanofi Pasteur. Silver Spring, MD: US Department of Health and Human Services, Food and Drug Administration; 2011. Available at <http://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm131170.pdf>. Accessed October 4, 2011.
4. Johnson DR. Menactra infant indication; meningococcal (groups A, C, Y and W-135) polysaccharide diphtheria toxoid conjugate vaccine. Presented at the meeting of the Advisory Committee on Immunization Practices, Atlanta, GA, June 22, 2011.
5. CDC. Recommendation from the Advisory Committee on Immunization Practices (ACIP) for use of quadrivalent meningococcal conjugate vaccine (MCV4) in children aged 2–10 years at increased risk for invasive meningococcal disease. *MMWR* 2007;56:1265–6.
6. CDC. Updated recommendation from the Advisory Committee on Immunization Practices (ACIP) for revaccination of persons at prolonged increased risk for meningococcal disease. *MMWR* 2009;58:1042–3.

Notes from the Field

Q Fever Outbreak Associated with Goat Farms — Washington and Montana, 2011

On April 22, 2011, the Q fever bacterium *Coxiella burnetii* was detected in a goat placenta collected from a farm in Washington, where 14 of 50 (28%) pregnant does had aborted since January. A county health alert advised health-care providers to ask patients with symptoms compatible with Q fever (e.g., fever, headache, chills, and myalgia) about exposure to goats, and the owners of the farm informed purchasers of their goats that *C. burnetii* had been detected in their herd. On May 25, the county health department reported a symptomatic patient with antibodies to *C. burnetii* who had purchased goats from the farm in February. On May 27, a report from Montana identified a child seropositive for *C. burnetii* whose family had purchased goats from the Washington farm in October 2010; one of the goats aborted triplets 2 weeks before the child's May 12, 2011, illness onset. On May 31, five more persons reported onset of symptoms compatible with Q fever from late March to mid-May, following exposure at a Montana farm to goats purchased from the Washington farm at various times during October 2010–January 2011. On June 10, the Washington State Department of Health and Montana Department of Public Health and Human Services requested CDC assistance to characterize the extent of the outbreak, distribute Q fever information, and identify others at risk for infection.

Goats sold after June 2010 by the Washington farm where *C. burnetii* initially was detected were traced to 21 farms in Washington (10 counties), Montana (three counties), and Oregon (one county). Seventeen farms participated in the outbreak investigation. *C. burnetii* infection was detected in 16 of 17 goat herds, including polymerase chain reaction confirmation of bacterial shedding in feces, vaginal mucous, or milk in 161 of 667 (24%) goats tested and an overall seroprevalence of 21% (131 of 615) by enzyme-linked immunosorbent assay. To date, 19% (20 of 108; 11 in Washington and nine in Montana) of serologically tested persons met the outbreak case definition of a person epidemiologically linked to at least one farm of interest (i.e., as a goat owner, farm visitor, or neighbor) since January 2011 with a *C. burnetii* phase II immunoglobulin G titer $\geq 1:128$ by immunofluorescence assay (1). No deaths were reported; four of the 20 persons were hospitalized, and five were asymptomatic.

Both states implemented a herd management plan to promote continued communication between public health and agricultural authorities and to advise goat owners to disinfect birthing areas, avoid contact with birth products, limit visitor access to animal holding areas, maintain an animal registry, and

report animal abortions and positive Q fever test results to state authorities. All homes within a 1-mile radius of the Washington farm where *C. burnetii* was initially detected and a Montana farm that also had high goat seroprevalence linked to human illness were visited once by CDC or by county public health officials and CDC in July or August 2011 to provide Q fever health education and offer human serologic testing. The states have received no additional reports of Q fever since July.

Q fever (a category B bioterrorism agent) is a nationally notifiable disease in humans and is endemic throughout the United States with a national seroprevalence of 3% (2). Washington and Montana typically report ≤ 3 cases of Q fever annually. Acute Q fever is characterized by a self-limited febrile illness or, less often, by pneumonia or hepatitis. Less common still is chronic Q fever, which affects $<5\%$ of infected persons and presents as endocarditis in patients with preexisting valvular disease. Pregnant women, immunosuppressed persons, and patients with a preexisting heart-valve defect are at greatest risk for chronic Q fever. Doxycycline is recommended for treatment of acute Q fever. *C. burnetii* is highly infectious, persists in the environment, and can travel for miles once windborne (3). Transmission can occur via inhalation of contaminated aerosols or dust; human-to-human transmission is rare. Cattle, sheep, and goats are the primary Q fever reservoirs. Continued community awareness is essential for disease prevention and control. Additional information is available at <http://www.cdc.gov/qfever>.

Reported by

Washington State Dept of Agriculture; Washington State Dept of Health. Montana Dept of Livestock; Montana Dept of Public Health and Human Svcs. Oregon Dept of Human Svc. Veterinary Svcs, Animal and Plant Health Inspection Svc, US Dept of Agriculture. Rickettsial Zoonoses Br, Div of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases; EIS officers, CDC. **Corresponding contributors:** Adam Bjork, PhD, abjork@cdc.gov, 404-639-2603; Alicia Anderson, DVM, aha5@cdc.gov, 404-639-4499.

References

1. Bamberg WM, Pape WJ, Beebe JL, et al. Outbreak of Q fever associated with a horse-boarding ranch, Colorado, 2005. *Vector Borne Zoonotic Dis* 2007;7:394–402.
2. Anderson AD, Kruszon-Moran D, Loftis AD, et al. Seroprevalence of Q fever in the United States, 2003–2004. *Am J Trop Med Hyg* 2009;81:691–4.
3. Hawker JI, Ayres JG, Blair I, et al. A large outbreak of Q fever in the West Midlands: windborne spread into a metropolitan area? *Commun Dis Public Health* 1998;1:180–7.

Announcements

National Latino AIDS Awareness Day — October 15, 2011

October 15, 2011, is National Latino AIDS Awareness Day, which seeks to raise awareness of the disproportionate impact of human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) on the Hispanic/Latino population in the United States. Estimates of HIV incidence for 2009 indicate that Hispanics had a rate of 26.4 per 100,000 population, compared with 9.1 for whites (1). Two of the three goals of the National HIV/AIDS Strategy are to reduce HIV incidence and to reduce HIV-related disparities (2).

National Latino AIDS Awareness Day is an opportunity to encourage increased HIV prevention activities, such as HIV testing, for Hispanics. In 2009, male-to-male sexual contact was associated with an estimated 64% of new infections among all Hispanics and an estimated 81% of new infections among Hispanic males (1). Among Hispanic females, high-risk heterosexual contact was associated with an estimated 85% of new infections (3). Data from CDC's National HIV Behavioral Surveillance System show that, in 2008, 46% of HIV-positive Hispanic men who have sex with men did not know they were infected compared with 26% of HIV-positive non-Hispanic white men who have sex with men (3).

Additional information about National Latino AIDS Awareness Day is available at <http://www.cdc.gov/features/latinoaidawareness> and at <http://www.nlaad.org>. Information about CDC activities and HIV resources is available at <http://www.cdc.gov/hiv/hispanics>.

References

1. Prejean J, Song R, Hernandez A, et al. Estimated HIV incidence in the United States, 2006–2009. *PLoS ONE* 2011;6(8):e17502.
2. White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States. Washington, DC: White House Office of National AIDS Policy; 2010. Available at <http://www.aids.gov/federal-resources/policies/national-hiv-aids-strategy/nhas.pdf>. Accessed October 5, 2011.
3. CDC. Prevalence and awareness of HIV infection among men who have sex with men—21 cities, United States, 2008. *MMWR* 2010;59:1201–7.

Application Deadline for The CDC Experience Applied Epidemiology Fellowship — December 2, 2011

The CDC Experience is a 1-year fellowship in applied epidemiology for third- and fourth-year medical students. Eight competitively selected fellows spend 10–12 months at CDC in Atlanta, Georgia, where they conduct epidemiologic analyses in areas of public health that interest them. The fellowship provides opportunities to enhance skills in research and analytic thinking, written and oral scientific presentations, and the practices of preventive medicine and public health.

Through this training, fellows acquire practical tools for approaching population-based health problems. Graduates of The CDC Experience have an appreciation of the role of epidemiology in medicine and health and are able to apply their knowledge and skills to enhance their clinical acumen and help improve the quality of the U.S. health-care system.

Information on applying for The CDC Experience is available at <http://www.cdc.gov/cdcexperiencefellowship>. Applications for the class of 2012–13 must be submitted by December 2, 2011. Questions can be addressed to Virginia Watson, program coordinator, by e-mail (vwatson1@cdc.gov).

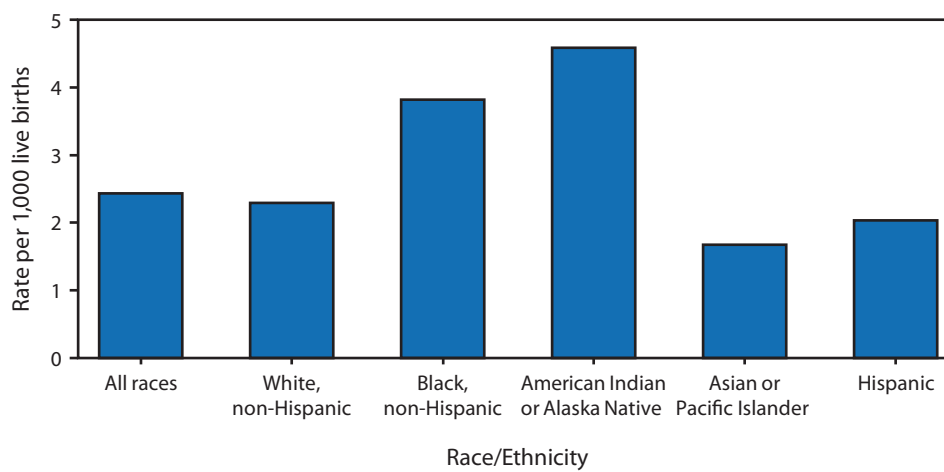
Errata: Vol. 60, No. SS-12

In the *MMWR* Surveillance Summary “Surveillance for Waterborne Disease Outbreaks and Other Health Events Associated with Recreational Water — United States, 2007–2008,” two errors occurred. On page 15, the source of the data in Table 9 should read, “**Waterborne Disease Outbreak Surveillance System**,” and on page 16, the source of the data in Table 11 should read, “**Hazardous Substance Emergency Events Surveillance System**.”

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Term Infant Mortality Rates, by Race/Ethnicity — United States, 2007



Approximately 82% of all U.S. births occur at term (i.e., at 37–41 weeks of gestation). The infant mortality rate for term infants was highest for American Indian or Alaska Native women (4.59 infant deaths per 1,000 live births), twice the rate for non-Hispanic white women (2.29). The rate for non-Hispanic black women was 3.82, which was 67% higher than for non-Hispanic white women. Rates for Asian or Pacific Islander (1.67) and Hispanic (2.02) women were lower than for non-Hispanic white women.

Source: MacDorman MF, Mathews TJ. Understanding racial and ethnic disparities in U.S. infant mortality rates. NCHS Data Brief no. 74. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2011. Available at <http://www.cdc.gov/nchs/data/databriefs/db74.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 October 8, 2011 (40th week)*

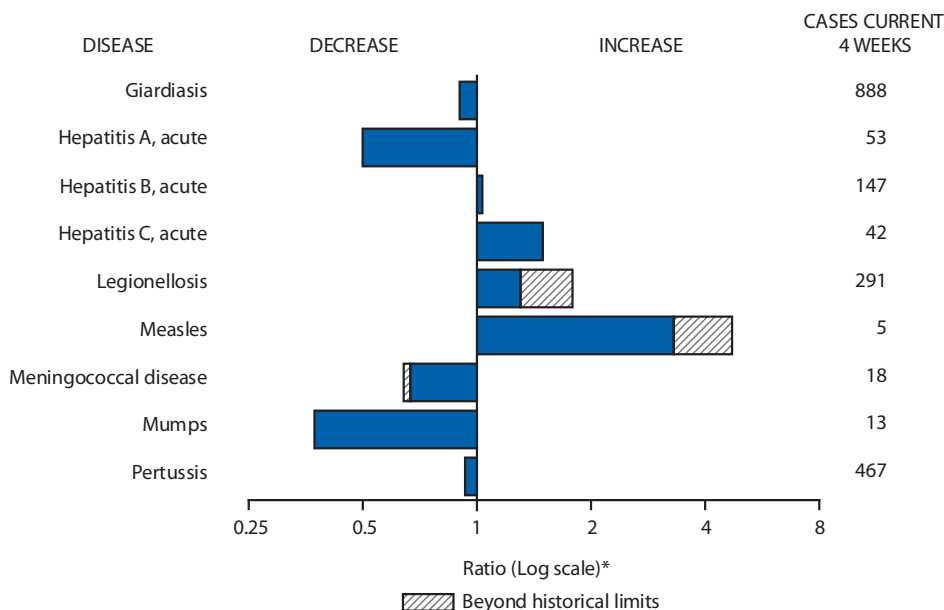
Disease	Current week	Cum 2011	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	—	—	1	—	1	1	
Arboviral diseases ^{§, ¶} :									
California serogroup virus disease	—	88	2	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	3	0	10	4	4	4	8	
Powassan virus disease	—	12	—	8	6	2	7	1	
St. Louis encephalitis virus disease	—	2	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	25	559	1	NN	NN	NN	NN	NN	NY (25)
Botulism, total	—	74	3	112	118	145	144	165	
foodborne	—	8	0	7	10	17	32	20	
infant	—	58	2	80	83	109	85	97	
other (wound and unspecified)	—	8	0	25	25	19	27	48	
Brucellosis	—	67	2	115	115	80	131	121	
Chancroid	9	22	0	24	28	25	23	33	NJ (9)
Cholera	—	28	0	13	10	5	7	9	
Cyclosporiasis [§]	1	139	2	179	141	139	93	137	FL (1)
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	5	1	23	35	30	22	29	
nonsensory type b	—	85	2	200	236	244	199	175	
unknown serotype	2	181	3	223	178	163	180	179	OH (1), FL (1)
Hansen disease [§]	1	35	2	98	103	80	101	66	CA (1)
Hantavirus pulmonary syndrome [§]	—	18	0	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal [§]	1	131	7	266	242	330	292	288	ID (1)
Influenza-associated pediatric mortality ^{§, ††}	—	112	3	61	358	90	77	43	
Listeriosis	9	548	19	821	851	759	808	884	NY (1), OH (1), NC (1), FL (2), AL (1), TX (1), WA (1), CA (1)
Measles ^{§§}	—	199	1	63	71	140	43	55	
Meningococcal disease, invasive ^{¶¶} :									
A, C, Y, and W-135	—	138	5	280	301	330	325	318	
serogroup B	—	72	2	135	174	188	167	193	
other serogroup	—	11	0	12	23	38	35	32	
unknown serogroup	6	316	8	406	482	616	550	651	OH (1), MO (3), FL (2)
Novel influenza A virus infections ^{***}	—	6	0	4	43,774	2	4	NN	
Plague	—	2	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic [§]	—	—	—	—	—	—	—	NN	
Psittacosis [§]	—	2	0	4	9	8	12	21	
Q fever, total [§]	—	84	2	131	113	120	171	169	
acute	—	63	1	106	93	106	—	—	
chronic	—	21	0	25	20	14	—	—	
Rabies, human	—	1	0	2	4	2	1	3	
Rubella ^{†††}	—	3	0	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV [§]	—	—	—	—	—	—	—	—	
Smallpox [§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome [§]	1	88	2	142	161	157	132	125	NY (1)
Syphilis, congenital (age <1 yr) ^{§§§}	—	148	8	377	423	431	430	349	
Tetanus	—	7	1	26	18	19	28	41	
Toxic-shock syndrome (staphylococcal) [§]	—	61	1	82	74	71	92	101	
Trichinellosis	—	8	0	7	13	39	5	15	
Tularemia	3	110	2	124	93	123	137	95	MO (1), VA (1), CA (1)
Typhoid fever	2	292	10	467	397	449	434	353	NYC (1), WA (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	—	51	1	91	78	63	37	6	
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	—	2	1	—	2	1	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	14	543	16	846	789	588	549	NN	OH (1), MD (2), FL (2), TN (1), AZ (1), WA (5), CA (2)
Viral hemorrhagic fever ^{¶¶¶}	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending October 8, 2011 (40th week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.
 * Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf.
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/5yearweeklyaverage.pdf.
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
 ** Data for H. influenzae (all ages, all serotypes) are available in Table II.
 †† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 2, 2011, no influenza-associated pediatric deaths occurring during the 2011-12 influenza season have been reported.
 ‡‡ No measles cases were reported for the current week.
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.
 *** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the six cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts are provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).
 ††† No rubella cases were reported for the current week.
 §§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
 ¶¶¶ There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals October 8, 2011, with historical data



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

Notifiable Disease Data Team and 122 Cities Mortality Data Team

Jennifer Ward	Deborah A. Adams
Willie J. Anderson	Lenee Blanton
Rosaline Dhara	Diana Harris Onweh
Pearl C. Sharp	Michael S. Wodajo

Morbidity and Mortality Weekly Report

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	<i>Chlamydia trachomatis</i> infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	12,573	26,130	31,142	1,005,986	994,211	73	360	568	14,129	NN	113	135	353	6,655	7,405
New England	466	857	2,043	32,717	31,856	—	0	1	1	NN	3	7	58	368	427
Connecticut	—	210	1,557	7,106	8,393	—	0	0	—	NN	—	1	52	106	77
Maine†	—	58	100	2,359	1,973	—	0	0	—	NN	—	1	4	37	85
Massachusetts	404	419	860	17,127	16,010	—	0	0	—	NN	3	3	7	137	139
New Hampshire	—	53	82	2,013	1,841	—	0	1	1	NN	—	1	5	50	51
Rhode Island†	—	76	154	3,004	2,669	—	0	0	—	NN	—	0	1	1	15
Vermont†	62	26	84	1,108	970	—	0	0	—	NN	—	1	4	37	60
Mid. Atlantic	1,703	3,374	5,069	130,117	130,267	—	0	1	3	NN	11	16	38	715	698
New Jersey	167	542	1,004	22,412	20,221	—	0	0	—	NN	—	0	4	21	38
New York (Upstate)	766	715	2,099	27,546	25,989	—	0	0	—	NN	7	4	15	182	178
New York City	—	1,121	2,612	40,581	47,801	—	0	0	—	NN	—	2	6	60	72
Pennsylvania	770	968	1,240	39,578	36,256	—	0	1	3	NN	4	9	26	452	410
E.N. Central	1,069	3,975	7,039	150,050	157,537	1	0	5	39	NN	57	32	139	2,035	2,087
Illinois	—	1,057	1,320	37,433	46,529	—	0	0	—	NN	—	3	26	156	297
Indiana	181	486	3,376	20,457	15,380	—	0	0	—	NN	—	4	14	180	240
Michigan	532	922	1,412	36,378	38,135	1	0	3	24	NN	2	6	13	256	273
Ohio	202	1,000	1,134	38,468	39,566	—	0	3	15	NN	52	9	95	940	400
Wisconsin	154	459	559	17,314	17,927	—	0	0	—	NN	3	8	58	503	877
W.N. Central	300	1,448	1,667	55,516	55,813	—	0	2	6	NN	7	18	83	1,088	1,635
Iowa	12	212	254	8,153	8,140	—	0	0	—	NN	—	6	18	296	343
Kansas	16	197	288	7,910	7,541	—	0	0	—	NN	—	0	8	31	93
Minnesota	—	274	368	9,375	11,972	—	0	0	—	NN	—	0	10	—	354
Missouri	260	544	759	21,484	20,116	—	0	0	—	NN	6	4	63	447	497
Nebraska†	—	112	218	4,574	3,774	—	0	2	6	NN	1	4	12	163	231
North Dakota	6	43	77	1,533	1,824	—	0	0	—	NN	—	0	12	28	19
South Dakota	6	63	93	2,487	2,446	—	0	0	—	NN	—	2	13	123	98
S. Atlantic	4,571	5,212	6,686	212,213	199,980	—	0	2	3	NN	9	21	37	903	843
Delaware	83	85	128	3,279	3,401	—	0	0	—	NN	—	0	1	7	7
District of Columbia	111	110	191	4,345	4,245	—	0	0	—	NN	—	0	1	5	5
Florida	864	1,492	1,698	58,791	58,600	—	0	0	—	NN	5	8	17	357	315
Georgia	688	979	2,384	39,331	34,184	—	0	0	—	NN	3	5	11	222	213
Maryland†	—	464	1,125	17,744	18,694	—	0	2	3	NN	1	1	6	54	31
North Carolina	1,356	862	1,688	38,488	33,746	—	0	0	—	NN	—	0	13	36	76
South Carolina†	603	516	946	21,657	19,996	—	0	0	—	NN	—	2	8	107	95
Virginia†	815	648	965	25,392	24,192	—	0	0	—	NN	—	2	8	99	85
West Virginia	51	77	121	3,186	2,922	—	0	0	—	NN	—	0	5	16	16
E.S. Central	1,314	1,840	3,314	73,446	70,654	—	0	0	—	NN	14	7	24	279	273
Alabama†	—	524	1,567	21,504	20,584	—	0	0	—	NN	2	3	13	112	138
Kentucky	435	269	2,352	12,157	11,656	—	0	0	—	NN	11	1	17	56	67
Mississippi	604	403	696	16,384	16,636	—	0	0	—	NN	—	1	4	37	19
Tennessee†	275	593	795	23,401	21,778	—	0	0	—	NN	1	1	6	74	49
W.S. Central	854	3,397	4,338	133,313	136,225	—	0	1	5	NN	3	7	62	366	406
Arkansas†	373	308	440	12,634	12,138	—	0	0	—	NN	—	0	3	17	30
Louisiana	349	482	1,052	17,281	20,728	—	0	1	5	NN	—	0	9	37	62
Oklahoma	132	222	850	7,710	11,104	—	0	0	—	NN	3	1	34	69	69
Texas†	—	2,415	3,107	95,688	92,255	—	0	0	—	NN	—	4	34	243	245
Mountain	596	1,727	2,155	68,072	64,423	41	278	457	11,246	NN	1	11	30	481	499
Arizona	310	520	698	21,304	21,047	41	273	455	11,119	NN	—	1	4	35	31
Colorado	—	416	848	18,239	15,031	—	0	0	—	NN	—	3	12	132	112
Idaho†	45	82	235	3,360	3,073	—	0	0	—	NN	—	2	9	91	86
Montana†	76	61	89	2,580	2,389	—	0	2	4	NN	1	1	6	61	41
Nevada†	139	201	380	8,313	7,811	—	1	5	72	NN	—	0	2	7	36
New Mexico†	—	196	1,183	7,810	8,367	—	0	4	38	NN	—	3	8	102	111
Utah	—	126	175	4,931	5,112	—	0	2	10	NN	—	1	5	33	61
Wyoming†	26	38	90	1,535	1,593	—	0	2	3	NN	—	0	5	20	21
Pacific	1,700	3,926	6,559	150,542	147,456	31	63	143	2,826	NN	8	11	29	420	537
Alaska	—	110	157	4,332	4,742	—	0	0	—	NN	—	0	3	10	4
California	979	2,963	5,763	116,905	112,885	31	63	143	2,819	NN	1	7	19	251	280
Hawaii	—	107	135	3,677	4,718	—	0	0	—	NN	—	0	0	—	1
Oregon	317	270	524	10,694	8,708	—	0	1	7	NN	1	2	11	96	183
Washington	404	415	522	14,934	16,403	—	0	0	—	NN	6	1	9	63	69
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	NN	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	8	81	189	757	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	69	102	349	4,131	4,729	—	0	0	—	NN	N	0	0	N	N
U.S. Virgin Islands	—	16	27	539	454	—	0	0	—	NN	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Dengue Virus Infection†									
	Dengue Fever§					Dengue Hemorrhagic Fever¶				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max			
United States	—	3	20	117	595	—	0	1	1	9
New England	—	0	3	1	6	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island**	—	0	0	—	1	—	0	0	—	—
Vermont**	—	0	1	1	2	—	0	0	—	—
Mid. Atlantic	—	0	4	24	203	—	0	0	—	5
New Jersey	—	0	3	—	25	—	0	0	—	—
New York (Upstate)	—	0	1	—	29	—	0	0	—	2
New York City	—	0	2	10	130	—	0	0	—	3
Pennsylvania	—	0	2	14	19	—	0	0	—	—
E.N. Central	—	0	4	8	58	—	0	0	—	1
Illinois	—	0	2	1	17	—	0	0	—	—
Indiana	—	0	1	1	12	—	0	0	—	—
Michigan	—	0	1	2	9	—	0	0	—	—
Ohio	—	0	1	2	14	—	0	0	—	—
Wisconsin	—	0	2	2	6	—	0	0	—	1
W.N. Central	—	0	6	5	24	—	0	1	—	—
Iowa	—	0	1	3	2	—	0	0	—	—
Kansas	—	0	1	1	4	—	0	0	—	—
Minnesota	—	0	1	—	13	—	0	0	—	—
Missouri	—	0	1	1	4	—	0	0	—	—
Nebraska**	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	6	54	211	—	0	1	1	2
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	6	39	164	—	0	0	—	2
Georgia	—	0	1	3	11	—	0	0	—	—
Maryland**	—	0	2	4	—	—	0	0	—	—
North Carolina	—	0	1	1	7	—	0	0	—	—
South Carolina**	—	0	0	—	13	—	0	0	—	—
Virginia**	—	0	1	7	14	—	0	1	1	—
West Virginia	—	0	0	—	2	—	0	0	—	—
E.S. Central	—	0	1	1	5	—	0	0	—	—
Alabama**	—	0	1	—	2	—	0	0	—	—
Kentucky	—	0	0	—	2	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	1	1	1	—	0	0	—	—
W.S. Central	—	0	2	6	25	—	0	0	—	1
Arkansas**	—	0	0	—	—	—	0	0	—	1
Louisiana	—	0	1	3	4	—	0	0	—	—
Oklahoma	—	0	1	—	4	—	0	0	—	—
Texas**	—	0	1	3	17	—	0	0	—	—
Mountain	—	0	2	3	17	—	0	0	—	—
Arizona	—	0	2	2	7	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	2	—	0	0	—	—
Montana**	—	0	1	—	3	—	0	0	—	—
Nevada**	—	0	0	—	4	—	0	0	—	—
New Mexico**	—	0	0	—	1	—	0	0	—	—
Utah	—	0	1	1	—	—	0	0	—	—
Wyoming**	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	4	15	46	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	2	5	32	—	0	0	—	—
Hawaii	—	0	4	5	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	1	5	13	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	29	230	873	9,430	—	0	4	14	221
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phps/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB 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).

§ Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.

¶ DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Ehrlichiosis/Anaplasmosis [†]														
	<i>Ehrlichia chaffeensis</i>					<i>Anaplasma phagocytophilum</i>					Undetermined				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
United States	3	6	109	596	576	19	16	50	554	1,488	—	2	13	88	80
New England	—	0	2	4	4	—	2	24	184	82	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	5	—	32	—	0	0	—	—
Maine [§]	—	0	1	1	2	—	0	2	13	14	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	17	124	—	—	0	0	—	—
New Hampshire	—	0	1	2	2	—	0	4	14	13	—	0	1	1	2
Rhode Island [§]	—	0	1	1	—	—	0	10	30	22	—	0	0	—	—
Vermont [§]	—	0	0	—	—	—	0	1	3	1	—	0	0	—	—
Mid. Atlantic	1	1	7	53	80	18	4	27	256	222	—	0	2	11	10
New Jersey	—	0	1	—	48	—	0	3	—	61	—	0	0	—	1
New York (Upstate)	1	0	7	46	25	18	3	25	224	149	—	0	2	11	6
New York City	—	0	1	7	5	—	0	5	29	11	—	0	0	—	—
Pennsylvania	—	0	1	—	2	—	0	1	3	1	—	0	1	—	3
E.N. Central	—	0	3	22	41	—	0	9	14	457	—	1	4	36	42
Illinois	—	0	2	12	15	—	0	2	6	7	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	28	15
Michigan	—	0	2	4	2	—	0	1	—	3	—	0	2	4	—
Ohio	—	0	1	6	6	—	0	1	5	2	—	0	1	1	—
Wisconsin	—	0	1	—	18	—	0	9	3	445	—	0	1	1	24
W.N. Central	—	1	18	146	116	1	0	20	32	652	—	0	11	15	9
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	1	2	6	—	0	1	2	1	—	0	0	—	—
Minnesota	—	0	12	—	—	—	0	20	1	641	—	0	11	—	—
Missouri	—	1	18	142	108	—	0	7	26	10	—	0	7	14	9
Nebraska [§]	—	0	1	1	2	1	0	0	1	—	—	0	1	1	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	1	1	—	—	0	1	2	—	—	0	0	—	—
S. Atlantic	1	3	33	206	226	—	1	8	47	55	—	0	1	9	6
Delaware	—	0	2	15	17	—	0	1	1	4	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	—	0	3	13	8	—	0	3	8	3	—	0	0	—	—
Georgia	—	0	3	16	20	—	0	2	7	1	—	0	1	1	1
Maryland [§]	—	0	3	23	19	—	0	2	4	13	—	0	0	—	2
North Carolina	—	0	17	55	87	—	0	6	17	22	—	0	0	—	—
South Carolina [§]	—	0	1	1	4	—	0	0	—	1	—	0	0	—	—
Virginia [§]	1	1	14	83	69	—	0	3	10	11	—	0	1	7	3
West Virginia	—	0	1	—	2	—	0	0	—	—	—	0	1	1	—
E.S. Central	—	0	8	66	86	—	0	2	15	18	—	0	3	11	8
Alabama [§]	—	0	2	4	10	—	0	1	4	7	N	0	0	N	N
Kentucky	—	0	3	10	16	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	3	3	—	0	1	1	2	—	0	0	—	1
Tennessee [§]	—	0	6	49	57	—	0	2	10	9	—	0	3	11	6
W.S. Central	1	0	87	99	22	—	0	9	3	2	—	0	0	—	1
Arkansas [§]	1	0	12	42	4	—	0	2	2	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	82	56	14	—	0	7	1	2	—	0	0	—	—
Texas [§]	—	0	1	1	3	—	0	1	—	—	—	0	0	—	1
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	4	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	3	—
Colorado	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Idaho [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Montana [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Nevada [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
New Mexico [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Utah	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
Wyoming [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	1	3	—	—	0	1	1	2
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	1	—	1	—	0	0	—	—	—	0	1	1	2
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	1	3	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Cumulative total *E. ewingii* cases reported for year 2011 = 13.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	216	294	456	11,373	15,396	3,093	5,925	7,484	228,444	234,447	25	64	141	2,420	2,325
New England	22	28	49	1,146	1,320	54	100	206	3,927	4,300	—	4	12	162	137
Connecticut	—	4	9	152	243	—	41	150	1,592	1,938	—	1	6	40	28
Maine [§]	3	3	10	138	160	—	3	17	171	135	—	0	2	17	10
Massachusetts	8	13	27	550	568	47	47	80	1,766	1,848	—	2	6	80	71
New Hampshire	—	2	7	90	136	1	2	7	103	113	—	0	2	11	10
Rhode Island [§]	—	1	10	57	60	—	7	16	252	218	—	0	2	9	11
Vermont [§]	11	3	16	159	153	6	0	8	43	48	—	0	3	5	7
Mid. Atlantic	63	58	103	2,258	2,565	366	759	1,121	29,713	27,252	8	14	32	551	435
New Jersey	—	5	20	134	371	72	138	237	5,939	4,377	—	2	7	82	82
New York (Upstate)	48	22	72	869	869	123	114	271	4,419	4,245	3	3	18	144	113
New York City	5	16	29	655	726	—	245	497	9,037	9,192	2	3	6	129	71
Pennsylvania	10	16	27	600	599	171	263	365	10,318	9,438	3	4	11	196	169
E.N. Central	16	46	78	1,791	2,622	266	1,021	2,091	39,178	43,343	6	11	22	425	376
Illinois	—	9	16	297	583	—	265	369	9,444	11,995	—	3	10	124	131
Indiana	—	6	11	189	324	39	115	1,018	4,932	4,325	—	2	7	77	76
Michigan	2	10	25	373	562	130	235	491	9,243	10,501	—	1	4	51	25
Ohio	11	17	30	634	652	55	313	395	12,102	12,726	6	2	7	120	92
Wisconsin	3	8	17	298	501	42	93	126	3,457	3,796	—	1	5	53	52
W.N. Central	17	24	54	879	1,694	102	300	363	11,620	11,292	3	3	10	118	167
Iowa	5	5	15	220	232	4	37	53	1,464	1,355	—	0	0	—	1
Kansas	—	2	7	72	178	4	39	57	1,568	1,607	2	0	2	18	16
Minnesota	—	0	26	—	678	—	35	53	1,281	1,685	—	0	5	—	59
Missouri	9	8	23	333	329	94	150	186	5,869	5,301	—	1	5	62	65
Nebraska [§]	2	4	11	152	176	—	24	49	905	853	1	1	3	26	16
North Dakota	1	0	12	35	19	—	4	8	148	156	—	0	6	11	10
South Dakota	—	1	7	67	82	—	10	20	385	335	—	0	1	1	—
S. Atlantic	41	53	98	2,062	3,096	1,279	1,463	1,862	57,149	59,370	7	15	31	575	605
Delaware	1	0	2	26	26	10	16	31	617	780	—	0	2	3	5
District of Columbia	—	1	3	29	46	27	39	69	1,560	1,656	—	0	1	—	3
Florida	29	23	51	933	1,667	236	378	465	15,138	15,816	2	5	12	186	145
Georgia	—	13	51	556	616	231	313	874	11,932	11,830	1	3	7	106	130
Maryland [§]	7	4	13	209	215	—	117	246	4,268	5,425	4	2	5	72	54
North Carolina	N	0	0	N	N	409	289	535	12,438	11,312	—	1	7	56	107
South Carolina [§]	2	2	8	88	119	200	144	257	6,181	6,174	—	1	5	60	70
Virginia [§]	2	6	32	199	374	157	110	176	4,395	5,978	—	1	8	75	71
West Virginia	—	0	8	22	33	9	16	29	620	399	—	0	9	17	20
E.S. Central	1	4	11	134	166	359	504	1,007	20,068	19,125	—	3	11	149	139
Alabama [§]	1	4	11	134	166	—	159	409	6,585	5,963	—	1	4	45	23
Kentucky	N	0	0	N	N	128	70	712	3,347	3,019	—	0	4	21	27
Mississippi	N	0	0	N	N	183	118	197	4,492	4,688	—	0	3	12	10
Tennessee [§]	N	0	0	N	N	48	143	224	5,644	5,455	—	2	5	71	79
W.S. Central	5	5	15	196	319	233	918	1,319	34,504	37,576	—	2	26	104	110
Arkansas [§]	3	2	9	93	99	98	90	138	3,767	3,683	—	0	3	27	16
Louisiana	2	3	10	103	158	112	133	372	4,932	6,325	—	1	4	37	25
Oklahoma	—	0	0	—	62	23	59	254	2,198	3,340	—	1	19	39	61
Texas [§]	N	0	0	N	N	—	599	867	23,607	24,228	—	0	4	1	8
Mountain	4	25	47	977	1,402	142	201	266	8,223	7,398	—	5	12	200	244
Arizona	—	3	6	100	130	107	75	128	3,342	2,456	—	2	6	74	91
Colorado	—	12	25	466	557	—	44	89	1,690	2,143	—	1	5	48	67
Idaho [§]	1	3	9	109	170	4	3	15	114	87	—	0	2	15	13
Montana [§]	2	2	5	64	85	3	1	4	64	87	—	0	1	2	2
Nevada [§]	—	1	6	44	82	28	38	103	1,586	1,414	—	0	2	14	6
New Mexico [§]	—	2	6	70	86	—	28	98	1,207	915	—	1	4	32	33
Utah	—	3	9	104	248	—	4	10	187	268	—	0	3	14	26
Wyoming [§]	1	0	5	20	44	—	1	3	33	28	—	0	1	1	6
Pacific	47	49	128	1,930	2,212	292	612	791	24,062	24,791	1	3	10	136	112
Alaska	—	2	7	74	82	—	20	34	748	1,023	—	0	3	19	20
California	24	33	67	1,300	1,349	234	504	695	19,971	20,213	—	1	6	35	16
Hawaii	—	0	4	24	47	—	13	26	474	572	—	0	3	19	19
Oregon	2	7	20	259	399	12	26	40	1,039	804	1	1	6	60	52
Washington	21	7	57	273	335	46	48	86	1,830	2,179	—	0	2	3	5
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	3	—	0	10	6	80	—	0	0	—	—
Puerto Rico	3	1	7	37	76	10	6	14	252	237	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	7	83	111	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† 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).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
United States	13	22	74	873	1,252	20	47	167	1,826	2,527	8	18	39	759	637
New England	—	1	4	51	82	—	1	8	59	44	—	1	5	45	47
Connecticut	—	0	3	12	22	—	0	4	10	18	—	0	3	25	32
Maine†	—	0	2	6	7	—	0	2	7	11	—	0	2	6	2
Massachusetts	—	0	3	25	43	—	1	6	40	8	—	0	2	10	12
New Hampshire	—	0	1	—	1	—	0	1	2	5	N	0	0	N	N
Rhode Island†	—	0	1	3	9	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	2	5	—	—	0	0	—	2	—	0	1	4	1
Mid. Atlantic	2	4	10	160	214	2	5	12	198	229	2	1	6	66	81
New Jersey	—	1	4	25	62	—	1	4	32	62	—	0	4	1	18
New York (Upstate)	2	1	4	40	46	—	1	9	37	36	1	0	4	37	39
New York City	—	1	6	52	62	—	1	5	60	71	—	0	2	2	3
Pennsylvania	—	1	3	43	44	2	2	4	69	60	1	0	4	26	21
E.N. Central	1	4	8	150	165	1	5	37	253	390	1	3	12	141	72
Illinois	—	1	4	42	43	—	1	6	49	101	—	0	2	6	—
Indiana	—	0	3	12	11	—	1	3	38	60	—	1	5	49	24
Michigan	—	1	6	58	56	—	1	6	66	102	1	2	7	80	33
Ohio	1	1	3	33	39	1	1	30	80	85	—	0	1	5	8
Wisconsin	—	0	2	5	16	—	0	3	20	42	—	0	1	1	7
W.N. Central	—	1	25	34	64	—	2	16	104	94	—	0	6	7	15
Iowa	—	0	1	5	9	—	0	1	8	13	—	0	0	—	—
Kansas	—	0	2	3	10	—	0	2	10	7	—	0	1	3	2
Minnesota	—	0	22	9	14	—	0	15	9	7	—	0	6	2	6
Missouri	—	0	1	10	16	—	2	5	65	54	—	0	1	—	5
Nebraska†	—	0	1	5	14	—	0	3	11	11	—	0	1	2	2
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	1	—	0	1	1	2	—	0	0	—	—
S. Atlantic	2	5	13	173	273	10	12	55	505	700	3	4	11	186	143
Delaware	—	0	1	2	7	1	0	1	3	23	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	1	1	6	61	109	5	4	11	162	232	1	1	4	47	43
Georgia	—	1	3	33	33	—	2	8	71	137	—	1	3	29	22
Maryland†	—	0	4	21	18	2	1	4	43	52	—	0	2	28	19
North Carolina	—	0	3	20	41	2	2	12	87	82	1	1	7	45	32
South Carolina†	—	0	2	9	22	—	1	4	26	46	—	0	1	1	1
Virginia†	1	0	3	19	40	—	1	7	49	67	—	0	2	14	10
West Virginia	—	0	5	8	2	—	0	43	64	58	1	0	6	22	14
E.S. Central	1	0	6	39	33	4	9	14	331	279	—	3	7	138	122
Alabama†	1	0	2	5	6	1	2	5	86	55	—	0	3	16	5
Kentucky	—	0	6	8	13	1	2	6	81	100	—	1	6	56	85
Mississippi	—	0	1	7	2	—	1	3	35	27	U	0	0	U	U
Tennessee†	—	0	5	19	12	2	4	8	129	97	—	1	5	66	32
W.S. Central	3	3	15	95	106	3	7	67	226	442	—	2	11	67	53
Arkansas†	—	0	0	—	2	—	1	4	38	48	—	0	0	—	1
Louisiana	—	0	1	2	9	—	1	4	23	44	—	0	2	5	2
Oklahoma	—	0	4	3	1	2	1	16	59	77	—	1	10	34	19
Texas†	3	2	11	90	94	1	3	45	106	273	—	0	3	28	31
Mountain	—	1	5	52	124	—	1	4	56	111	—	1	4	45	51
Arizona	—	0	2	14	53	—	0	3	13	19	U	0	0	U	U
Colorado	—	0	2	17	33	—	0	2	15	39	—	0	3	14	12
Idaho†	—	0	1	6	6	—	0	1	2	6	—	0	2	8	9
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	3	2
Nevada†	—	0	3	5	13	—	0	3	16	34	—	0	1	6	5
New Mexico†	—	0	1	5	3	—	0	2	5	5	—	0	1	11	13
Utah	—	0	2	1	9	—	0	1	5	7	—	0	1	1	10
Wyoming†	—	0	1	2	3	—	0	1	—	1	—	0	1	2	—
Pacific	4	3	15	119	191	—	3	25	94	238	2	1	12	64	53
Alaska	—	0	1	2	1	—	0	1	4	3	U	0	0	U	U
California	1	2	15	84	152	—	1	22	40	159	—	1	4	27	21
Hawaii	—	0	2	7	7	—	0	1	5	5	U	0	0	U	U
Oregon	—	0	2	6	16	—	0	4	27	35	—	0	3	11	14
Washington	3	0	4	20	15	—	0	4	18	36	2	0	5	26	18
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	4	—	1	8	28	68	—	0	4	10	56
Puerto Rico	—	0	2	6	14	—	0	3	8	20	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	75	53	161	2,654	2,533	356	361	1,847	24,134	26,003	10	27	114	1,009	1,342
New England	6	4	42	269	204	1	75	409	5,044	7,837	—	2	20	74	86
Connecticut	—	1	10	53	32	—	34	218	2,117	2,651	—	0	20	10	2
Maine†	—	0	2	10	10	—	12	62	589	573	—	0	1	4	5
Massachusetts	6	2	27	167	102	1	22	73	1,085	3,013	—	1	5	49	65
New Hampshire	—	0	3	15	20	—	11	62	643	1,144	—	0	2	2	4
Rhode Island†	—	0	4	14	31	—	1	31	111	156	—	0	4	3	7
Vermont†	—	0	2	10	9	—	5	66	499	300	—	0	1	6	3
Mid. Atlantic	28	15	66	864	689	336	152	1,188	15,060	9,238	4	6	17	213	410
New Jersey	—	2	18	124	118	85	53	571	6,279	3,207	—	0	6	8	84
New York (Upstate)	13	5	27	274	208	143	35	214	2,938	2,136	4	1	4	40	64
New York City	1	3	17	139	126	—	2	17	83	604	—	3	10	117	215
Pennsylvania	14	5	32	327	237	108	63	498	5,760	3,291	—	1	4	48	47
E.N. Central	11	10	51	570	553	—	20	103	1,088	3,513	—	3	7	118	137
Illinois	—	1	9	80	133	—	1	18	126	126	—	1	4	44	52
Indiana	1	1	5	71	47	—	0	15	87	78	—	0	2	8	12
Michigan	1	3	15	139	140	—	1	13	94	84	—	0	4	26	27
Ohio	9	4	34	279	178	—	1	9	41	25	—	1	4	34	35
Wisconsin	—	0	2	1	55	—	15	64	740	3,200	—	0	2	6	11
W.N. Central	1	2	9	67	91	—	2	26	98	1,964	—	1	45	25	59
Iowa	—	0	2	8	14	—	0	11	73	83	—	0	3	15	10
Kansas	—	0	2	9	9	—	0	2	10	10	—	0	2	6	10
Minnesota	—	0	8	—	23	—	0	23	—	1,845	—	0	45	—	3
Missouri	—	1	5	42	26	—	0	0	—	4	—	0	1	—	18
Nebraska†	1	0	1	5	8	—	0	2	8	8	—	0	1	3	15
North Dakota	—	0	1	1	4	—	0	10	4	13	—	0	1	—	—
South Dakota	—	0	2	2	7	—	0	1	3	1	—	0	1	1	3
S. Atlantic	19	9	27	384	418	17	50	164	2,612	3,146	4	8	23	345	350
Delaware	—	0	2	11	13	—	11	46	654	558	—	0	3	6	2
District of Columbia	—	0	3	9	16	—	0	2	11	36	—	0	1	5	11
Florida	5	3	9	127	129	2	1	7	87	73	1	2	7	80	106
Georgia	—	1	4	30	50	4	0	3	21	10	—	1	5	65	58
Maryland†	10	1	14	83	90	7	17	111	935	1,336	2	2	13	90	75
North Carolina	2	1	7	54	50	—	0	8	51	66	—	0	6	34	40
South Carolina†	—	0	5	14	11	—	0	6	24	27	—	0	1	4	3
Virginia†	2	1	9	50	48	4	17	76	761	942	1	1	8	61	52
West Virginia	—	0	2	6	11	—	0	14	68	98	—	0	0	—	3
E.S. Central	2	2	10	125	109	—	1	5	47	41	—	1	4	26	26
Alabama†	2	0	2	22	15	—	0	2	14	2	—	0	3	6	6
Kentucky	—	0	3	26	24	—	0	1	1	5	—	0	1	6	6
Mississippi	—	0	3	11	12	—	0	1	3	—	—	0	1	1	2
Tennessee†	—	1	8	66	58	—	0	3	29	34	—	0	3	13	12
W.S. Central	1	2	13	94	134	—	1	29	32	91	—	1	18	27	81
Arkansas†	1	0	2	10	16	—	0	0	—	—	—	0	1	4	4
Louisiana	—	0	3	14	9	—	0	1	1	3	—	0	1	1	4
Oklahoma	—	0	3	9	11	—	0	0	—	—	—	0	1	5	5
Texas†	—	2	11	61	98	—	1	29	31	88	—	0	17	17	68
Mountain	—	2	5	71	137	—	0	4	33	25	1	1	4	51	52
Arizona	—	1	3	23	49	—	0	2	9	2	1	0	4	20	23
Colorado	—	0	2	4	25	—	0	1	1	2	—	0	3	18	16
Idaho†	—	0	1	5	5	—	0	2	3	8	—	0	1	2	2
Montana†	—	0	1	1	4	—	0	3	9	4	—	0	1	1	2
Nevada†	—	0	2	12	18	—	0	1	3	1	—	0	2	7	5
New Mexico†	—	0	2	8	7	—	0	2	6	5	—	0	1	2	1
Utah	—	0	2	14	22	—	0	1	1	3	—	0	1	1	3
Wyoming†	—	0	2	4	7	—	0	1	1	—	—	0	0	—	—
Pacific	7	5	21	210	198	2	2	11	120	148	1	4	10	130	141
Alaska	—	0	0	—	2	—	0	2	7	6	—	0	2	5	3
California	5	4	15	177	168	1	2	9	93	95	—	2	8	91	96
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	5	3
Oregon	1	0	3	14	11	1	0	2	14	38	—	0	4	12	10
Washington	1	0	6	18	16	—	0	4	6	9	1	0	3	17	29
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	1	1	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	0	—	5
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	6	15	53	537	610	2	7	47	229	2,411	148	282	2,925	10,546	17,217
New England	—	0	3	24	15	—	0	1	7	24	3	10	19	427	410
Connecticut	—	0	1	3	2	—	0	0	—	11	—	1	3	35	94
Maine [§]	—	0	1	4	3	—	0	1	—	1	2	2	12	123	38
Massachusetts	—	0	2	11	5	—	0	1	4	9	—	4	10	164	219
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	7	64	13
Rhode Island [§]	—	0	1	—	—	—	0	1	2	—	1	0	4	23	35
Vermont [§]	—	0	3	5	5	—	0	1	1	—	—	0	4	18	11
Mid. Atlantic	—	1	6	61	62	1	1	23	28	2,061	63	31	125	1,241	1,141
New Jersey	—	0	1	5	19	—	0	2	9	343	—	3	7	118	133
New York (Upstate)	—	0	4	19	9	—	0	2	7	660	21	13	81	539	391
New York City	—	0	3	23	16	1	0	22	10	1,033	36	0	19	74	66
Pennsylvania	—	0	2	14	18	—	0	16	2	25	6	13	70	510	551
E.N. Central	1	2	7	73	102	1	2	7	64	51	15	60	198	2,166	3,887
Illinois	—	0	3	22	19	—	1	4	39	18	—	15	50	556	665
Indiana	—	0	2	11	22	—	0	1	—	4	—	4	26	153	543
Michigan	—	0	4	9	17	1	0	1	10	17	3	14	57	530	1,117
Ohio	1	0	2	21	26	—	0	5	12	9	12	16	80	572	1,202
Wisconsin	—	0	2	10	18	—	0	1	3	3	—	10	25	355	360
W.N. Central	3	1	4	40	42	—	0	4	31	80	4	23	501	893	1,608
Iowa	—	0	1	9	9	—	0	1	5	38	—	5	36	146	447
Kansas	—	0	1	2	6	—	0	1	4	4	—	2	10	75	143
Minnesota	—	0	2	—	3	—	0	4	1	4	—	0	469	326	498
Missouri	3	0	2	16	17	—	0	3	12	9	1	7	43	237	302
Nebraska [§]	—	0	2	10	5	—	0	1	5	23	—	1	11	44	153
North Dakota	—	0	1	1	2	—	0	3	4	—	3	0	10	40	38
South Dakota	—	0	1	2	—	—	0	0	—	2	—	0	7	25	27
S. Atlantic	2	2	8	111	110	—	0	4	23	47	21	30	106	1,052	1,361
Delaware	—	0	1	1	1	—	0	0	—	—	—	0	5	21	10
District of Columbia	—	0	1	1	1	—	0	0	—	3	—	0	2	3	8
Florida	2	1	5	44	50	—	0	2	7	8	6	6	17	258	248
Georgia	—	0	1	12	8	—	0	2	4	2	2	3	13	137	194
Maryland [§]	—	0	1	11	8	—	0	1	1	10	—	2	6	61	107
North Carolina	—	0	3	13	12	—	0	2	7	8	4	3	35	144	250
South Carolina [§]	—	0	1	9	11	—	0	0	—	4	7	3	25	117	298
Virginia [§]	—	0	2	13	17	—	0	2	4	10	2	7	41	253	178
West Virginia	—	0	3	7	2	—	0	0	—	2	—	0	41	58	68
E.S. Central	—	0	3	20	34	—	0	1	4	9	1	9	28	277	617
Alabama [§]	—	0	2	9	6	—	0	1	1	6	—	3	11	109	164
Kentucky	—	0	2	2	15	—	0	0	—	1	1	1	16	57	212
Mississippi	—	0	1	2	3	—	0	1	3	—	—	0	10	24	65
Tennessee [§]	—	0	2	7	10	—	0	1	—	2	—	2	10	87	176
W.S. Central	—	1	12	45	67	—	1	15	52	86	13	23	297	711	2,340
Arkansas [§]	—	0	1	8	5	—	0	1	1	5	2	2	16	52	171
Louisiana	—	0	2	10	12	—	0	2	—	5	1	0	3	16	35
Oklahoma	—	0	2	7	15	—	0	2	3	—	—	0	92	29	53
Texas [§]	—	0	10	20	35	—	1	14	48	76	10	19	187	614	2,081
Mountain	—	1	4	36	47	—	0	2	7	18	3	40	100	1,394	1,174
Arizona	—	0	1	10	12	—	0	0	—	5	1	14	29	567	355
Colorado	—	0	1	8	17	—	0	1	3	7	—	9	63	304	179
Idaho [§]	—	0	1	5	5	—	0	1	1	1	2	2	11	106	166
Montana [§]	—	0	2	4	1	—	0	0	—	—	—	2	16	72	64
Nevada [§]	—	0	1	1	8	—	0	0	—	1	—	0	5	22	29
New Mexico [§]	—	0	1	1	3	—	0	2	2	—	—	2	10	102	107
Utah	—	0	2	7	1	—	0	0	—	3	—	6	16	212	262
Wyoming [§]	—	0	1	—	—	—	0	1	1	1	—	0	1	9	12
Pacific	—	4	26	127	131	—	0	3	13	35	25	68	1,710	2,385	4,679
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	4	21	35
California	—	2	17	91	86	—	0	3	6	23	—	53	1,569	1,673	4,039
Hawaii	—	0	1	4	1	—	0	1	2	3	—	1	9	72	59
Oregon	—	0	3	17	25	—	0	1	4	2	—	5	16	226	235
Washington	—	0	8	13	18	—	0	1	—	6	25	8	131	393	311
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	2	5	12	461	—	0	14	31	3
Puerto Rico	—	0	0	—	2	—	0	1	1	1	—	0	1	2	2
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† 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).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	20	59	119	2,253	3,563	614	910	1,807	35,944	41,343	61	95	264	3,833	4,012
New England	—	4	16	171	246	8	34	354	2,008	2,012	—	3	37	208	182
Connecticut	—	0	10	67	109	—	8	333	697	491	—	0	37	77	60
Maine [§]	—	1	6	53	51	—	3	8	110	98	—	0	3	24	15
Massachusetts	—	0	0	—	—	5	19	46	873	1,071	—	1	9	68	71
New Hampshire	—	0	3	17	15	—	4	8	136	150	—	0	3	22	18
Rhode Island [§]	—	0	4	15	27	—	1	62	135	141	—	0	2	4	3
Vermont [§]	—	0	2	19	44	3	1	5	57	61	—	0	3	13	15
Mid. Atlantic	6	16	35	708	882	55	94	205	4,307	4,793	8	9	32	456	449
New Jersey	—	0	0	—	—	—	19	48	788	978	—	2	6	68	99
New York (Upstate)	6	7	20	298	412	38	25	67	1,123	1,161	7	3	12	168	152
New York City	—	0	3	9	140	3	20	41	906	1,090	—	2	6	70	56
Pennsylvania	—	9	21	401	330	14	32	111	1,490	1,564	1	3	18	150	142
E.N. Central	3	2	16	153	218	35	88	151	3,530	4,847	8	12	47	697	683
Illinois	—	0	6	46	112	—	29	60	1,214	1,650	—	2	13	146	130
Indiana	—	0	6	21	—	—	10	19	350	625	—	2	8	86	111
Michigan	—	1	6	47	62	7	14	32	656	785	2	2	18	132	132
Ohio	3	0	5	39	44	28	21	46	992	1,067	6	2	10	153	116
Wisconsin	N	0	0	N	N	—	8	45	318	720	—	3	20	180	194
W.N. Central	—	2	40	67	217	27	47	101	1,895	2,395	8	13	39	570	732
Iowa	—	0	1	—	24	2	9	19	364	431	—	2	15	148	145
Kansas	—	0	4	27	54	5	7	25	354	355	—	1	8	78	58
Minnesota	—	0	34	—	25	—	0	16	—	613	—	0	8	—	241
Missouri	—	0	1	—	60	15	17	45	805	650	6	4	14	205	195
Nebraska [§]	—	0	3	29	43	3	4	13	203	193	2	1	7	85	62
North Dakota	—	0	6	11	11	2	0	15	35	32	—	0	10	11	5
South Dakota	—	0	0	—	—	—	3	17	134	121	—	1	4	43	26
S. Atlantic	9	17	93	829	931	318	279	718	10,733	11,362	8	14	29	512	527
Delaware	—	0	0	—	—	—	3	10	124	146	—	0	2	13	5
District of Columbia	—	0	0	—	—	—	1	5	47	78	—	0	1	3	9
Florida	—	0	84	88	121	155	107	226	4,219	4,634	3	3	15	114	167
Georgia	—	0	0	—	—	42	42	126	1,895	2,244	1	2	8	94	83
Maryland [§]	—	5	13	204	309	13	18	40	733	861	1	1	8	36	70
North Carolina	—	0	0	—	—	57	34	251	1,655	1,140	2	2	11	98	51
South Carolina [§]	N	0	0	N	N	27	30	67	1,135	1,232	—	0	4	15	20
Virginia [§]	7	11	27	466	443	24	21	68	882	880	1	3	9	136	106
West Virginia	2	0	30	71	58	—	0	14	43	147	—	0	4	3	16
E.S. Central	1	2	7	95	148	34	60	188	3,098	3,106	—	4	22	209	202
Alabama [§]	1	1	7	69	61	13	18	70	911	801	—	1	15	69	40
Kentucky	—	0	2	12	18	5	9	21	368	463	—	1	5	34	52
Mississippi	—	0	1	1	—	6	21	67	1,044	985	—	0	12	17	14
Tennessee [§]	—	0	4	13	69	10	17	49	775	857	—	2	11	89	96
W.S. Central	—	1	31	61	698	45	124	515	4,511	5,356	2	6	151	239	250
Arkansas [§]	—	0	10	47	23	19	14	53	666	601	2	0	5	37	44
Louisiana	—	0	0	—	—	1	14	52	580	1,083	—	0	2	7	16
Oklahoma	—	0	20	14	41	25	11	95	525	513	—	1	55	44	21
Texas [§]	—	0	17	—	634	—	82	381	2,740	3,159	—	5	95	151	169
Mountain	1	0	4	32	61	8	47	91	1,863	2,329	4	11	30	443	506
Arizona	N	0	0	N	N	5	14	34	565	797	—	2	14	73	50
Colorado	—	0	0	—	—	—	10	24	421	460	—	2	11	90	182
Idaho [§]	1	0	1	6	11	1	3	8	119	133	3	3	6	92	74
Montana [§]	N	0	0	N	N	2	2	10	107	81	1	0	5	35	37
Nevada [§]	—	0	2	9	5	—	3	8	107	256	—	0	7	27	29
New Mexico [§]	—	0	2	10	11	—	6	22	252	264	—	1	6	35	36
Utah	—	0	2	7	10	—	6	15	244	287	—	1	7	68	79
Wyoming [§]	—	0	0	—	24	—	1	9	48	51	—	0	7	23	19
Pacific	—	3	15	137	162	84	102	288	3,999	5,143	23	13	46	499	481
Alaska	—	0	2	9	12	—	1	6	44	68	—	0	1	3	2
California	—	3	10	118	136	54	75	232	3,078	3,795	6	8	36	310	215
Hawaii	—	0	0	—	—	—	7	14	264	269	—	0	1	6	27
Oregon	—	0	2	10	14	1	6	12	196	440	1	1	11	69	76
Washington	—	0	14	—	—	29	12	42	417	571	16	2	16	111	161
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	11	—	0	0	—	—
Puerto Rico	—	0	6	25	36	8	5	24	178	485	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

[†] 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).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF) [†]									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Confirmed					Probable				
		Med	Max			Current week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010
United States	154	235	742	8,351	10,931	4	2	16	153	123	9	25	245	1,455	1,323
New England	—	4	30	232	296	—	0	0	—	—	—	0	1	6	4
Connecticut	—	0	29	62	69	—	0	0	—	—	—	0	0	—	—
Maine [§]	—	0	4	19	5	—	0	0	—	—	—	0	0	—	2
Massachusetts	—	3	18	139	198	—	0	0	—	—	—	0	1	4	—
New Hampshire	—	0	2	2	12	—	0	0	—	—	—	0	1	1	1
Rhode Island [§]	—	0	4	6	11	—	0	0	—	—	—	0	1	1	1
Vermont [§]	—	0	1	4	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	14	15	74	610	1,386	—	0	2	11	2	—	1	4	35	90
New Jersey	—	3	8	89	323	—	0	0	—	1	—	0	3	—	53
New York (Upstate)	9	3	18	210	180	—	0	1	3	1	—	0	1	6	14
New York City	3	5	14	217	252	—	0	0	—	—	—	0	3	15	11
Pennsylvania	2	3	56	94	631	—	0	2	8	—	—	0	3	14	12
E.N. Central	4	15	40	551	1,327	—	0	2	7	3	—	1	6	78	74
Illinois	—	4	10	129	753	—	0	1	1	2	—	0	3	26	33
Indiana [§]	—	1	4	43	51	—	0	1	2	1	—	0	4	38	20
Michigan	—	3	10	128	212	—	0	1	1	—	—	0	1	1	1
Ohio	4	5	27	251	248	—	0	2	3	—	—	0	2	13	14
Wisconsin	—	0	4	—	63	—	0	0	—	—	—	0	1	—	6
W.N. Central	1	7	38	241	1,811	1	0	7	25	13	3	4	30	309	253
Iowa	—	0	4	14	46	—	0	0	—	—	—	0	2	5	5
Kansas [§]	1	2	12	47	223	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	4	—	48	—	0	0	—	—	—	0	2	—	—
Missouri	—	5	18	163	1,457	1	0	4	18	10	3	4	30	298	245
Nebraska [§]	—	0	10	13	30	—	0	3	5	3	—	0	1	5	2
North Dakota	—	0	0	—	—	—	0	1	2	—	—	0	0	—	1
South Dakota	—	0	2	4	7	—	0	0	—	—	—	0	1	1	—
S. Atlantic	66	68	133	2,833	1,943	3	1	8	82	75	2	6	54	398	411
Delaware [§]	—	0	1	3	37	—	0	1	1	1	—	0	4	17	17
District of Columbia	—	0	2	12	27	—	0	1	1	—	—	0	1	1	—
Florida [§]	43	42	98	2,005	823	—	0	1	3	3	1	0	2	8	8
Georgia	14	11	25	442	615	3	0	5	50	53	—	0	0	—	—
Maryland [§]	3	2	7	77	106	—	0	1	2	—	—	0	3	23	40
North Carolina	3	4	36	171	140	—	0	4	12	13	—	0	49	201	213
South Carolina [§]	1	1	4	38	59	—	0	2	10	1	—	0	2	18	16
Virginia [§]	2	2	8	81	110	—	0	1	3	4	1	2	9	127	117
West Virginia	—	0	66	4	26	—	0	0	—	—	—	0	1	3	—
E.S. Central	8	15	29	492	566	—	0	3	7	20	3	5	24	297	362
Alabama [§]	3	5	15	170	135	—	0	1	3	5	1	1	8	61	73
Kentucky	2	1	6	42	194	—	0	1	1	6	—	0	0	—	—
Mississippi	2	3	9	140	40	—	0	0	—	1	—	0	4	12	17
Tennessee [§]	1	4	14	140	197	—	0	2	3	8	2	4	19	224	272
W.S. Central	48	56	503	1,964	2,061	—	0	8	7	4	1	1	235	303	116
Arkansas [§]	3	2	7	60	50	—	0	2	4	—	1	0	41	254	74
Louisiana	1	4	21	180	224	—	0	0	—	—	—	0	2	4	2
Oklahoma	7	2	161	108	226	—	0	5	2	3	—	0	202	41	22
Texas [§]	37	45	338	1,616	1,561	—	0	1	1	1	—	0	5	4	18
Mountain	4	16	41	630	633	—	0	5	13	2	—	0	6	29	12
Arizona	4	6	27	267	341	—	0	4	12	—	—	0	6	15	1
Colorado [§]	—	1	8	78	81	—	0	1	—	—	—	0	1	2	1
Idaho [§]	—	0	3	15	22	—	0	1	1	—	—	0	1	1	5
Montana [§]	—	1	15	118	7	—	0	0	—	2	—	0	1	1	1
Nevada [§]	—	0	4	26	38	—	0	0	—	—	—	0	0	—	—
New Mexico [§]	—	3	9	86	106	—	0	0	—	—	—	0	1	1	1
Utah	—	1	4	38	38	—	0	0	—	—	—	0	1	1	3
Wyoming [§]	—	0	1	2	—	—	0	0	—	—	—	0	2	8	—
Pacific	9	21	63	798	908	—	0	2	1	4	—	0	0	—	1
Alaska	—	0	2	5	1	N	0	0	N	N	N	0	0	N	N
California	8	18	59	652	728	—	0	2	1	4	—	0	0	—	—
Hawaii	—	1	3	41	38	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	34	47	—	0	0	—	—	—	0	0	—	1
Washington	1	1	7	66	94	—	0	1	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	3	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	5	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	4	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/pdfs/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

[†] Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by Rickettsia rickettsii, is the most common and well-known spotted fever.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	<i>Streptococcus pneumoniae</i> , [†] invasive disease														
	All ages					Age <5					Syphilis, primary and secondary				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	89	298	937	10,422	11,620	10	29	118	935	1,643	76	258	363	9,678	10,593
New England	1	17	79	580	639	—	1	5	35	83	2	7	16	282	378
Connecticut	—	6	49	249	257	—	0	3	7	23	—	1	5	39	79
Maine [§]	—	2	13	100	90	—	0	1	3	7	—	0	3	11	23
Massachusetts	—	1	3	27	58	—	0	3	13	40	—	5	9	173	232
New Hampshire	—	2	8	76	86	—	0	1	5	4	1	0	3	15	17
Rhode Island [§]	—	2	8	73	84	—	0	1	2	5	—	0	7	36	25
Vermont [§]	1	1	6	55	64	—	0	2	5	4	1	0	2	8	2
Mid. Atlantic	5	33	81	1,035	1,189	2	2	27	88	176	8	29	51	1,119	1,319
New Jersey	1	13	35	483	529	—	1	4	30	44	—	4	13	147	192
New York (Upstate)	1	1	10	61	119	—	1	9	34	88	5	3	20	147	102
New York City	3	13	42	491	541	2	0	14	24	44	—	15	31	557	741
Pennsylvania	N	0	0	N	N	N	0	0	N	N	3	6	13	268	284
E.N. Central	22	67	113	2,251	2,376	3	5	13	183	292	2	32	49	1,234	1,530
Illinois	N	0	0	N	N	—	1	6	57	75	1	14	35	554	725
Indiana	—	16	32	507	550	—	0	4	22	43	1	3	8	117	145
Michigan	4	15	29	497	550	—	1	4	26	69	—	5	12	192	194
Ohio	15	26	45	918	895	3	2	7	65	76	—	8	21	329	428
Wisconsin	3	9	24	329	381	—	0	3	13	29	—	1	5	42	38
W.N. Central	4	3	35	134	637	—	1	6	46	128	1	6	13	221	276
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	2	12	17
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	19	17
Minnesota	—	0	24	—	484	—	0	3	—	73	—	2	8	91	108
Missouri	N	0	0	N	N	—	0	4	26	31	1	2	6	93	123
Nebraska [§]	3	2	9	90	102	—	0	2	9	14	—	0	2	5	7
North Dakota	1	0	25	44	51	—	0	1	1	2	—	0	1	1	—
South Dakota	N	0	0	N	N	—	0	2	10	8	—	0	0	—	4
S. Atlantic	31	72	170	2,918	3,153	3	7	25	249	440	32	65	178	2,539	2,441
Delaware	—	1	6	37	28	—	0	1	—	—	—	0	4	16	4
District of Columbia	—	1	3	28	59	—	0	1	4	7	—	3	8	125	109
Florida	17	24	68	1,051	1,155	1	3	13	96	156	6	23	36	888	894
Georgia	9	22	54	783	1,014	1	2	7	57	125	6	13	130	537	528
Maryland [§]	3	10	32	414	408	—	1	4	29	44	—	8	19	333	239
North Carolina	N	0	0	N	N	N	0	0	N	N	5	8	21	304	320
South Carolina [§]	2	8	25	350	396	1	0	3	23	44	3	4	10	164	109
Virginia [§]	N	0	0	N	N	—	0	3	26	47	12	4	16	170	232
West Virginia	—	1	48	255	93	—	0	6	14	17	—	0	1	2	6
E.S. Central	6	19	36	683	783	1	2	4	53	88	4	15	34	558	683
Alabama [§]	N	0	0	N	N	N	0	0	N	N	—	4	11	151	200
Kentucky	N	0	0	N	N	N	0	0	N	N	1	2	16	82	98
Mississippi	N	0	0	N	N	—	0	2	8	14	3	3	16	141	160
Tennessee [§]	6	19	36	683	783	1	1	4	45	74	—	5	11	184	225
W.S. Central	16	31	368	1,390	1,417	—	4	38	160	235	7	35	50	1,331	1,644
Arkansas [§]	5	3	26	174	132	—	0	3	13	15	6	4	10	157	167
Louisiana	1	3	11	122	87	—	0	2	11	20	1	7	25	289	443
Oklahoma	N	0	0	N	N	—	1	8	29	40	—	1	4	44	76
Texas [§]	10	25	333	1,094	1,198	—	3	27	107	160	—	23	30	841	958
Mountain	4	32	72	1,311	1,338	1	3	8	110	185	7	12	20	432	470
Arizona	4	12	45	628	631	1	1	5	52	81	—	4	11	177	175
Colorado	—	10	23	407	410	—	0	4	28	55	—	2	6	81	109
Idaho [§]	N	0	0	N	N	—	0	1	4	5	—	0	4	11	2
Montana [§]	N	0	0	N	N	N	0	0	N	N	—	0	1	4	3
Nevada [§]	N	0	0	N	N	N	0	0	N	N	7	2	9	102	84
New Mexico [§]	—	3	13	182	123	—	0	2	14	15	—	1	4	49	40
Utah	—	2	8	74	163	—	0	3	12	26	—	0	2	8	57
Wyoming [§]	—	0	15	20	11	—	0	1	—	3	—	0	0	—	—
Pacific	—	3	11	120	88	—	0	1	11	16	13	52	66	1,962	1,852
Alaska	—	2	11	116	88	—	0	1	9	16	—	0	1	1	3
California	N	0	0	N	N	N	0	0	N	N	9	42	57	1,618	1,576
Hawaii	—	0	3	4	—	—	0	1	2	—	—	0	5	10	28
Oregon	N	0	0	N	N	N	0	0	N	N	2	3	9	132	52
Washington	N	0	0	N	N	N	0	0	N	N	2	5	13	201	193
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	5	4	14	188	184
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

[†] Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 8, 2011, and October 9, 2010 (40th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Neuroinvasive					Nonneuroinvasive§				
		Med	Max			Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
United States	185	272	367	9,660	11,844	—	1	51	318	606	—	0	23	156	388
New England	9	23	50	935	885	—	0	3	12	14	—	0	1	2	5
Connecticut	4	4	16	199	276	—	0	2	8	7	—	0	1	1	4
Maine¶	—	5	16	170	172	—	0	0	—	—	—	0	0	—	—
Massachusetts	4	7	18	357	218	—	0	1	2	6	—	0	1	1	1
New Hampshire	—	3	9	102	111	—	0	0	—	1	—	0	0	—	—
Rhode Island¶	—	0	6	31	31	—	0	1	1	—	—	0	0	—	—
Vermont¶	1	2	10	76	77	—	0	1	1	—	—	0	0	—	—
Mid. Atlantic	30	38	72	1,782	1,313	—	0	11	27	123	—	0	6	18	63
New Jersey	16	14	64	1,061	456	—	0	1	1	15	—	0	1	3	15
New York (Upstate)	N	0	0	N	N	—	0	5	13	56	—	0	4	13	30
New York City	—	0	0	—	—	—	0	4	9	33	—	0	1	1	9
Pennsylvania	14	18	41	721	857	—	0	1	4	19	—	0	1	1	9
E.N. Central	58	66	118	2,158	3,799	—	0	11	53	80	—	0	4	19	30
Illinois	—	16	31	551	983	—	0	3	13	45	—	0	2	5	16
Indiana¶	6	4	18	190	294	—	0	2	4	6	—	0	1	3	7
Michigan	21	19	38	683	1,117	—	0	6	28	25	—	0	1	1	4
Ohio	31	21	58	733	1,008	—	0	2	8	4	—	0	3	9	1
Wisconsin	—	0	22	1	397	—	0	0	—	—	—	0	1	1	2
W.N. Central	5	8	42	296	713	—	0	7	23	31	—	0	4	21	75
Iowa	N	0	0	N	N	—	0	2	4	4	—	0	1	3	4
Kansas¶	—	2	15	81	293	—	0	1	1	4	—	0	0	—	15
Minnesota	—	0	0	—	—	—	0	1	1	4	—	0	1	1	4
Missouri	—	4	24	150	339	—	0	1	4	3	—	0	1	3	—
Nebraska¶	—	0	5	5	16	—	0	4	12	10	—	0	3	11	29
North Dakota	5	0	10	36	33	—	0	1	1	2	—	0	1	3	7
South Dakota	—	1	7	24	32	—	0	0	—	4	—	0	0	—	16
S. Atlantic	23	33	64	1,357	1,734	—	0	8	43	36	—	0	3	14	21
Delaware¶	—	0	3	6	26	—	0	1	1	—	—	0	0	—	—
District of Columbia	—	0	2	12	17	—	0	1	1	3	—	0	0	—	3
Florida¶	23	15	38	685	824	—	0	5	16	9	—	0	2	2	2
Georgia	N	0	0	N	N	—	0	1	5	4	—	0	1	3	9
Maryland¶	N	0	0	N	N	—	0	4	10	16	—	0	2	9	6
North Carolina	N	0	0	N	N	—	0	1	2	—	—	0	0	—	—
South Carolina¶	—	0	9	12	75	—	0	1	—	—	—	0	0	—	—
Virginia¶	—	8	25	330	434	—	0	2	7	4	—	0	0	—	1
West Virginia	—	6	32	312	358	—	0	1	1	—	—	0	0	—	—
E.S. Central	2	5	15	199	243	—	0	7	39	8	—	0	5	26	10
Alabama¶	2	4	14	187	235	—	0	1	1	1	—	0	0	—	2
Kentucky	N	0	0	N	N	—	0	1	2	2	—	0	1	1	1
Mississippi	—	0	3	12	8	—	0	4	25	3	—	0	4	22	5
Tennessee¶	N	0	0	N	N	—	0	3	11	2	—	0	1	3	2
W.S. Central	58	44	258	1,968	2,223	—	0	5	12	100	—	0	1	6	19
Arkansas¶	17	4	17	207	159	—	0	1	1	6	—	0	0	—	1
Louisiana	—	2	6	66	63	—	0	2	5	18	—	0	1	3	7
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas¶	41	41	247	1,695	2,001	—	0	4	6	76	—	0	1	3	11
Mountain	—	18	65	880	842	—	0	6	38	148	—	0	4	17	125
Arizona	—	3	50	392	—	—	0	6	21	98	—	0	2	8	58
Colorado¶	—	4	31	181	317	—	0	0	—	26	—	0	1	2	55
Idaho¶	N	0	0	N	N	—	0	1	1	—	—	0	0	—	1
Montana¶	—	2	28	115	162	—	0	1	1	—	—	0	0	—	—
Nevada¶	N	0	0	N	N	—	0	4	12	—	—	0	2	4	2
New Mexico¶	—	1	3	34	88	—	0	1	2	21	—	0	0	—	4
Utah	—	4	26	150	261	—	0	0	—	1	—	0	1	1	1
Wyoming¶	—	0	3	8	14	—	0	1	1	2	—	0	1	2	4
Pacific	—	2	6	85	92	—	0	12	71	66	—	0	6	33	40
Alaska	—	1	4	42	34	—	0	0	—	—	—	0	0	—	—
California	—	0	2	9	30	—	0	12	71	66	—	0	6	33	39
Hawaii	—	1	4	34	28	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	0	—	1
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	25	—	0	0	—	—	—	0	0	—	—
Puerto Rico	5	5	21	153	498	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB 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/osels/ph_surveillance/ndss/phs/infdiss.htm.

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

Morbidity and Mortality Weekly Report

TABLE III. Deaths in 122 U.S. cities,* week ending October 8, 2011 (40th week)

Reporting area	All causes, by age (years)						P&I†	Reporting area (Continued)	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1			Total	All Ages	≥65	45-64	25-44	1-24	
New England	524	365	110	31	9	9	35	S. Atlantic	1,029	596	293	71	30	39	52
Boston, MA	137	85	37	9	2	4	11	Atlanta, GA	145	70	42	7	4	22	8
Bridgeport, CT	27	19	7	1	—	—	2	Baltimore, MD	114	51	40	14	8	1	7
Cambridge, MA	12	9	3	—	—	—	—	Charlotte, NC	91	59	21	6	3	2	4
Fall River, MA	30	21	6	3	—	—	—	Jacksonville, FL	103	59	36	5	2	1	9
Hartford, CT	47	35	9	3	—	—	4	Miami, FL	105	66	27	7	3	2	6
Lowell, MA	23	19	3	1	—	—	2	Norfolk, VA	52	34	13	4	—	1	—
Lynn, MA	10	8	1	1	—	—	1	Richmond, VA	47	28	13	2	4	—	3
New Bedford, MA	19	17	2	—	—	—	—	Savannah, GA	59	39	14	3	—	3	1
New Haven, CT	44	28	10	3	2	1	5	St. Petersburg, FL	34	22	9	2	—	1	1
Providence, RI	50	37	10	1	1	1	4	Tampa, FL	172	103	48	15	3	3	7
Somerville, MA	3	3	—	—	—	—	—	Washington, D.C.	93	52	29	6	3	3	5
Springfield, MA	42	26	8	4	3	1	2	Wilmington, DE	14	13	1	—	—	—	1
Waterbury, CT	23	16	5	1	1	—	2	E.S. Central	830	552	198	52	17	10	53
Worcester, MA	57	42	9	4	—	2	2	Birmingham, AL	152	99	38	7	6	2	8
Mid. Atlantic	1,334	908	304	79	26	17	65	Chattanooga, TN	97	59	29	6	2	1	7
Albany, NY	40	25	7	5	1	2	1	Knoxville, TN	111	81	20	7	—	3	11
Allentown, PA	21	20	1	—	—	—	2	Lexington, KY	48	28	14	2	1	3	—
Buffalo, NY	67	39	22	4	2	—	4	Memphis, TN	171	114	44	11	1	1	14
Camden, NJ	23	13	4	4	—	2	—	Mobile, AL	82	52	20	7	2	—	6
Elizabeth, NJ	19	13	3	3	—	—	2	Montgomery, AL	32	23	6	2	1	—	2
Erie, PA	49	42	5	—	1	1	4	Nashville, TN	137	96	27	10	4	—	5
Jersey City, NJ	11	5	4	2	—	—	1	W.S. Central	1,063	709	233	67	22	32	69
New York City, NY	616	408	152	34	15	7	27	Austin, TX	88	58	21	5	2	2	6
Newark, NJ	15	10	5	—	—	—	—	Baton Rouge, LA	60	42	8	8	2	—	—
Paterson, NJ	21	10	6	3	1	1	—	Corpus Christi, TX	71	49	17	3	—	2	8
Philadelphia, PA	131	64	50	12	5	—	2	Dallas, TX	161	96	43	13	4	5	10
Pittsburgh, PA [§]	41	31	7	3	—	—	1	El Paso, TX	86	66	16	4	—	—	6
Reading, PA	35	29	5	1	—	—	4	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	69	57	8	2	—	2	6	Houston, TX	118	85	20	2	4	7	2
Schenectady, NY	15	13	1	1	—	—	3	Little Rock, AR	74	44	25	2	1	2	—
Scranton, PA	27	17	7	1	1	1	—	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	75	64	9	1	—	1	7	San Antonio, TX	214	138	48	19	5	4	19
Trenton, NJ	26	19	5	2	—	—	1	Shreveport, LA	77	49	16	3	1	8	7
Utica, NY	18	15	3	—	—	—	—	Tulsa, OK	114	82	19	8	3	2	11
Yonkers, NY	15	14	—	1	—	—	—	Mountain	1,106	727	244	91	24	19	56
E.N. Central	1,749	1,191	379	103	40	36	97	Albuquerque, NM	99	64	22	10	1	2	11
Akron, OH	53	41	11	—	—	1	3	Boise, ID	66	51	11	4	—	—	4
Canton, OH	36	20	12	4	—	—	3	Colorado Springs, CO	77	56	14	6	—	1	2
Chicago, IL	234	161	43	19	5	6	9	Denver, CO	82	55	19	4	1	3	5
Cincinnati, OH	88	59	16	7	4	2	4	Las Vegas, NV	278	174	72	22	8	2	14
Cleveland, OH	227	157	53	11	3	3	13	Ogden, UT	29	20	6	—	2	1	1
Columbus, OH	160	106	38	9	3	4	12	Phoenix, AZ	168	98	42	17	8	3	6
Dayton, OH	137	93	28	10	2	4	10	Pueblo, CO	35	25	7	1	2	—	2
Detroit, MI	58	33	13	7	3	2	2	Salt Lake City, UT	118	78	19	14	2	5	5
Evansville, IN	43	35	6	1	1	—	2	Tucson, AZ	154	106	32	13	—	2	6
Fort Wayne, IN	72	52	15	3	—	2	3	Pacific	1,637	1,106	367	99	35	30	122
Gary, IN	8	6	2	—	—	—	—	Berkeley, CA	12	7	4	1	—	—	—
Grand Rapids, MI	63	42	13	4	2	2	2	Fresno, CA	118	83	27	7	—	1	10
Indianapolis, IN	164	100	38	15	7	4	13	Glendale, CA	35	26	8	1	—	—	11
Lansing, MI	35	23	11	—	—	1	1	Honolulu, HI	68	50	13	—	4	1	5
Milwaukee, WI	84	55	21	3	4	1	2	Long Beach, CA	83	50	22	5	3	3	5
Peoria, IL	58	38	14	3	2	1	8	Los Angeles, CA	242	155	52	22	7	6	18
Rockford, IL	43	28	9	4	2	—	1	Pasadena, CA	27	20	6	1	—	—	1
South Bend, IN	46	34	12	—	—	—	1	Portland, OR	132	80	30	12	7	3	5
Toledo, OH	91	67	18	2	2	2	5	Sacramento, CA	197	135	49	6	2	5	22
Youngstown, OH	49	41	6	1	—	1	3	San Diego, CA	154	108	36	7	1	2	9
W.N. Central	529	352	126	26	11	14	38	San Francisco, CA	98	65	20	8	2	3	9
Des Moines, IA	—	—	—	—	—	—	—	San Jose, CA	182	136	33	9	2	2	10
Duluth, MN	29	22	4	2	1	—	1	Santa Cruz, CA	34	20	9	4	1	—	2
Kansas City, KS	29	23	2	2	—	2	5	Seattle, WA	108	69	26	7	5	1	5
Kansas City, MO	89	57	22	4	3	3	5	Spokane, WA	68	49	11	5	1	2	5
Lincoln, NE	48	35	9	3	1	—	—	Tacoma, WA	79	53	21	4	—	1	5
Minneapolis, MN	63	35	19	4	1	4	6	Total¶	9,801	6,506	2,254	619	214	206	587
Omaha, NE	81	63	14	3	1	—	7								
St. Louis, MO	81	43	31	5	1	1	5								
St. Paul, MN	42	29	9	1	2	1	3								
Wichita, KS	67	45	16	2	1	3	6								

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.

TABLE IV. Provisional cases of selected notifiable disease, United States, third quarter ending October 1, 2011 (39th week)

Reporting area	Tuberculosis*				
	Current quarter	Previous 4 quarters		Cum 2011	Cum 2010
		Min	Max		
United States	1,009	1,009	3,189	4,926	7,843
New England	14	14	87	155	270
Connecticut	—	0	23	39	65
Maine	1	1	3	6	5
Massachusetts	8	8	55	88	168
New Hampshire	1	0	2	3	8
Rhode Island	4	4	8	16	22
Vermont	—	0	3	3	2
Mid. Atlantic	276	276	418	943	1,098
New Jersey	84	47	141	222	264
New York (Upstate)	40	40	71	127	153
New York City	150	138	166	468	509
Pennsylvania	2	2	68	126	172
E.N. Central	142	142	259	522	618
Illinois	62	62	100	238	267
Indiana	28	17	31	72	59
Michigan	14	14	57	69	117
Ohio	28	28	55	91	135
Wisconsin	10	10	23	52	40
W.N. Central	35	35	82	145	239
Iowa	4	4	14	19	33
Kansas	—	0	12	19	39
Minnesota	28	20	39	87	96
Missouri	—	0	12	8	26
Nebraska	3	3	7	12	20
North Dakota	—	0	2	—	10
South Dakota	—	0	0	—	15
S. Atlantic	235	235	567	1,126	1,695
Delaware	—	0	1	1	19
District of Columbia	10	10	14	34	31
Florida	26	26	183	373	654
Georgia	48	48	91	212	330
Maryland	56	49	67	163	153
North Carolina	25	25	80	133	215
South Carolina	12	12	50	70	103
Virginia	54	21	91	131	177
West Virginia	4	2	4	9	13
E.S. Central	109	96	159	341	386
Alabama	44	28	46	120	118
Kentucky	4	4	46	38	44
Mississippi	17	17	36	60	80
Tennessee	44	38	49	123	144
W.S. Central	29	29	492	506	1,256
Arkansas	14	11	29	51	50
Louisiana	—	0	78	13	122
Oklahoma	14	14	26	58	67
Texas	1	1	368	384	1,017
Mountain	81	52	228	306	337
Arizona	23	6	119	117	163
Colorado	20	10	34	48	37
Idaho	1	1	5	5	10
Montana	4	1	4	6	5
Nevada	19	13	45	71	69
New Mexico	9	9	16	30	34
Utah	5	5	11	27	14
Wyoming	—	0	2	2	5
Pacific	88	88	897	882	1,944
Alaska	16	0	16	16	—
California	25	25	777	646	1,622
Hawaii	15	15	36	71	78
Oregon	—	0	24	13	63
Washington	32	32	60	136	181
Territories					
American Samoa	—	0	1	—	2
C.N.M.I.	—	0	7	13	26
Guam	—	0	21	—	80
Puerto Rico	13	11	25	36	55
U.S. Virgin Islands	—	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.

* CDC is in the process of implementing Public Health Information Network tuberculosis (TB) case notification message standards, which will simplify reporting of TB cases. As a result, TB provisional incidence counts are now reported from the National Electronic Disease Surveillance System (NEDSS) and the Tuberculosis Information Management System (TIMS) data sources. Previously, provisional TB incidence counts were reported through the National Electronic Telecommunications System for Surveillance (NETSS). The TB provisional incidence counts are low in some reporting jurisdictions as these areas continue to catch up with data entry and transmission to CDC during this transition.

Morbidity and Mortality Weekly Report

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, visit *MMWR's* free subscription page at <http://www.cdc.gov/mmwr/mmwrsubscribe.html>. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

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.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

U.S. Government Printing Office: 2012-523-043/21083 Region IV ISSN: 0149-2195