

Community Health Impact of Extended Loss of Water Service — Alabama, January 2010

Access to clean water is fundamental to good health (1). During January 2010, approximately 18,000 residents of two predominantly rural counties in Alabama lost access to municipal water for up to 12 days after below-freezing temperatures led to breaks in water mains and residential water pipes and caused widespread systemic mechanical failures. To assess potential health impacts, use of alternative water sources, and effectiveness of the emergency response, the Alabama Department of Public Health (ADPH) invited CDC to assist in an investigation that included a survey of 470 households representing 1,283 residents and a qualitative investigation (i.e., focus group discussions and interviews with key informants). This report summarizes the results of that investigation, which found a significantly higher prevalence of acute gastrointestinal illness (AGI) among residents of households that lost both water service and water pressure (adjusted odds ratio [AOR] = 2.6), that lost water service for ≥ 7 days (AOR = 2.4), and that lost water pressure for ≥ 7 days (AOR = 3.5). Significant dose-response relationships were observed between increased duration of lost water service or pressure and AGI. The survey and qualitative investigation revealed that households, communities, water utilities, and institutions were not adequately prepared for water emergencies in areas of communication and notification, planning for alternative water sources, and interagency coordination. Health effects from loss of water supply or water pressure might be mitigated by public health involvement in fostering household, community, and interagency preparedness, and developing communication strategies that will reach the majority of citizens in a timely manner.

Community A and community B are located in two contiguous, predominantly rural counties in southwestern Alabama, served primarily by three interconnected public water utilities. Because freezing conditions are rare in this area, few building code regulations require burial or insulation of residential water pipes. During January 4–11, 2010, overnight low temperatures

ranged from 12°F to 22°F (-11°C to -6°C), causing many utility water mains and residential water pipes to break. The resulting systemic water loss and related mechanical failures forced water utilities to cut off service to most households in the two communities (Figure). Local ADPH offices did not learn about the water shortages until January 10 in community A, when a resident complained about restaurants operating without water, and January 11 in community B, when an ADPH nurse found a school operating without water. Subsequently, ADPH issued boil water advisories for both communities. Three agencies were involved in supplying emergency water to the affected communities: the Alabama Emergency Management Agency provided five truckloads of bottled water to community A and one truckload to community B; the National Guard delivered nonpotable water to community A; and ADPH deployed water filtration/UV disinfection units to both communities.

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Household Survey

During February 26–March 9, 2010, CDC and ADPH conducted a household survey to assess the extent of the water emergency and its effect on public health. A stratified random sample of addresses was drawn from community A, community B, and two additional communities in the same area that were presumed to be unaffected by the water emergency.* Each of the sampling areas included a mixture of unaffected and affected households. The entire population was analyzed together in a cross-sectional survey, and results in this report are in aggregate unless otherwise noted.

In-person interviews were conducted with one adult who resided in each home throughout January, normally received municipal water service, and provided oral consent. Each respondent answered questions regarding normal household water service and January water service interruptions, including loss of service,[†] loss of pressure,[§] and availability and use of emergency water sources. Each respondent also provided data

*Although the two additional communities were thought to be unaffected by the water emergency and were not subject to boil water advisories, survey results indicated that 17.4% and 43.3% of households in the additional sampling areas reported low water pressure, compared with 76.7% of households in community A and 71.0% of households in community B, and 7.0% and 13.3% of households in the additional sampling areas reported loss of water service, compared with 56.5% of households in community A and 89.4% of households in community B.

[†] Defined as a period during which the household's water supply completely ceased.

[§] Defined as a period when the household's water pressure was lower than usual, but water service did not completely cease.

regarding every household member, regardless of age, including information on demographics, chronic health conditions, and whether or not household members had experienced acute illnesses during January 4–31, 2010. The primary outcomes of interest were AGI[‡] and acute respiratory illness** (ARI). Data on skin and eye complaints also were collected.

Prevalence of self-reported illness by self-reported water service disruption category was calculated, as were odds ratios (ORs), AORs, and 95% confidence intervals to evaluate the association between water service disruptions and illness. Using the chi square test, associations between duration of water service interruptions and illness outcomes were tested for linear trends. Of 900 randomly selected households, approximately one third were excluded (e.g., because of a vacant home or no municipal water service), leaving 610 (68%) that were eligible for inclusion. Of those, a respondent in 470 (77%) households completed the survey, providing data on 1,283 persons. Median age of the 1,283 was 36 years (range: 0–94 years), and 54% were female; 55% were black, and 44% were white. Demographic characteristics of respondents were similar to census data for both counties.

Among households with no loss of water service or pressure, AGI was reported for 13 (4.3%) residents during January 4–31. AGI was associated with combined loss of water service and

[‡] Defined as new onset of diarrhea or vomiting, with diarrhea defined as three or more loose stools in a 24-hour period during January 4–January 31, 2010.

** Defined as new onset of cold or flu symptoms during January 4–January 31, 2010.

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].

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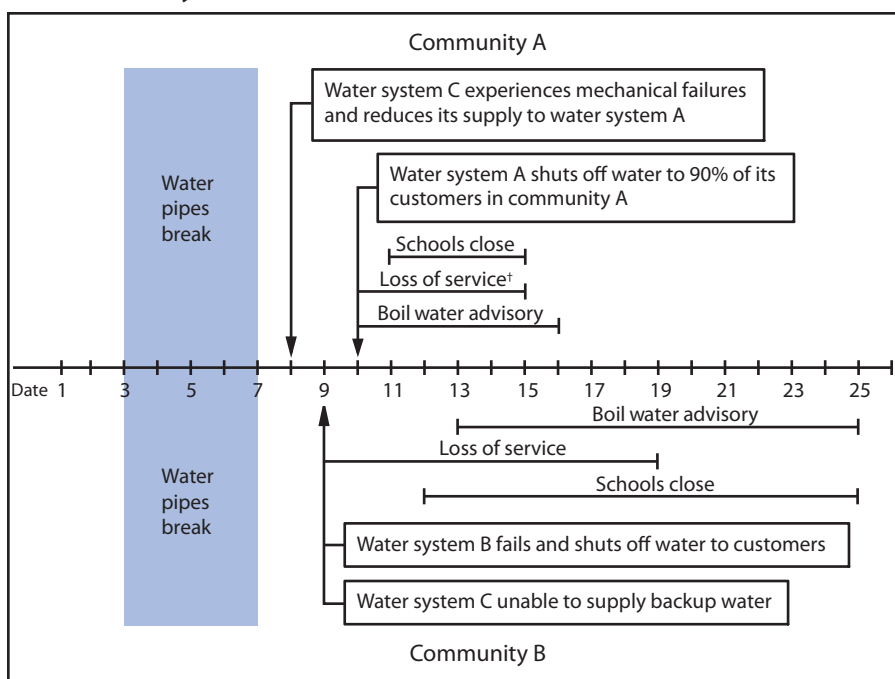
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FIGURE. Timeline of events during an extended water loss emergency — two communities,* Alabama, January 2010



* Water system A is owned by community A and normally supplies one fourth of community A's water. In 2009, water system A had reduced its storage levels by 50% to meet regulatory standards on chlorination by-products. Water system B is owned by community B and normally supplies all of community B's water. Water system C is owned by a nearby community and normally supplies three fourths of community A's water and is the designated backup supplier for community B in the event of a water shortage.

† Defined as a period during which the household's water supply completely ceased. Periods are approximate.

pressure (67 residents [12.4%], AOR = 2.6), loss of service ≥ 7 days (46 [13.2%], AOR = 2.4), and loss of pressure ≥ 7 days (23 [15.6%], AOR = 3.5) and 3–6 days (30 [12.7%], AOR = 2.8). Dose-response relationships were evident for the duration of both loss of service and loss of pressure (p for trend = 0.03 and 0.002, respectively) (Table).

The prevalence of ARI among unaffected households was 13.9%. Although individual AORs were not statistically significant, reporting of ARI increased with increasing duration of loss of pressure (1–2 days, 12.8%; 3–6 days, 20.5%; ≥ 7 days, 22.8%; p -value for trend = 0.04). Loss of water service was not associated with ARI. A total of 25 persons (1.6%) reported skin complaints, and 15 (1.0%) reported eye complaints; these outcomes were not significantly associated with loss of service or pressure.

Of the 470 surveyed households, 108 (23%) reported water pipe breaks as a result of the January freeze. A total of 210 (45%) of the 470 households had any water stored for emergencies, and <10% had stored >5 gallons. Among households in community A and community B, which were under a boil water advisory, residents in 90% of the households had heard about the advisory. However, <50% heard about it at the

beginning of the water emergency, and 30% reported drinking unboiled tap water. In community B, residents in 40% of the households said they heard about the boil water advisory from family, friends, or neighbors, and not from official sources. In both community A and community B, residents preferred to hear emergency information via telephone (73.4% and 59.1%, respectively), television (37.4% and 42.4%), or radio (42.4% and 24.2%), compared with informal sources such as friends and neighbors (15.1% and 9.1%) (preferences were not mutually exclusive).

Qualitative Investigation

A concurrent qualitative investigation was conducted, including focus group discussions with members of the community, emergency responders, and government officials, as well as interviews with key informants from institutions (e.g., restaurants, schools, and health-care facilities). No health-care facilities or public health agencies identified any clusters of illness, and focus group participants did not attribute illnesses to the water emergency. Like respondents in the household survey, focus group participants described insufficient household preparedness and said they preferred receiving emergency information via telephone from official sources. Emergency responders and government officials indicated that the two communities were not sufficiently prepared for the intensity and duration of the water emergency; many officials said they thought their communities would be most effectively served by word-of-mouth communication. In general, community emergency preparedness planning had not included collaboration with water utilities, plans had not outlined a clear chain-of-command structure and boil water notification procedures, and emergency water distribution did not meet the needs of vulnerable populations, such as senior citizens, persons with disabilities, and those with limited financial or transportation resources. As a result of this investigation, CDC prepared recommendations for public health involvement in water emergency preparedness (Box).

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TABLE. Effects on households of water service interruption, weighted prevalence of acute gastrointestinal illness (AGI)* among household residents,[†] and association between water service interruption and AGI — two communities, Alabama, January 2010

Effect	Total households (N = 470)		Persons with AGI		Persons without AGI		OR [§]	95% CI	AOR ^{§¶}	95% CI
	No.	(%) [§]	No.	(%) [§]	No.	(%) [§]				
Water service interruption										
No loss of service or pressure	126	(35.9)	13	(4.3)	300	(95.7)	1.0		1.0	
Loss of service only	57	(10.4)	10	(6.1)	161	(93.9)	1.5	0.5–4.1	1.2	0.4–3.4
Loss of pressure only	102	(22.7)	18	(6.6)	260	(93.4)	1.6	0.6–4.1	1.7	0.6–4.4
Loss of service and loss of pressure	185	(31.1)	67	(12.4)	454	(87.6)	3.2	1.4–7.4	2.6	1.0–6.7
Loss of service**										
None	229	(59.0)	31	(5.2)	566	(94.8)	1.0		1.0	
<7 days	130	(23.4)	31	(8.8)	311	(91.2)	1.8	0.9–3.4	1.3	0.7–2.6
≥7 days	111	(17.7)	46	(13.2)	298	(86.8)	2.8	1.5–5.4	2.4	1.1–5.2
p for trend								0.001		0.03
Loss of pressure^{††}										
None	183	(47.0)	23	(4.7)	471	(95.3)	1.0		1.0	
1–2 days	146	(28.7)	32	(7.1)	385	(92.9)	1.6	0.7–3.2	1.4	0.7–3.1
3–6 days	83	(15.3)	30	(12.7)	199	(87.3)	2.9	1.4–6.2	2.8	1.3–6.1
≥7 days	53	(8.9)	23	(15.6)	120	(84.3)	3.8	1.6–8.7	3.5	1.4–8.9
p for trend								<0.001		0.002

Abbreviations: OR = odds ratio; AOR = adjusted odds ratio; CI = confidence interval.

* Defined as new onset of diarrhea or vomiting, with diarrhea defined as three or more loose stools in a 24-hour period during January 4–31, 2010.

[†] Among the 1,283 residents of the 470 households.

[§] Percentages (prevalences) and ORs were weighted (inverse of sampling probability). Standard errors were adjusted for clustering by household, and finite population corrections were applied. Because the rare disease assumption is met for AGI (overall prevalence 7.6%), these ORs estimate prevalence ratios.

[¶] Results are from three separate models, each adjusted for age, race, employment, school, dwelling, and chronic health problems.

** Defined as a period during which the household's water supply completely ceased.

^{††} Defined as a period when the household's water pressure was lower than usual but water service did not completely cease.

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Editorial Note

In this investigation, the prevalence of AGI in households unaffected by the January 2010 water emergency (4.3%) was similar to the national 1-month background prevalence (5.1%) of acute diarrheal illness identified in FoodNet population surveys (2), whereas the prevalence of AGI in the most affected households was significantly higher (12.4%–15.6%). Of 780 drinking water-associated outbreaks reported in the United States during 1971–2006, 10% were associated with water distribution system deficiencies (3). Although a limited number of epidemiologic studies have investigated the association between low water pressure and illness, some have identified increased AGI in populations experiencing low water pressure (4–6). Even without loss of water service, brief periods of low pressure lasting only seconds (pressure transients) can draw contaminants into the distribution system through numerous cracks and leaks in water pipes (7) or back-siphonage from household plumbing systems that lack

What is already known on this topic?

Studies in other countries have identified an association between low pressure events in water distribution systems and gastrointestinal illness; the aging water infrastructure in the United States might increase the risk for similar health effects during main breaks or water-related emergencies that cause loss of pressure throughout the water distribution system.

What is added by this report?

In January 2010, in two Alabama communities, persons in households that experienced extended water service interruption were more likely to report acute gastrointestinal illness (AGI) than members of unaffected households; this association was particularly significant among persons in households that experienced ≥7 days of loss of water pressure (15.6% reporting AGI), compared with those unaffected by the water emergency (4.3% reporting AGI).

What are the implications for public health practice?

Public health agencies might help to prevent or mitigate the health effects from future water emergencies through efforts to improve community and household preparedness and to develop and implement effective communication strategies to reach diverse communities before and during such emergencies.

adequate backflow prevention devices. The findings from this investigation suggest that additional studies are needed

BOX. CDC recommendations for public health agency involvement in water emergency preparedness**Develop a water emergency response protocol**

- Develop notification procedures between agencies, utilities, and associations (including up-to-date rosters).
- Establish a prioritization of facilities during water shortages.
- Identify all institutions (e.g., businesses, schools, and hospitals) that need to be notified in emergencies and maintain current contact information.
- Assess protocols and interagency responses through periodic drills and exercises.

Develop a water distribution plan

- Identify vulnerable populations and provide for their aid during water shortages.
- Develop a tiered hierarchy of preferred emergency sources of potable water (e.g., bottled, approved bulk water supply, or portable treatment devices).
- Specify proper procedures and equipment for treating, transporting, and distributing potable water.
- Identify options for providing the community with nonpotable water during longer-term shortages (with a clear distinction in packaging from potable sources).

Develop a community communications toolkit for water emergencies

- Provide draft language for water emergencies and advisories (e.g., how long to boil water or how to obtain alternative water sources) using basic language (e.g., fifth grade comprehension level).

- Use modes of communication that are locally preferred and effective (e.g., most frequently viewed TV channels or radio stations, telephonic community notification system when possible, notification through schools, and signage).
- Provide targeted emergency messages for key facilities such as medical facilities, schools, and businesses.

Provide guidance for household preparedness

- Increase emphasis on the need for a minimum 3-day supply of potable water for emergencies.
- Supply information on how to protect pipes and identify vulnerabilities to freezing, targeting rural areas that lack building codes and owners of vacation homes who might not be present to detect burst pipes.
- Evaluate effectiveness of current emergency preparedness campaigns (e.g., complexity of messaging and application to year-round preparedness).

Provide guidance for institutional preparedness

- Provide guidance and training to ensure that health-care facilities, schools, and businesses know how to maintain their operations to protect the public's health during a loss of water service.
- Consider developing tools and templates or sample emergency plans that can be downloaded from the public health agency's website and adapted to individual facilities. Make these available to all institutions, regardless of whether a public health agency normally oversees their operations.

to assess the prevalence of waterborne disease attributable to water distribution systems.

The findings in this report are subject to at least three limitations. First, because the investigation began approximately 6 weeks after the onset of the water emergency, detailed information regarding the periods of loss of water service or water pressure and the dates of illness onset could not be collected; thus, their temporal order is uncertain. Second, no clinical specimens or environmental samples were collected to corroborate illness, identify responsible pathogens, and determine the precise cause of increased AGI in affected households. Although consuming contaminated water might have been responsible, altered hygiene and sanitary practices related to household water shortages (8) or changes in activities could have contributed to increased incidence of AGI. Finally, because the household survey relied on self-report for both water service events and illnesses, some of the findings might be subject to recall bias. However, concerns regarding bias are

mitigated somewhat by the specificity of the associations with AGI and the dose-response relationships observed.

Households, institutions, and communities were not adequately prepared for the water emergency that affected Alabama communities in January 2010. In part because of an aging water infrastructure, approximately 240,000 water main breaks, which can allow contaminants to enter the drinking water supply, occur in the United States each year (9,10). Public investment in improved drinking water infrastructure is critically important to protecting public health. Health effects from loss of water service or low water pressure might be mitigated by public health involvement in fostering household, community, and interagency preparedness, and developing communication strategies that will reach the majority of citizens in a timely manner. Additional information regarding preparedness and communications during water emergencies is available at <http://www.cdc.gov/healthywater/emergency/preparedness/before.html>.

Acknowledgments

The findings in this report are based, in part, on contributions by J Bender, N Bradford, K Bush, R Carpenter, MSW, M Clinkscales, J Coleman, B Cooper, S Davidson, MPH, C Detlefsen, R Elliot, MPH, GB Fisher, J Guerry, T Hatch, MPA, B Hollinger, D Johnson, S Johnson, B Jowers, D Kelly, C Kent, K Kiser, S McDaniel, A Mullins, MPA, M Nowlin, A Oliveira, DrPH, E Phillips, T Pippin, J Pope, P Pugh, N Quinney, MSW, H Railey, D Rhone, P Roberts, B Robinson, J Roley, J Roberts, F Sheffield, J Skinner, MPH, A Smith, MPH, H Steadham, K Stevens, MS, J Strother, T Syphrit, S Terrell, MSW, B Webb, J Wade, S Wood, M Woodfin, D Wyszumlek, R Spencer, Alabama Dept of Public Health; A Wendel, MD, L Brown, PhD, K Delea, MPH, Div of Emergency and Environmental Health Svcs, National Center for Environmental Health; E Ailes, PhD, S Collier, MPH, J Yoder, MPH, MJ Beach, PhD, Div of Foodborne, Waterborne, and Environmental Diseases, National Center for Emerging and Zoonotic Infectious Diseases; and B Person, PhD, Office of the Director, National Center for Emerging and Zoonotic Infectious Diseases, CDC.

References

1. World Health Organization. Guidelines for drinking-water quality. 3rd ed. Geneva, Switzerland: World Health Organization; 2008. Available at http://www.who.int/water_sanitation_health/dwq/fulltext.pdf. Accessed February 14, 2011.
2. Jones TF, McMillian MB, Scallan E, et al. A population-based estimate of the substantial burden of diarrhoeal disease in the United States; FoodNet, 1996–2003. *Epidemiol Infect* 2007;135:293–301.
3. Craun GF, Brunkard JM, Yoder JS, et al. Causes of outbreaks associated with drinking water in the United States from 1971 to 2006. *Clin Microbiol Rev* 2010;23:507–28.
4. Hunter PR, Chalmers RM, Hughes S, Syed Q. Self-reported diarrhea in a control group: a strong association with reporting of low-pressure events in tap water. *Clin Infect Dis* 2005;40:e32–4.
5. Nygard K, Wahl E, Krogh T, et al. Breaks and maintenance work in the water distribution systems and gastrointestinal illness: a cohort study. *Int J Epidemiol* 2007;36:873–80.
6. Payment P, Siemiatycki J, Richardson L, Renaud G, Franco E, Prevost M. A prospective epidemiological study of gastrointestinal health effects due to the consumption of drinking water. *Int J Environ Health Res* 1997;7:5–31.
7. LeChevallier MW, Gullick RW, Karim MR, Friedman M, Funk JE. The potential for health risks from intrusion of contaminants into the distribution system from pressure transients. *J Water Health* 2003;1:3–14.
8. Hennessy TW, Ritter T, Holman RC, et al. The relationship between in-home water service and the risk of respiratory tract, skin, and gastrointestinal tract infections among rural Alaska natives. *Am J Public Health* 2008;98:2072–8.
9. Kirmeyer G, Richards W, Smith C. An assessment of water distribution systems and associated research needs. Denver, CO: American Water Works Association Research Foundation; 1994.
10. American Water Works Association. Dawn of the replacement era: reinvesting in drinking water infrastructure. Denver, CO: American Water Works Association; 2001. Available at <http://www.win-water.org/reports/infrastructure.pdf>. Accessed February 14, 2011.

Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Effects Among Hispanic Adults, by Hispanic Subgroup — United States, 2002, 2003, 2006, and 2009

Arthritis affects approximately 50 million adults in the United States, making it one of the most prevalent health conditions among U.S. adults and the most common cause of disability (1). Arthritis is associated with substantial activity limitation, work disability, increased prevalence of obesity, reduced quality of life, and high health-care costs (1–3). Among U.S. adults, the prevalence of arthritis and arthritis-attributable effects (e.g., arthritis-attributable activity limitations [AAAL]) varies among racial/ethnic groups; non-Hispanic whites and non-Hispanic blacks have a higher prevalence of doctor-diagnosed arthritis compared with Hispanics, but Hispanics and non-Hispanic blacks have a higher prevalence of arthritis-attributable effects compared with non-Hispanic whites (1,2). The prevalence of arthritis and its effects among specific Hispanic subgroups has not been studied in a nationally representative sample of U.S. adults. To determine the annualized prevalence of arthritis and arthritis-attributable effects among Hispanic subgroups, CDC analyzed National Health Interview Survey (NHIS) data for 2002, 2003, 2006, and 2009 combined. This report describes the results of that analysis, which indicated that the age-adjusted prevalence of arthritis ranged from 11.7% among Cubans/Cuban Americans to 21.8% among Puerto Ricans; an estimated 3.1 million Hispanics had arthritis during these years. Among all subgroups of Hispanics with arthritis, at least 20% of persons with arthritis reported an arthritis-attributable effect: AAAL (range: 21.1% among Cubans/Cuban Americans to 48.5% among Puerto Ricans); arthritis-attributable work limitations (AAWL) (range: 32.9% among Central/South Americans to 41.6% among Mexican Americans); and severe joint pain (SJP) (range: 23.7% among Cubans/Cuban Americans to 44.1% among Puerto Ricans). These findings identify Hispanic subgroups with high burdens of arthritis who likely are in need of interventions designed to improve their quality of life.

The annualized prevalence of arthritis and three measures of arthritis-attributable effects (AAAL, AAWL, and SJP) among adults aged ≥ 18 years were estimated using data from NHIS, an in-person, nationally representative survey of the noninstitutionalized U.S. civilian population. Data were from the NHIS sample adult survey component; for this module, one adult per selected household was chosen randomly to participate. The survey oversampled Asians (2006 and 2009), blacks, and Hispanics. Additionally, in 2006, NHIS sampling procedures were revised so that persons in these racial/ethnic subgroups

aged ≥ 65 years have an increased probability of being selected as an adult in the sample. Response rates for the sample adult survey component were 74.3% in 2002 (31,044 respondents), 74.2% in 2003 (30,852 respondents), 70.8% in 2006 (24,275 respondents), and 65.4% in 2009 (27,731 respondents).^{*} To date, these are the only survey years in which all of the arthritis-attributable effects have been measured. All analyses included adjustment for the multistage complex survey design. Sampling weights were applied so that estimates are representative of the noninstitutionalized U.S. civilian population.

Doctor-diagnosed arthritis was defined as a response of “yes” to the question, “Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?” Persons with arthritis who responded “yes” to the question, “Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?” were classified as having AAAL. Those with arthritis aged 18–64 years who responded “yes” to the question, “Do arthritis or joint symptoms now affect whether you work, the type of work you do, or the amount of work you do?” were classified as having AAWL. Respondents with arthritis also were asked to rate their average joint pain during the preceding 30 days on a scale of 0 (no pain) to 10 (extreme pain); SJP was defined as a rating of 7 or higher.

Prevalence of arthritis and 95% confidence intervals (CIs) were generated for seven self-identified Hispanic subgroups: Mexican, Mexican American, Central and South American, Puerto Rican, other/multiple Hispanic, Cuban/Cuban American, and Dominican/Dominican American. The prevalence of arthritis was estimated among all Hispanic adults, whereas prevalence of arthritis-attributable effects (i.e., AAAL, AAWL, and SJP) was estimated only among adults with arthritis. Age-adjusted prevalence, standardized to the 2000 U.S. standard population (4), was estimated for subgroup comparisons; unadjusted prevalence (Table 1) was estimated for program planning. Age-adjusted prevalence of doctor-diagnosed arthritis among Hispanic subgroups also was stratified by age group, sex, education, and body mass index (BMI). Statistical significance was defined as nonoverlapping CIs.

Puerto Ricans reported the highest age-adjusted prevalence of arthritis (21.8%; CI = 19.6%–24.3%) (Table 1, Figure) and

^{*} Additional information available at http://www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm.

TABLE 1. Prevalence of doctor-diagnosed arthritis and three arthritis-attributable effects among Hispanic adults, by Hispanic subgroup — United States, 2002, 2003, 2006, and 2009

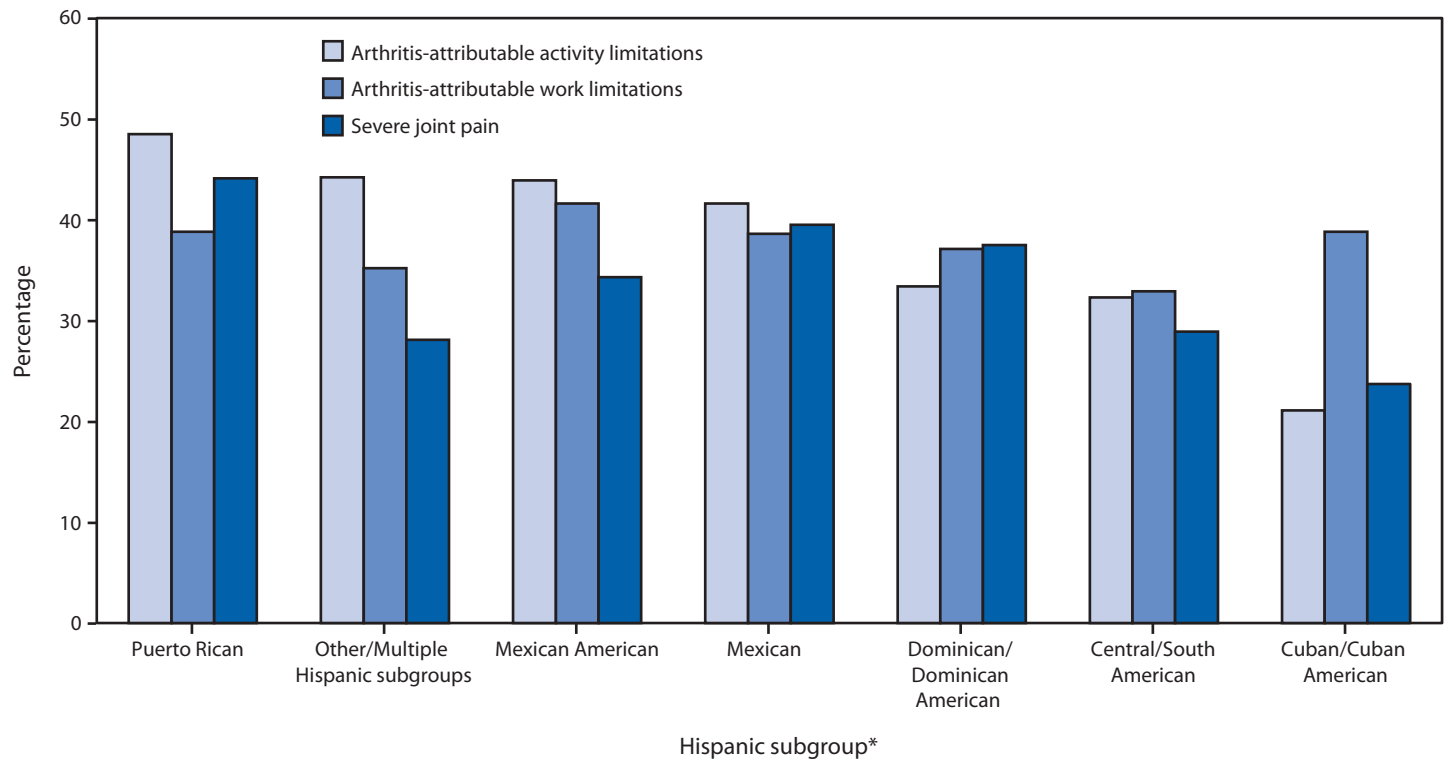
Effect	Mexican		Mexican American		Central/South American		Puerto Rican		Other/Multiple Hispanic subgroups		Cuban/Cuban American		Dominican/Dominican American	
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Unweighted total sample size	7,562		4,875		3,056		2,012		904		1,036		636	
Doctor-diagnosed arthritis	710		737		282		410		188		194		82	
Unweighted sample size	876,500		845,100		382,600		505,700		197,400		178,300		113,000	
Weighted average annual no.	8.3 (7.5–9.1)		13.2 (12.0–14.5)		8.7 (7.5–10.1)		18.9 (16.8–21.2)		18.0 (14.9–21.6)		15.0 (12.3–18.1)		14.2 (10.9–18.2)	
Age-adjusted	14.2 (13.0–15.6)		17.8 (16.2–19.5)		13.0 (11.4–14.9)		21.8 (19.6–24.3)		18.6 (15.8–21.7)		11.7 (10.0–13.7)		15.8 (12.5–19.8)	
Arthritis-attributable activity limitations*	400,400		383,500		132,800		256,600		83,500		61,000		46,100	
Unadjusted	45.7 (41.0–50.5)		45.4 (40.6–50.4)		34.9 (28.4–42.1)		50.8 (44.8–56.8)		42.3 (33.4–51.7)		34.2 (26.8–42.5)		40.8 (26.8–56.4)	
Age-adjusted	41.6 (35.9–47.5)		43.9 (38.2–49.6)		32.3 (24.9–40.7)		48.5 (41.7–55.3)		44.2 (34.6–54.2)		21.1 (13.9–30.8)		33.4 (22.2–46.8)	
Arthritis-attributable work limitations*†	251,000		263,500		95,100		148,900		43,700		21,200		51,800	
Unadjusted	40.5 (34.6–46.7)		43.6 (37.5–49.8)		35.7 (27.9–44.3)		42.0 (34.8–49.4)		33.9 (24.3–44.9)		34.4 (19.1–53.9)		52.8 (35.0–69.8)	
Age-adjusted	38.6 (31.8–45.8)		41.6 (34.6–48.9)		32.9 (24.3–42.8)		38.8 (31.3–46.8)		35.2 (24.1–48.0)		38.8 (17.0–66.2)		37.1 (21.9–55.3)	
Severe joint pain*	351,300		306,800		126,100		228,800		59,100		54,300		52,100	
Unadjusted	40.1 (35.7–44.8)		36.4 (32.3–40.6)		33.0 (26.6–40.0)		45.2 (39.0–51.7)		29.9 (23.4–37.4)		30.5 (24.9–36.6)		46.1 (32.5–60.2)	
Age-adjusted	39.5 (34.0–45.4)		34.3 (29.5–39.6)		28.9 (22.1–36.8)		44.1 (36.8–51.8)		28.1 (20.0–38.0)		23.7 (14.5–36.3)		37.5 (26.9–49.5)	

Abbreviation: CI = confidence interval.

* Among respondents with arthritis.

† Among respondents aged 18–64 years.

FIGURE. Age-adjusted prevalence of three arthritis-attributable effects among Hispanic adults with arthritis, by Hispanic subgroup — United States, 2002, 2003, 2006, and 2009



*Subgroups are in decreasing order of arthritis-attributable activity limitation prevalence.

Cubans/Cuban Americans the lowest (11.7%; CI = 10.0%–13.7%). An estimated 3.1 million Hispanics had arthritis.

For most subgroups, arthritis prevalence was highest among persons aged ≥ 65 years, women, and persons who were obese (BMI ≥ 30) (Table 2). The pattern in the relationship between educational attainment and arthritis within subgroups was inconsistent.

Among those with arthritis, Puerto Ricans had the highest age-adjusted prevalence of AAAL (48.5%; CI = 41.7%–55.3%) and Cubans/Cuban Americans the lowest (21.1%; CI = 13.9%–30.8%); nearly 1.4 million Hispanics reported AAAL. Mexican Americans and Central/South Americans reported the highest and lowest age-adjusted prevalence of AAWL, respectively (41.6%; CI = 34.6%–48.9% and 32.9%; CI = 24.3%–42.8%); overall, an estimated 875,000 Hispanics aged 18–64 years reported AAWL. Puerto Ricans reported the highest prevalence of SJP (44.1%; CI = 36.8%–51.8%) and Cubans/Cuban Americans (23.7%; CI = 14.5%–36.3%) the lowest; overall, an estimated 1.2 million Hispanics reported SJP.

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Editorial Note

Previous analyses of NHIS data among racial/ethnic groups indicated that Hispanics overall had a lower prevalence of arthritis compared with non-Hispanic whites and blacks (1,2). This subgroup analysis demonstrated variability in the prevalence of arthritis among Hispanic subgroups. The prevalence among Puerto Ricans (21.8%) was similar to that observed among non-Hispanic whites (22.6%) and non-Hispanic blacks (21.4%) in the previous analysis of 2007–2009 NHIS data (1).

Previous NHIS analyses also have indicated that, overall, Hispanics with arthritis report a high prevalence of arthritis-attributable effects (1,2). Despite the low prevalence of arthritis among some Hispanic subgroups in this analysis, the prevalence of each arthritis-attributable effect measure was greater than 20% for each subgroup, indicating the substantial impact of arthritis on the lives of all Hispanic subgroups. Furthermore, the prevalence of arthritis-attributable effects among Hispanics with arthritis was similar to or higher than that for non-Hispanic blacks and non-Hispanic whites. For example, the highest prevalence of AAAL was among Puerto

What is already known on this topic?

Arthritis and arthritis-attributable effects (i.e., arthritis-attributable activity limitations, arthritis-attributable work limitations, and severe joint pain) are a major public health problem in the United States. Non-Hispanic whites and blacks have a higher prevalence of arthritis than Hispanics, but Hispanics and non-Hispanic blacks have a higher prevalence of arthritis-attributable effects than non-Hispanic whites.

What does this report add?

Based on combined and annualized data from 2002, 2003, 2006, and 2009, an estimated 3.1 million Hispanics had arthritis. The age-adjusted prevalence of arthritis ranged from 11.7% among Cubans/Cuban Americans to 21.8% among Puerto Ricans. Among persons with arthritis, the estimated prevalence of arthritis-attributable effects varied considerably among Hispanic subgroups, but in all subgroups at least 20% of persons with arthritis reported one or more of the three effects: activity limitations, work limitations, and severe joint pain.

What are the implications for public health practice?

The burden of arthritis and arthritis-attributable effects is varied but substantial among all Hispanic subgroups. Wide-scale use of culturally adapted, community-level interventions that are proven to increase physical activity and self-management skills likely would lead to meaningful improvements in the quality of life for Hispanic adults with arthritis.

Ricans (48.5%), which was similar to the prevalence of AAAL among non-Hispanic blacks (43.4%) and higher than the prevalence among non-Hispanic whites (35.0%) in the 2007–2009 NHIS (1).

These are the first nationally representative estimates of the prevalence of arthritis and arthritis-attributable effects among Hispanic subgroups. The high prevalence among Puerto Ricans and low prevalence among Cuban Americans is a pattern that has been observed in previous studies. For example, a previous NHIS analysis of health status indicators (e.g., self-rated health and physical limitations) among all adults indicated a similar pattern of a high burden among Puerto Ricans and low burden among Cubans/Cuban Americans (5). A community-based study in Massachusetts found that a significantly higher proportion of older Puerto Ricans and Dominicans reported difficulties with activities of daily living compared with older non-Hispanic whites (e.g., 60% and 50% of Puerto Ricans and Dominicans, respectively, reported difficulties climbing stairs, compared with 43% of non-Hispanic whites) (6).

Studies examining the prevalence of health conditions and outcomes among Hispanic subgroups have suggested that prevalence rises with decreasing levels of education. For example, the low prevalence among Cuban/Cuban Americans and high prevalence among Puerto Ricans corresponds with the high and lower levels of educational attainment among

TABLE 2. Age-adjusted prevalence of doctor-diagnosed arthritis among Hispanic adults, by Hispanic subgroup and selected characteristics — United States, 2002, 2003, 2006, and 2009*

Characteristic	Mexican	Mexican American	Central/South American	Puerto Rican	Other/Multiple Hispanic subgroups	Cuban/Cuban American	Dominican/Dominican American
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Overall	14.2 (13.0–15.5)	17.8 (16.2–19.5)	13.0 (11.4–14.9)	21.8 (19.6–24.3)	18.6 (15.8–21.7)	11.7 (10.0–13.7)	15.8 (12.5–19.8)
Age (yrs)							
18–44	2.4 (2.0–2.9)	4.5 (3.7–5.4)	3.4 (2.5–4.7)	7.5 (5.8–9.7)	6.9 (5.0–9.5)	2.1 [†] (1.0–4.4)	3.8 (2.2–6.5)
45–64	19.1 (16.6–21.9)	26.1 (22.8–29.8)	14.6 (11.9–17.9)	32.0 (26.8–37.7)	25.8 (19.7–32.9)	13.9 (10.5–18.1)	30.1 (20.7–41.5)
≥65	42.6 (36.9–48.5)	44.5 (38.9–50.3)	40.2 (33.0–47.9)	48.5 (41.0–56.1)	42.2 (34.2–50.7)	37.9 (32.2–44.0)	28.2 (19.3–39.1)
Sex							
Men	10.8 (9.3–12.4)	14.9 (12.8–17.3)	8.2 (6.2–10.9)	16.0 (13.0–19.7)	16.3 (11.7–22.3)	7.2 (5.3–9.9)	6.7 [†] (3.6–12.1)
Women	17.8 (16.0–19.7)	20.5 (18.6–22.6)	15.9 (13.7–18.5)	26.6 (23.7–29.7)	20.0 (16.5–23.9)	16.5 (13.8–19.7)	19.9 (16.0–24.6)
Education							
Less than high school	13.8 (12.4–5.4)	18.8 (16.7–21.2)	13.1 (10.7–16.0)	20.7 (17.7–24.0)	24.0 (19.1–29.7)	14.2 (11.8–16.9)	17.4 (13.1–22.8)
High school	12.6 (9.7–16.4)	16.6 (13.6–20.1)	11.8 (8.9–15.5)	23.8 (19.5–28.8)	17.5 (12.6–23.7)	10.4 (7.2–14.8)	10.3 [†] (4.2–23.3)
Greater than high school	17.1 (14.0–20.7)	18.5 (15.7–21.6)	13.4 (10.5–16.9)	22.1 (17.9–27.0)	15.6 (12.1–19.8)	10.7 (8.1–14.0)	15.1 (8.8–24.7)
Body mass index							
Underweight/Normal (<25.0)	10.2 (8.2–12.7)	11.8 (9.7–14.2)	11.4 (9.0–14.2)	13.9 (10.9–17.5)	12.4 (8.7–17.3)	9.5 (7.0–12.7)	10.5 (6.0–17.8)
Overweight (25.0–29.9)	14.3 (12.4–16.5)	16.5 (14.2–19.0)	13.0 (10.5–16.0)	21.0 (18.1–24.3)	17.4 (13.6–22.0)	11.9 (9.4–15.0)	13.3 (8.8–19.5)
Obese (≥30.0)	18.0 (15.7–20.6)	23.6 (20.8–26.6)	15.3 (12.1–19.1)	29.7 (25.4–34.3)	31.2 (25.1–37.9)	15.3 (11.6–19.9)	30.3 (22.9–38.9)

Abbreviation: CI = confidence interval.

* All estimates except age-specific prevalence are age-adjusted.

[†] Estimates with a relative standard error > 30 and ≤50% are statistically unreliable.

Cubans/Cuban Americans and Puerto Ricans, respectively (5). This study did not find a consistent pattern in the relationship between arthritis prevalence and education level within subgroups (i.e., the prevalence of arthritis decreased with rising levels of education for the Cuban/Cuban American and other/multiple Hispanic subgroups only).

The findings in this report are subject to at least five limitations. First, doctor-diagnosed arthritis was self-reported; however, validation studies, which did not include Hispanics, have shown the definition to be sufficiently sensitive for public health surveillance (1). Second, Hispanics typically are undercounted in census counts and surveys (7); however, the limited amount of published information is insufficient to ascertain the impact (i.e., overestimation or underestimation) of this on estimates in this report. Third, although the analyses were based on 4 years of combined NHIS data, for some subgroups, the small sample sizes reduced the precision of some estimates. Fourth, the variability in health insurance coverage among Hispanic subgroups (e.g., in 2008, 16%, 23%, and 35% of Puerto Ricans, Cubans/Cuban Americans, and Mexicans in the United States reported being uninsured) (8) might account for some of the variability in prevalence of doctor-diagnosed arthritis among these subgroups. If so, arthritis prevalence might be underestimated in populations with low health insurance coverage or limited access to medical care. Finally, the prevalence of arthritis rises with increasing BMI (1). Some of the variability in the prevalence of arthritis and arthritis-attributable effects might be linked to varying

BMI among Hispanic subgroups. Sample sizes were insufficient to examine this possibility.

Physical activity has been proven to reduce pain and improve physical function among persons with arthritis (9). Using evidence from focus group work with Puerto Ricans, Mexicans, Mexican Americans, Cubans/Cuban Americans, and Central/South Americans, CDC developed a health communications campaign (Buenos Días, Arthritis) to promote physical activity among Spanish-speaking adults with arthritis (10). Self-management education (SME) is another strategy that has been proven to improve the quality of life of persons with arthritis (9). Tomando Control de Su Salud (Taking Control of Your Health) and Programa de Manejo Personal de la Arthritis (The Arthritis Self-Management Program) are Spanish-language, culturally adapted SME programs; similarly, Manejando Mi Arthritis (The Arthritis Toolkit) is a self-study program for Spanish-speaking adults with arthritis. Because wide-scale use of these evidence-based, community-level interventions would maximize their public health impact and likely lead to meaningful improvements in the quality of life for adults with arthritis, the CDC Arthritis Program funds 12 state programs to increase the availability of evidence-based physical activity and SME courses. Policies that lead to investment of public and private resources (financial and human capital) might result in increased availability and access to evidence-based intervention programs. The geographic clustering of some Hispanic subpopulations in the United States (e.g., the largest Puerto Rican community in the United States is in New

York City) indicates that identifiable areas exist that might have substantial need for these interventions and that greater use of an effective program might have a large public health impact in these areas.

References

1. CDC. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2007–2009. *MMWR* 2010;59:1261–5.
2. CDC. Racial/ethnic differences in the prevalence and impact of doctor-diagnosed arthritis—United States, 2002. *MMWR* 2005;54:119–23.
3. CDC. Arthritis: meeting the challenge. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at <http://www.cdc.gov/chronicdisease/resources/publications/aag/arthritis.htm>. Accessed February 10, 2011.
4. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. *Healthy People 2010 Stat Notes* 2001;20:1–10.
5. Hajat A, Lucas JB, Kington R. Health outcomes among Hispanic subgroups: data from the National Health Interview Survey, 1992–95. *Adv Data* 2000;310:1–14.
6. Tucker KL, Falcon LM, Bianchi LA, Cacho E, Bermudez OI. Self-reported prevalence and health correlates of functional limitation among Massachusetts elderly Puerto Ricans, Dominicans, and non-Hispanic white neighborhood comparison group. *J Gerontol A Biol Sci Med Sci* 2000;55:M90–7.
7. Lopez MH, Taylor P. Latinos and the 2010 Census: the foreign born are more positive. Washington, DC: Pew Hispanic Center; 2010. Available at <http://pewhispanic.org/files/reports/121.pdf>. Accessed February 10, 2011.
8. Dockterman D. Country of origin profiles: without health insurance. Washington, DC: Pew Hispanic Center; 2010. Available at <http://pewhispanic.org/data/origins>. Accessed February 10, 2011.
9. Brady TJ, Jernick SL, Hootman JM, Sniezek JE. Public health interventions for arthritis: expanding the toolbox of evidence-based interventions. *J Womens Health (Larchmt)* 2009;18:1905–17.
10. Brady T, Lam J. Impact of Buenos Dias, Arthritis, a Spanish health communications campaign promoting physical activity among Spanish-speaking people with arthritis. *Arthritis Rheum* 2010;62:S611.

Potential Transmission of Viral Hepatitis Through Use of Stored Blood Vessels as Conduits in Organ Transplantation — Pennsylvania, 2009

Solid organ transplantation sometimes requires the use of blood vessels from a deceased donor as conduits to connect transplanted organ vessels to recipient vessels. Vessels not immediately used are sometimes stored for later use, including vessels collected from hepatitis B virus (HBV) and hepatitis C virus (HCV) seropositive donors; HBV and HCV seropositive vessels can be stored for use in seropositive recipients. In May 2009, HCV was transmitted when a transplant facility inadvertently used a blood vessel conduit from an HCV-seropositive donor in a seronegative recipient. In November 2009, a second transplant facility, the University of Pittsburgh Medical Center (UPMC), identified two cases of potential hepatitis virus transmission from vessel conduits. In December 2009, CDC was asked to assist the local health department in conducting an investigation at UPMC. This report summarizes the results of that investigation, which determined that, although neither recipient of the vessel conduits at UPMC contracted hepatitis, these represented “near miss” incidents in which transmission could have occurred. The storage of vessels from hepatitis-seropositive donors at UPMC and its affiliated Department of Veterans Affairs (VA) hospital was not necessary; vessels from seropositive donors were infrequently used because adequate supplies of vessels from seronegative donors were available. UPMC’s prohibition of the storage of vessels from hepatitis-seropositive donors has removed a documented risk factor for viral transmission while not substantially affecting the transplant centers’ vessel conduit supply. Evaluation of available national data supports this prohibition. Therefore, CDC recommends that transplant centers discontinue the practice of storing vessel from donors with markers for viral hepatitis, including HBV surface antigen (HBsAg), HCV antibody (anti-HCV), and HBV or HCV detectable by nucleic acid tests.

Case Reports

In September 2009, CDC was notified of an anti-HCV negative patient who, during liver transplantation 4 months earlier, had been given a vessel conduit inadvertently from an anti-HCV positive donor. The potential disease transmission was identified when the United Network for Organ Sharing (UNOS) retrospectively recognized the serologic discordance between the HCV-seronegative recipient and the HCV-seropositive vessel donor. The transplant facility subsequently reported HCV infection in the patient resulting from use of the seropositive vessel conduit.

As a result of this disease transmission, UNOS requested that all transplant centers review HBV and HCV vessel conduit use during May 2006–May 2008. In November 2009, a second transplant center (UPMC) identified two incidents of conduit transplantation from hepatitis-seropositive donors into seronegative recipients. The first was identified as a result of the UNOS inquiry, and the second as a result of an internal audit by UPMC of its vessel conduit use during June 2008–November 2009. CDC and the local health department subsequently were invited to investigate the cases at UPMC. A case was defined as transplantation of a vessel conduit from a hepatitis-seropositive donor into a seronegative recipient at UPMC during May 2006–November 2009.

Case 1. On May 21, 2008, a woman aged 65 years received a cadaveric left kidney transplant for end-stage renal disease secondary to diabetes and hypertension. Pretransplantation, both the kidney donor and kidney recipient were negative HBsAg, hepatitis B surface antibody (HBsAb), and hepatitis B core antibody (HBcAb). However, the donor of the vessel was positive for HBcAb. Laboratory tests on recipient specimens on November 18, 2009, included an HBV surface antibody, surface antigen, and core antibody that were all negative, an aspartate aminotransaminase (AST) of 13 U/dL (normal: 15–37 U/dL), and an alanine aminotransaminase (ALT) of 21 U/dL (normal: 30–65 U/dL). On December 14, 2009, HBV DNA was undetectable at <300 copies. After the error was discovered, hepatitis B vaccinations were administered, but antiviral therapy was not offered because of the lack of clinical or laboratory evidence of hepatitis transmission. More than 1 year after the transplant, the patient remained asymptomatic for infection, and serial testing for hepatitis B markers remained negative.

Case 2. On October 21, 2009, a man aged 64 years received a living donor kidney transplant for end-stage renal disease secondary to diabetes and hypertension. Pretransplantation, both the donor and recipient of the kidney were negative for anti-HCV. The donor of the vessel, however, was positive for anti-HCV. Subsequent testing showed the kidney recipient’s serum on November 10, 2009, was negative for anti-HCV and had undetectable (i.e., <30 IU/mL) HCV RNA on November 19. One year after transplantation, the recipient remained asymptomatic for infection, and serial testing for hepatitis C markers remained negative.

Public Health Investigation

CDC assisted the local health department in investigating the events that resulted in transplantation of the two vessel conduits from hepatitis-seropositive donors into seronegative recipients at UPMC. In addition, the effect of discontinuing the storage of hepatitis-seropositive vessels on the availability of stored vessels for transplantation was evaluated.

At UPMC, vessels are collected and stored in a sterile fashion and refrigerated individually in bags with an outer pocket. A donor sheet with ABO blood group and hepatitis serologies is kept in the pocket of each bag, and examination of this sheet before transplantation is the only way to ensure seroconcordance between the vessel donor and organ recipient. At the time the two cases occurred, hepatitis-seropositive vessels were stored alongside hepatitis-seronegative vessels. According to UPMC transplant surgeons, the donor sheet presumably was examined in both cases, but hepatitis serologies likely were overlooked, resulting in HBV and HCV seropositive vessel conduits being transplanted into seronegative recipients.

In a review of vessel conduit use at UPMC and its affiliated VA hospital from January 1, 2008, to December 31, 2009, only two (0.6%) of 331 stored vessels were found to be from hepatitis-seropositive donors at UPMC and only six (9.4%) of 64 at the VA hospital. Two of the vessels were from donors positive for HBsAg, five were from donors positive for anti-HCV, and one was from a donor positive for both HBsAg and anti-HCV. UNOS collects information from all U.S. transplant centers on donor serologic markers for all vessel conduits recovered. According to these data, of 14,144 vessel conduits recovered nationally in 2008 and 2009, 367 (2.6%) were from donors with unknown or positive anti-HCV status, 30 (0.2%) were from donors with unknown or positive HBsAg status, and 644 (4.6%) were from donors of unknown, indeterminate, or seropositive HBcAb status. Even if no overlap of positive hepatitis markers among donors of these stored vessels existed, vessels from seropositive donors would account for only 7.4% of stored vessels nationally.

In addition to vessels from seropositive donors comprising a small proportion of stored vessels, UNOS data indicate that only a small proportion of these stored vessels are actually used. During 2008–2009, a total of 4,946 (72.2%) of 6,852 stored vessels with a documented disposition were not used for transplantations and eventually were discarded. During the same period at UPMC and its affiliated VA hospital, 275 (83.1%) of 331 and 61 (95.3%) of 64 stored vessels, respectively, were stored but not used.

What is already known on this topic?

Donated blood vessels are considered safe and reliable for use as conduits in organ transplantation, but they have been linked in rare instances to disease transmission.

What is added by this report?

Current procedures that permit the collection and storage of potentially infectious vessels put patients at risk for hepatitis B and C infection. This risk is avoidable by discontinuing the practice of storing vessels from seropositive donors.

What are the implications for public health practice?

By discontinuing the storage of these potentially infectious vessels, the potential for viral hepatitis transmission is reduced greatly without affecting the availability of vessel conduits needed for organ transplantation.

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Editorial Note

This investigation was triggered by the report of HCV transmission through use of a vessel conduit from an HCV-seropositive donor during liver transplantation. Although hepatitis transmission did not occur in the two cases described in this report, the error of transplanting a vessel from a seropositive donor into a seronegative recipient was the same in these cases as it was in the case where transmission did occur; the error occurred despite appropriate labeling of vessel seropositivity. These are thus considered important “near miss” incidents in which transmission could have occurred despite appropriate safeguards being in place. Although vessel conduits commonly are considered safe and reliable in transplant surgeries (1–3), they have been linked to disease transmission, resulting in severe illness and death (4).

Current policy regulating the storage and use of vessels is set by the Organ Procurement and Transplantation Network (OPTN) (1),* which is overseen by UNOS through a contract with the Health Resources and Services Administration. Vessels can be stored for up to 14 days and used when surgical complications arise in recipients who received an organ from

* Additional information available at <http://optn.transplant.hrsa.gov/policiesand-bylaws/policies.asp>.

the vessel donor or to facilitate transplant in another organ recipient. Vessels designated for organ transplant are only available for organ transplant procedures and are not used for other vascular procedures.

OPTN permits recovery and storage of vessels from hepatitis-seropositive donors because many transplantations occur in patients with markers for hepatitis infection. However, CDC regards this practice as placing seronegative transplant recipients at an unnecessary risk for exposure to viral hepatitis. Based on the investigation of vessel conduit use at UPMC and review of available national data from UNOS, CDC found that vessels from seropositive donors rarely were stored, and removal of these vessels from storage would not result in lack of vessel conduit availability. In fact, several transplant centers nationwide do not store vessels from hepatitis-seropositive donors and have not reported vessel shortages from this practice. Some transplant centers might remain concerned about the potential for vessel shortages, particularly in the case of surgical complications that arise in the recipient of the accompanying organ. However, several acceptable alternatives to stored vessel use exist, including use of a recipient blood vessel procured at the time of surgery, and these may be considered if such a situation occurs. Since November 2009, UPMC has prohibited storage of vessels from donors positive for anti-HCV, HBsAg, and HbcAb, and no problems related to vessel availability have been noted.

Based on this investigation, CDC recommends that transplant centers discontinue the practice of storing vessels from

donors with viral hepatitis markers. These markers include HBsAg, anti-HCV, or HBV or HCV detectable by nucleic acid tests. This discontinuation would apply to storage of vessels from donors seropositive or nucleic acid–positive, even if their storage was designated for use only with the original organ, because this practice still would not remove the potential for human error resulting in inadvertent use in a seronegative recipient. OPTN currently is considering a binding policy prohibiting storage of hepatitis-seropositive vessels at transplant centers.

Acknowledgments

The findings in this report are based, in part, on contributions by S Taranto, United Network for Organ Sharing; D Maurer, MBA, and S Doloughy, Univ of Pittsburgh Medical Center; E Lambrecht, VA Pittsburgh Healthcare System; and ND Thompson, PhD, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC.

References

1. Muralidharan V, Imber C, Leelaudomlipi S, et al. Arterial conduits for hepatic artery revascularization in adult liver transplantation. *Transpl Int* 2004;17:163–8.
2. Goldstein RM, Secrest CL, Lintmalm GB, Husberg BS. Problematic vascular reconstruction in liver transplantation. Part I. Arterial surgery 1990;107:540–3.
3. Sellers MT, Hausteil SV, McGuire BM, et al. Use of preserved vascular homografts in liver transplantation: hepatic artery aneurysms and other complications. *Am J Transplant* 2002;2:471–5.
4. Srinivasan A, Burton EC, Kuehnert MJ, et al. Transmission of rabies virus from an organ donor to four transplant recipients. *N Engl J Med* 2005;352:1103–11.

Update: Influenza Activity — United States, October 3, 2010–February 5, 2011

This report summarizes U.S. influenza activity* since the beginning of the 2010–11 influenza season (October 3, 2010) and updates the previous report (1). From October through early December 2010, influenza activity remained low in most regions of the United States. Activity increased beginning in mid-December 2010 and continued to increase during January and early February 2011. Influenza B, 2009 influenza A (H1N1), and influenza A (H3N2) viruses all have been identified thus far this influenza season, and most viruses in circulation are antigenically similar to strains included in the 2010–11 vaccine.

Viral Surveillance

During October 3, 2010–February 5, 2011, approximately 140 World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories in the United States tested 116,255 respiratory specimens for influenza viruses; 22,641 (19.5%) were positive (Figure 1). Of these, 16,496 (73%) were influenza A viruses, and 6,145 (27%) were influenza B viruses. A total of 11,094 (67%) of the influenza A viruses were subtyped; 7,845 (71%) were influenza A (H3) viruses, and 3,249 (29%) were 2009 influenza A (H1) viruses.

Influenza virus–positive test results have been reported from all 50 states and the District of Columbia. The percentage of specimens testing positive for influenza first exceeded 10% during the week ending November 27, 2010, increased through the week ending January 29, 2011, when 34% of specimens tested positive, and decreased slightly in the week ending February 5, 2011, when 32% of specimens tested positive.

Although influenza A (H3N2) viruses have predominated this season, 2009 influenza A (H1N1) and B viruses also have circulated widely. The relative proportion of each type

or subtype has varied by date and U.S. Department of Health and Human Services region.[†] From early November through mid-December, influenza B viruses accounted for 40%–49% of influenza viruses reported in the United States, with the largest numbers reported from Region 4, the southeastern states. Influenza B viruses were predominant in Region 4 through the end of December. During November and December, influenza A viruses predominated in all other regions and have predominated in all regions during January and early February. More than 80% of subtyped influenza A viruses from November and December were A (H3N2). However, the proportion of 2009 influenza A (H1N1) viruses began to increase during January and accounted for 50% of all subtyped influenza A viruses for the week ending February 5, 2011.

Outpatient Illness Surveillance

Since October 3, 2010, the weekly percentage of outpatient visits for influenza-like illness (ILI)[§] reported by approximately 1,700 U.S. Outpatient ILI Surveillance Network (ILINet) providers in 50 states, New York City, Chicago, and the District of Columbia that comprise ILINet has ranged from 1.1% to 4.6%. Since December 19, 2010, the percentage has exceeded the national baseline of 2.5% (Figure 2). On a regional level,[¶] the percentage of outpatient visits for ILI ranged from 1.8% to 7.3% during the week ending February 5, 2011. Nine of the 10 regions (Regions 1–8 and 10) reported ILI above

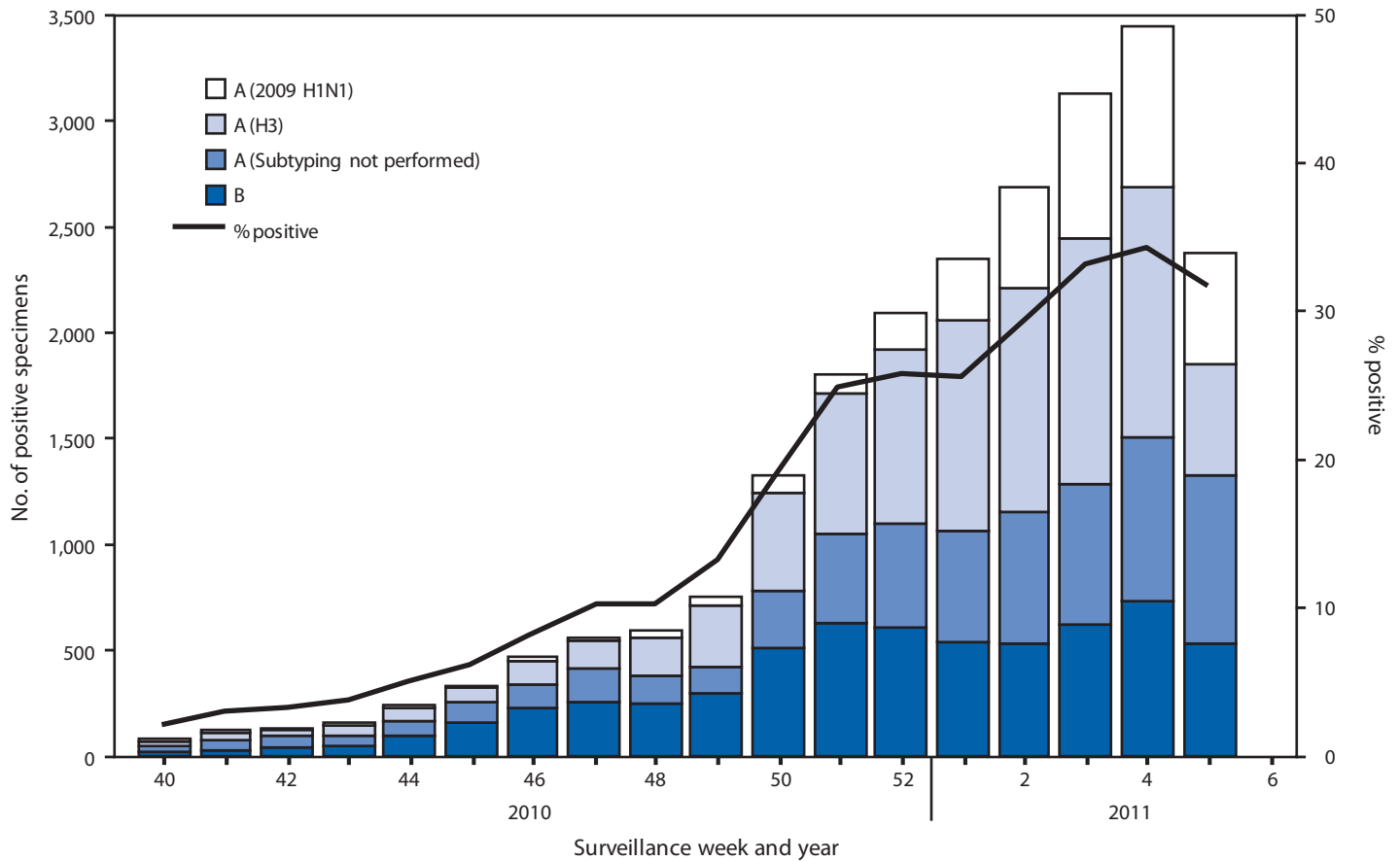
[†] The 10 regions include the following states and territories: Region 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Region 2: New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands; Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Region 6: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas; Region 7: Iowa, Kansas, Missouri, and Nebraska; Region 8: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; Region 9: Arizona, California, Hawaii, Nevada, American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, and Republic of Palau; Region 10: Alaska, Idaho, Oregon, and Washington.

[§] Defined as a temperature of $\geq 100.0^{\circ}\text{F}$ ($\geq 37.8^{\circ}\text{C}$), oral or equivalent, and cough or sore throat, in the absence of a known cause other than influenza.

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

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

FIGURE 1. Number* and percentage of respiratory specimens testing positive for influenza by type, surveillance week, and year — World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories, United States, October 3, 2010–February 5, 2011



*N = 22,641.

region-specific baseline levels. Data collected in ILINet are used to produce a measure of ILI activity** by state. During the week ending February 5, 2011, 19 states (Alabama, Georgia, Illinois, Indiana, Kansas, Louisiana, Maryland, Mississippi, Missouri, New Jersey, New Mexico, New York, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, and Virginia) experienced high ILI activity, nine states experienced moderate ILI activity, New York City and 10 states experienced low ILI activity, 12 states experienced minimal

ILI activity, and data from the District of Columbia were insufficient to calculate an ILI activity level.

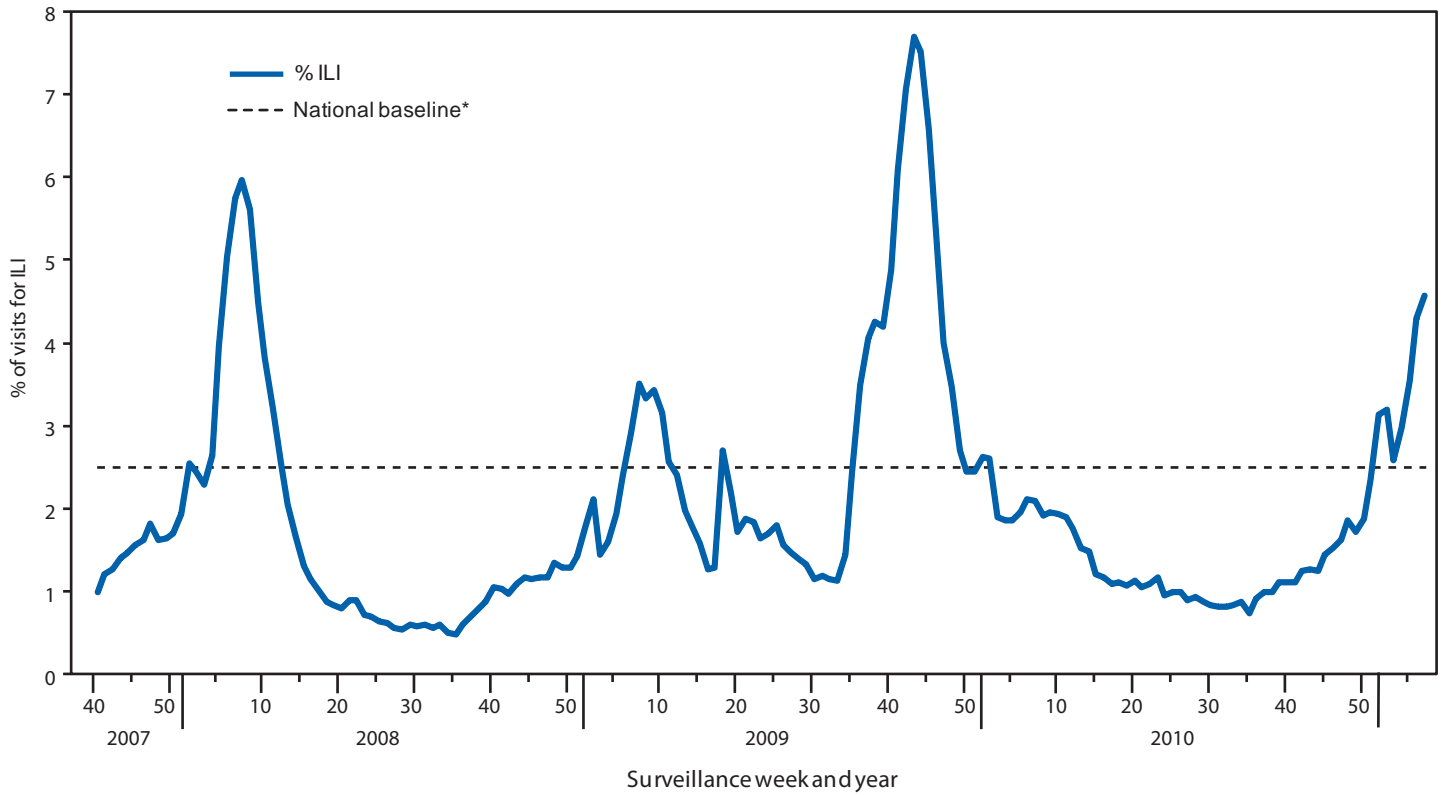
State-Specific Levels of Influenza Activity

For the week ending February 5, 2011, the level of influenza activity†† was reported as widespread by 37 states and regional in nine states. The District of Columbia reported local activity, and four states, as well as Puerto Rico, Guam, and the U.S. Virgin Islands, reported sporadic activity.

** Activity levels are based on the percent of outpatient visits in a state attributed to ILI and are compared with the average percent of ILI visits that occur during spring and fall weeks with little or no influenza virus circulation. Activity levels range from minimal, which would correspond to ILI activity from outpatient clinics being at or below the average, to high, which would correspond to ILI activity from outpatient clinics being much higher than the average. Because the clinical definition of ILI is nonspecific, not all ILI is caused by influenza; however, when combined with laboratory data, the information on ILI activity provides a useful picture of influenza activity in the United States.

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

FIGURE 2. Percentage of visits for influenza-like illness (ILI) reported, by surveillance week and year — U.S. Outpatient Influenza-Like Illness Surveillance Network (ILINet), United States, September 30, 2007–February 5, 2011



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

Widespread influenza activity was first reported in Georgia during the week ending December 18; an additional 13 states reported regional spread of influenza activity for that week. By the week ending January 22, widespread influenza activity had been reported by at least one state in each region.

Influenza-Associated Hospitalizations

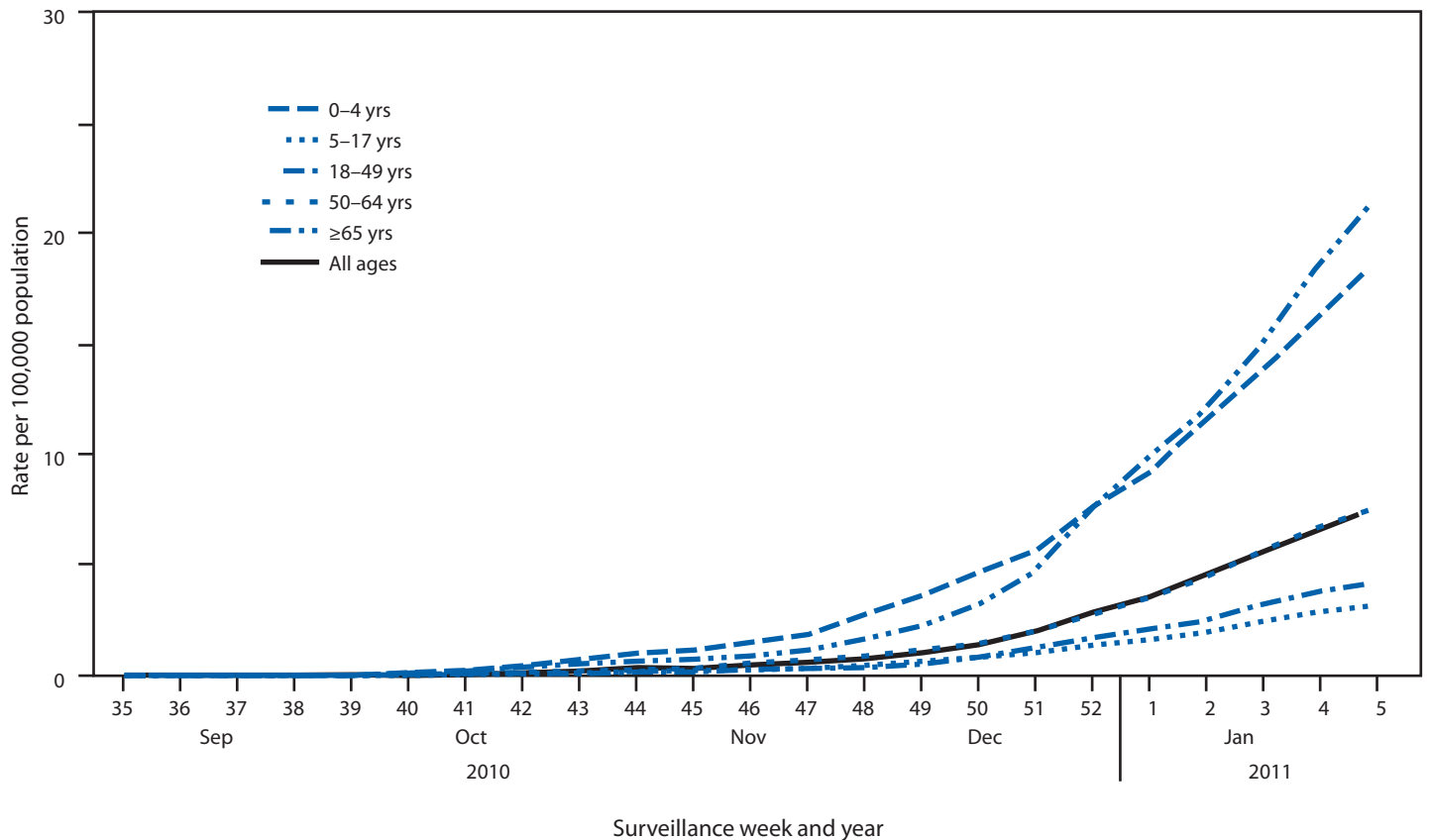
CDC monitors hospitalizations associated with laboratory-confirmed influenza infections using the FluSurv-NET surveillance system. FluSurv-NET^{§§} is a population-based surveillance network that was created during the 2009–10 influenza season, when surveillance in six states was added to ongoing surveillance for influenza-associated hospitalizations in the 10 Emerging Infections Program (EIP) states. Based on EIP surveillance data, the cumulative hospitalization rate (per 100,000 population) for October 3, 2010–February 5, 2011, was 14.5 among children aged 0–4 years, 2.5 among children

aged 5–17 years, 3.5 among adults aged 18–49 years, 6.3 among adults aged 50–64 years, and 18.8 among adults aged ≥65 years. The cumulative incidence for all age groups since October 3, 2010, was 6.3 per 100,000. Based on FluSurv-NET data, the cumulative hospitalization rate (per 100,000) for October 3, 2010–February 5, 2011, was 18.5 among children aged 0–4 years, 3.2 among children aged 5–17 years, 4.2 among adults aged 18–49 years, 7.5 among adults aged 50–64 years, and 21.3 among adults aged ≥65 years. The cumulative incidence for all age groups since October 3, 2010, was 7.6 per 100,000 (Figure 3).

As of February 5, 2011, among the 628 FluSurv-NET adult patients for whom medical chart data were available for analysis, the most frequent underlying conditions were metabolic disorders (32%), cardiovascular disease (30%), and asthma or reactive airway disease (19%). Among 226 children hospitalized with laboratory-confirmed influenza, 47% did not have any underlying conditions, and 20% had underlying asthma or reactive airway disease.

^{§§} FluSurv-NET conducts population-based surveillance at sites in 10 Emerging Infections Program (EIP) states (California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New Mexico, New York, Oregon, and Tennessee), and at sites in Idaho, Michigan, Ohio, Oklahoma, Rhode Island, and Utah.

FIGURE 3. Cumulative rate of laboratory-confirmed influenza-associated hospitalizations, by age group, surveillance week, and year — FluSurv-NET (Emerging Infections Program [EIP] and six new sites),* United States, October 3, 2010–February 5, 2011



* FluSurv-NET results include surveillance at EIP sites and at sites in six additional states (Idaho, Michigan, Ohio, Oklahoma, Rhode Island, and Utah). Rates are based on 2,197 total cases for the period, of which 380 occurred among persons aged 0–4 years, 159 among persons aged 5–17 years, 565 among persons aged 18–49 years, 395 among persons aged 50–64 years, and 698 among persons aged ≥65 years.

Pneumonia and Influenza-Related Mortality

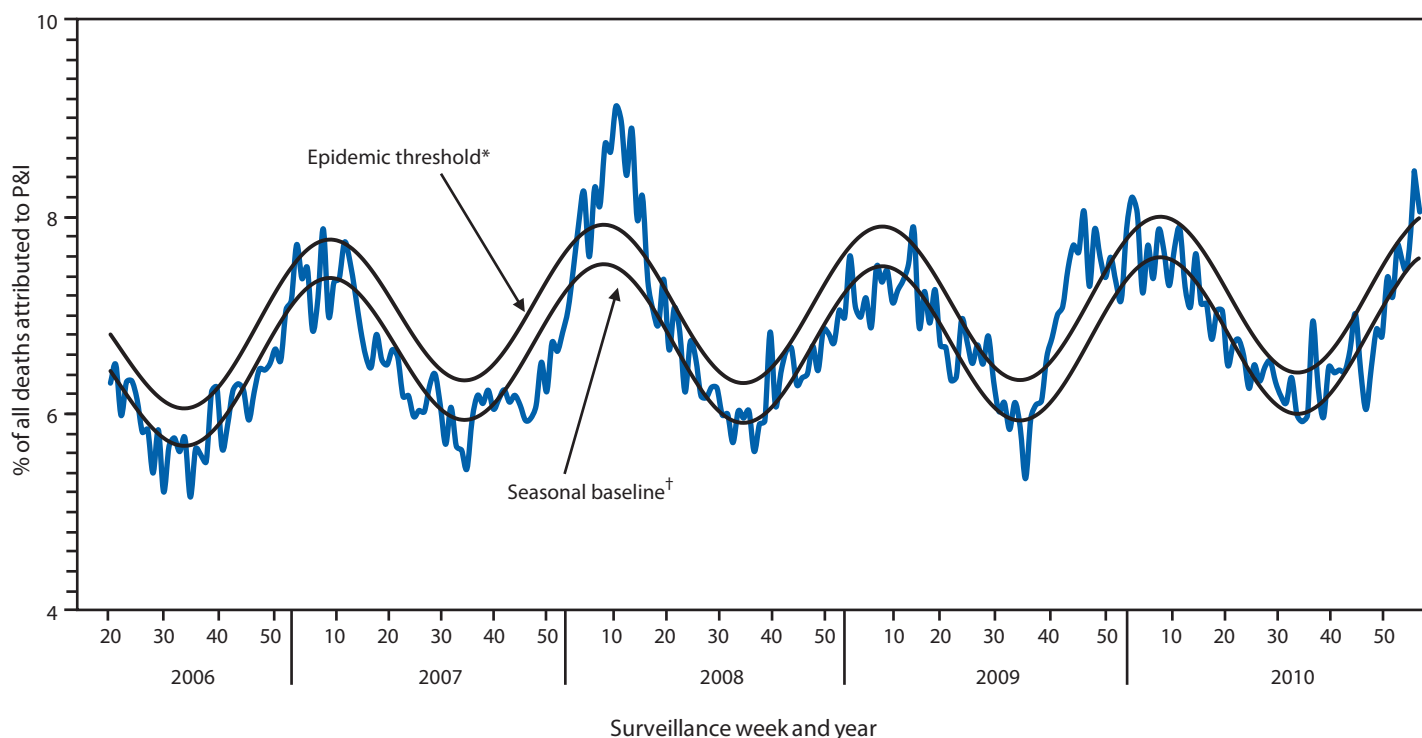
For the week ending February 5, 2011, pneumonia and influenza (P&I) was reported as an underlying or contributing cause of death for 8.0% of all deaths reported to the 122 Cities Mortality Reporting System. This percentage is at the epidemic threshold of 7.97% for that week.⁴⁴ Since October 3, 2010, the weekly percentage of deaths attributed to P&I ranged from 6.0% to 8.4%, and first exceeded the epidemic threshold during the week ending January 29, 2011 (Figure 4). Peak weekly percentages of deaths attributed to P&I previously were as follows: 8.2 for the week ending January 23, 2010, during the 2009–10 season; 7.9 for the week ending April 11, 2009, during the 2008–09 season; 9.1% for the week ending March 15, 2008, during the 2007–08 season; and 7.7% for the week ending February 24, 2007, during the 2006–07 season.

⁴⁴ The seasonal baseline proportion of P&I deaths is projected using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I that were reported by the 122 Cities Mortality Reporting System during the preceding 5 years. The epidemic threshold is set at 1.645 standard deviations above the seasonal baseline.

Influenza-Related Pediatric Mortality

As of February 5, 2011, a total of 30 influenza-related pediatric deaths from 18 states (Arizona, Colorado, Florida, Georgia, Illinois, Indiana, Louisiana, Michigan, New Jersey, New York, North Carolina, North Dakota, Oklahoma, Pennsylvania, Texas, Utah, Virginia, and West Virginia) and New York City have been reported to CDC for the 2010–11 season. Nine deaths were associated with influenza A (H3N2) virus infection, 12 deaths were associated with influenza B virus infection, three deaths were associated with influenza A (H1N1), and six were associated with an influenza A virus for which the subtype was not determined. Twenty of these deaths occurred during January 16–February 5, 2011. During the 2009 pandemic, 329 pediatric deaths were reported during April 15, 2009–January 23, 2010. Before the pandemic, 65 influenza-related pediatric deaths were reported for the 2008–09 season (through the week ending April 11, 2009), 88 pediatric deaths were reported for the 2007–08 season, and 77 pediatric deaths were reported for the 2006–07 season.

FIGURE 4. Percentage of all deaths attributed to pneumonia and influenza (P&I), by surveillance week and year — 122 Cities Mortality Reporting System, United States, 2006–2011



*The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

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

Antigenic Characterization

WHO collaborating laboratories in the United States are requested to submit a subset of their influenza-positive respiratory specimens to CDC for further antigenic characterization. Since October 1, 2010, CDC has antigenically characterized 564 influenza viruses submitted by U.S. laboratories: 82 were 2009 influenza A (H1N1), 300 influenza A (H3N2), and 182 influenza B viruses. All 82 of the 2009 influenza A (H1N1) viruses were characterized as A/California/7/2009-like, the influenza A (H1N1) component of the 2010–11 influenza vaccine. Of 300 influenza A (H3N2) viruses, 298 (99%) were characterized as A/Perth/16/2009-like, the influenza A (H3N2) component of the 2010–11 influenza vaccine. Two viruses (1%) of the 300 tested showed reduced titers with antiserum produced against A/Perth/16/2009. Of the 182 influenza B viruses tested, 170 (93%) belong to the B/Victoria lineage of viruses: 169 (99.4%) were characterized as B/Brisbane/60/2008-like, the recommended influenza B component for the 2010–11 influenza vaccine, and one (0.6%) showed reduced titers with antisera produced against B/Brisbane/60/2008. Twelve (7.0%) of the 182 influenza B viruses were identified as belonging to the B/Yamagata lineage of viruses.

Novel Influenza A Viruses

Four cases of human infection with a novel influenza A virus have been reported this influenza season. Three cases were reported during November and December 2010 and are described in a previous update (1). On January 25, 2011, a fourth case of human infection with swine origin influenza A (H3N2) was identified in a female child in Pennsylvania. She developed symptoms of fever, headache, and lethargy on September 6, 2010. She did not require hospitalization and has since fully recovered. The patient reported contact with swine in the week preceding symptom onset.

Antiviral Resistance of Influenza Virus Isolates

Since October 1, 2010, a total of 364 influenza virus isolates have been tested for antiviral resistance. Of the 158 influenza A (H3N2) and 119 influenza B viruses tested, 100% were sensitive to both oseltamivir and zanamivir. Among the 2009 influenza A (H1N1) viruses, the 87 tested for resistance to oseltamivir were 100% sensitive, and the 33 tested for resistance to zanamivir were 100% sensitive. High levels of resistance to the adamantanes (amantadine and rimantadine) persist among 2009 influenza A (H1N1) and A (H3N2) viruses currently circulating.

What is already known on this topic?

Influenza A (H3N2), 2009 A (H1N1), and B viruses have cocirculated this season; although the predominant influenza virus has varied over time and by region, the majority of circulating influenza viruses are closely related to components included in the 2010–11 influenza vaccine.

What is added by this report?

Rates of influenza-associated hospitalization this season have been highest in children aged 0–4 years and adults aged ≥ 65 years, as seen in the 2007–08 season, when influenza A (H3N2) last predominated. The number of influenza-associated pediatric deaths (30) reported this season has tripled since mid-January.

What are the implications for public health practice?

Influenza continues to be associated with a substantial number of out-patient visits, hospitalizations, and deaths, particularly among high-risk groups. Health-care providers should continue to offer vaccine to all unvaccinated persons aged ≥ 6 months throughout the influenza season and provide timely empiric antiviral treatment for patients who have severe, complicated, or progressive influenza illness, or who are at higher risk for influenza complications.

Reported by

WHO Collaborating Center for the Surveillance, Epidemiology, and Control of Influenza. L Brammer MPH, S Epperson, MPH, M Jhung, MD, K Kniss, MPH, D Mustaquim, MPH, A Bishop, MPH, R Dhara, MPH, T Wallis, MS, L Finelli, DrPH, L Gubareva, PhD, J Bresee, MD, A Klimov, PhD, N Cox, PhD, Influenza Div, National Center for Immunization and Respiratory Diseases; S Garg, MD, EIS Officer, CDC.

Editorial Note

Influenza activity, as measured across all CDC influenza surveillance systems in the United States, began to increase in mid-December and continued to increase through the week ending February 5, 2011. Although the timing of peak activity is not predictable, peak activity in the United States most commonly occurs in February; however, substantial activity can occur as late as May (2). Vaccination remains the most effective method to prevent influenza and its complications. Health-care providers should continue to offer vaccine to all unvaccinated persons aged ≥ 6 months throughout the influenza season.

Influenza A (H3N2), 2009 A (H1N1), and B viruses have cocirculated this influenza season, with the predominant influenza virus varying over time and by region. Influenza A (H3N2) has been the predominant influenza virus in circulation in all regions except Region 4, where influenza B predominated early in the season. Although a small number of 2009 influenza A (H1N1) viruses were found to be circulating early in the season, the proportion of influenza A viruses

that are 2009 influenza A (H1N1) has increased over the past few weeks in several regions. Thus far this season, all of the 2009 influenza A (H1N1) viruses and the majority of influenza A (H3N2) and B viruses in circulation that were tested are closely related to components included in the 2010–11 influenza vaccine.

According to 2010 recommendations of the Advisory Committee on Immunization Practices (ACIP), health-care providers should offer influenza vaccination to all persons aged ≥ 6 months throughout the influenza season (2). All children aged 6 months–8 years who receive a seasonal influenza vaccine for the first time should receive 2 doses. Children who received only 1 dose of a seasonal influenza vaccine in the first influenza season that they were vaccinated should receive 2 doses in the following influenza season. In addition, for the 2010–11 influenza season, children aged 6 months–8 years who did not receive at least 1 dose of an influenza A (H1N1) 2009 monovalent vaccine should receive 2 doses of a 2010–11 seasonal influenza vaccine, regardless of previous vaccination history (2).

Higher overall and age-specific rates of hospitalization often are observed during influenza A (H3N2)–predominant seasons (3). Based on FluSurv-NET surveillance data thus far, rates of hospitalization among patients with laboratory-confirmed influenza are increasing. Rates of influenza-associated hospitalization are highest in children aged 0–4 years and adults aged ≥ 65 years. This trend is similar to that seen in 2007–08, the last season in which influenza A (H3N2) was predominant. In influenza seasons before the 2009 pandemic, cumulative end-of-season hospitalization rates per 100,000 persons obtained from EIP surveillance data ranged from 7.7 in 2008–09 to 18.1 in 2007–08.

Since the beginning of this season, 30 influenza-related pediatric deaths have been reported. More than half of the pediatric deaths this season have occurred since January 16, 2011. Health-care providers are asked to notify their local or state health department as soon as possible when deaths associated with laboratory-confirmed influenza occur among children.

Antiviral medications continue to be an important adjunct to vaccination for reducing the health impact of influenza. On January 21, 2011, new ACIP recommendations on use of antiviral agents for treatment and chemoprophylaxis of influenza were released (4). Antiviral treatment is recommended as soon as possible for patients with confirmed or suspected influenza who have severe, complicated, or progressive illness; who require hospitalization, or who are at higher risk for influenza complications (4–7). Antiviral treatment also may be considered for outpatients with confirmed or suspected influenza who do not have known risk factors for severe illness

if treatment can be initiated within 48 hours of illness onset. Recommended antiviral medications include oseltamivir and zanamivir; recent viral surveillance and resistance data indicate that >99% of currently circulating influenza virus strains are sensitive to these medications. Amantadine and rimantadine should not be used because of the high levels of resistance to these drugs among circulating influenza A viruses (4).

Influenza surveillance reports for the United States are posted online weekly during October–May and are available at <http://www.cdc.gov/flu/weekly/fluactivity.htm>. Additional information regarding influenza viruses, influenza surveillance, influenza vaccine, influenza antiviral medications, and novel influenza A infections in humans is available at <http://www.cdc.gov/flu>.

Acknowledgments

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

References

1. CDC. Update: influenza activity—United States, October 3, 2010–December 11, 2011. *MMWR* 2010;59:1651–5.
2. CDC. Prevention and control of influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2010;59(No. RR-8).
3. Dao CN, Kamimoto L, Nowell M, et al. Adult hospitalizations for laboratory-positive influenza during the 2005–2006 through 2007–2008 seasons in the United States. *J Infect Dis* 2010;202:881–8.
4. CDC. Antiviral agents for the treatment and chemoprophylaxis of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2011;60(No. RR-1):1–24.
5. CDC. Deaths related to 2009 pandemic influenza A (H1N1) among American Indian/Alaska Natives—12 states, 2009. *MMWR* 2009;58:1341–4.
6. Jain S, Kamimoto L, Bramley AM, et al. Hospitalized patients with 2009 H1N1 influenza in the United States, April–June 2009. *N Engl J Med* 2009;361:1935–44.
7. Morgan OW, Bramley A, Fowlkes A, et al. Morbid obesity as a risk factor for hospitalization and death due to 2009 pandemic influenza A(H1N1) disease. *PLoS ONE* 2010; 5:e9694.

Notes from the Field

Deaths from Acute Hepatitis B Virus Infection Associated with Assisted Blood Glucose Monitoring in an Assisted-Living Facility — North Carolina, August–October 2010

Sharing of blood glucose monitoring equipment in assisted-living facilities has resulted in at least 16 outbreaks of hepatitis B virus (HBV) infection in the United States since 2004 (1,2). On October 12, 2010, the North Carolina Division of Public Health (NCDPH) and the Wayne County Health Department were notified by a local hospital of four residents of a single assisted-living facility with suspected acute HBV infection. NCDPH requested HBV testing of all persons who had resided in the facility during January 1–October 13, 2010, and defined an outbreak-associated case as either 1) positive hepatitis B surface antigen and core immunoglobulin M (IgM) results or 2) clinical evidence of acute hepatitis (jaundice or serum aminotransferase levels twice the upper limit of normal) with onset ≥ 6 weeks after admission to the facility. Records were reviewed for potential health-care-associated exposures and HBV-related risk factors. Infection control practices were assessed through observations and interviews with facility staff.

The investigation identified unsafe practices, including sharing of reusable fingerstick lancing devices approved for single patient use only and shared use of blood glucose meters without cleaning and disinfection between patients. Of 87 persons who had resided in the facility during the study period, 47 were excluded from analysis because of HBV immunity (20 persons), chronic infection (one person), or unknown HBV status (26 persons). Of the remaining 40, eight met the case definition. Of these, all were hospitalized, and six died from hepatitis complications. All eight were among the 15 residents whom facility staff had assisted with blood glucose monitoring; none of 25 residents who had not been assisted with blood glucose monitoring were infected.

Despite long-standing and recently expanded infection control recommendations (2,3), HBV transmission continues to occur through sharing of fingerstick lancing devices and other blood glucose monitoring equipment. These practices put residents at risk for severe illness and death. In accordance with NCDPH recommendations, the facility now uses individually assigned blood glucose meters and single-use, autodisable fingerstick lancing devices. The facility also offered HBV vaccine to all susceptible residents. NCDPH and the state licensing agency issued a notification to all health-care providers and licensed health-care facilities statewide warning of the potential for HBV transmission through unsafe diabetes-care practices. This outbreak underscores the need for increased efforts to promote compliance with infection-control guidelines in assisted-living facilities.

Reported by

Z Moore, MD, J-M Maillard, MD, M Davies, MD, North Carolina Dept of Health and Human Svcs; N Dailey, MD, EIS Officer, CDC.

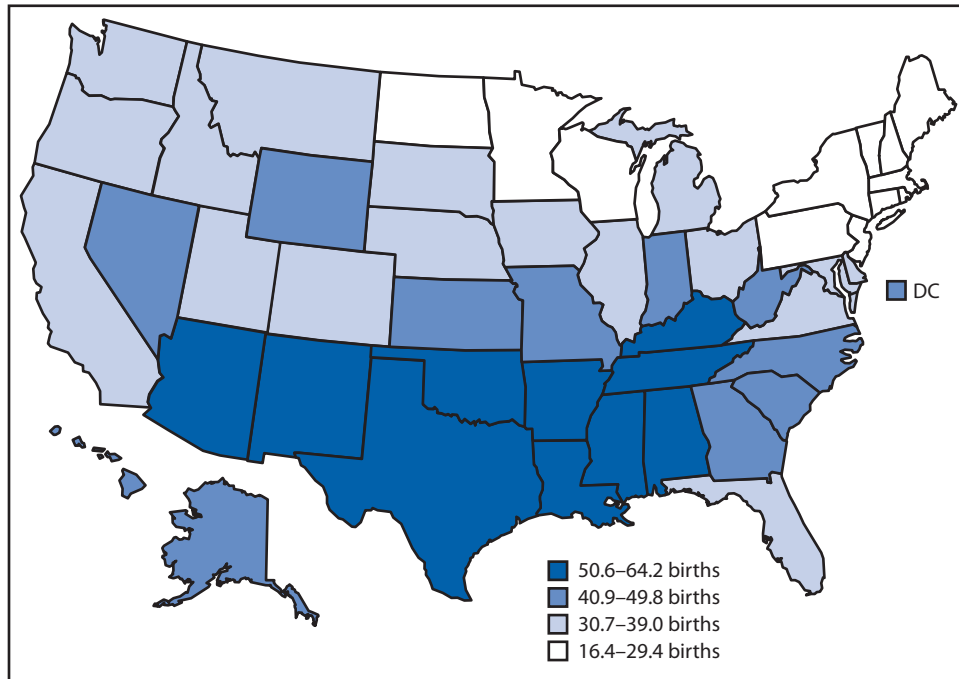
References

1. CDC. Transmission of hepatitis B virus among persons undergoing blood glucose monitoring in long-term-care facilities—Mississippi, North Carolina, and Los Angeles County, California, 2003–2004. *MMWR* 2005;54:220–3.
2. CDC. Infection prevention during blood glucose monitoring and insulin administration. Atlanta, GA: US Department of Health and Human Services, CDC; 2010; Available at <http://www.cdc.gov/injectionsafety/blood-glucose-monitoring.html>. Accessed February 10, 2011.
3. Food and Drug Administration. Use of fingerstick devices on more than one person poses risk for transmitting bloodborne pathogens: initial communication: update 11/29/2010. Washington, DC: US Department of Health and Human Services, FDA; 2010; Available at <http://www.fda.gov/medicaldevices/safety/alertsandnotices/ucm224025.htm>. Accessed February 10, 2011.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Birth Rates* for Teens Aged 15–19 Years, by State — United States, 2009†



* Births per 1,000 women aged 15–19 years.

† Data for 2009 are preliminary.

In 2009, birth rates among teens aged 15–19 years in the United States were lowest in the Northeast and upper Midwest, and highest across the southern states. Rates ranged from <20.0 per 1,000 in three states to >60.0 in four states. The national rate was 39.1 in 2009.

Sources: National Vital Statistics System. Birth data. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2009. Available at <http://www.cdc.gov/nchs/births.htm>.

Ventura SJ, Hamilton BE. U.S. teenage birth rate resumes decline. NCHS Data Brief, no 58. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2011. Available at <http://www.cdc.gov/nchs/products/databriefs.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 February 12, 2011 (6th week)*

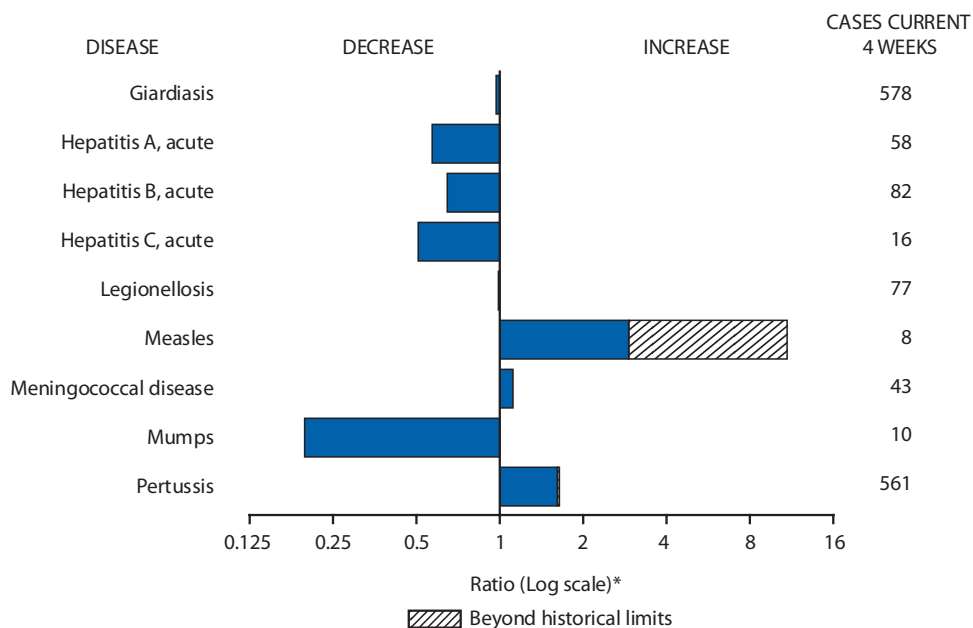
Disease	Current week	Cum 2011	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	0	—	1	—	1	1	
Arboviral diseases ^{§, ¶} :									
California serogroup virus disease	—	—	0	74	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	—	10	4	4	4	8	
Powassan virus disease	—	—	—	8	6	2	7	1	
St. Louis encephalitis virus disease	—	—	—	8	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	1	2	1	NN	NN	NN	NN	NN	NY (1)
Botulism, total	1	3	2	108	118	145	144	165	
foodborne	—	—	0	7	10	17	32	20	
infant	—	1	2	76	83	109	85	97	
other (wound and unspecified)	1	2	1	25	25	19	27	48	CA (1)
Brucellosis	—	3	1	128	115	80	131	121	
Chancroid	1	3	1	36	28	25	23	33	CA (1)
Cholera	—	3	—	12	10	5	7	9	
Cyclosporiasis [§]	2	10	2	172	141	139	93	137	FL (2)
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> , ** invasive disease (age <5 yrs):									
serotype b	—	—	1	17	35	30	22	29	
nonsertotype b	1	7	5	155	236	244	199	175	VA (1)
unknown serotype	2	24	4	266	178	163	180	179	MO (1), NC (1)
Hansen disease [§]	1	4	2	65	103	80	101	66	FL (1)
Hantavirus pulmonary syndrome [§]	—	—	0	17	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal [§]	—	5	2	229	242	330	292	288	
Influenza-associated pediatric mortality ^{§, ††}	5	31	3	61	358	90	77	43	NC (1), NV (1), VA (2), WI (1)
Listeriosis	5	36	10	774	851	759	808	884	NY (1), NC (1), FL (1), AR (1), CA (1)
Measles ^{§§}	5	11	1	60	71	140	43	55	PA (4), AZ (1)
Meningococcal disease, invasive ^{¶¶} :									
A, C, Y, and W-135	—	9	7	243	301	330	325	318	
serogroup B	—	9	4	110	174	188	167	193	
other serogroup	—	—	1	9	23	38	35	32	
unknown serogroup	12	58	13	427	482	616	550	651	OH (1), AL (1), OR (1), CA (9)
Novel influenza A virus infections ^{***}	—	1	0	4	43,774	2	4	NN	
Plague	—	—	—	1	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic [§]	—	—	—	—	—	—	—	NN	
Psittacosis [§]	—	—	0	4	9	8	12	21	
Q fever, total [§]	1	6	2	122	113	120	171	169	
acute	—	4	1	93	93	106	—	—	
chronic	1	2	0	29	20	14	—	—	VA (1)
Rabies, human	—	—	—	1	4	2	1	3	
Rubella ^{†††}	—	—	0	6	3	16	12	11	
Rubella, congenital syndrome	—	—	0	—	2	—	—	1	
SARS-CoV [§]	—	—	—	—	—	—	—	—	
Smallpox [§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome [§]	1	10	3	167	161	157	132	125	NY (1)
Syphilis, congenital (age <1 yr) ^{§§§}	—	7	8	245	423	431	430	349	
Tetanus	—	—	0	10	18	19	28	41	
Toxic-shock syndrome (staphylococcal) [§]	—	7	2	79	74	71	92	101	
Trichinellosis	—	2	0	4	13	39	5	15	
Tularemia	—	1	0	113	93	123	137	95	
Typhoid fever	3	19	8	425	397	449	434	353	NY (1), MD (1), CA (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	—	4	1	91	78	63	37	6	
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	—	1	1	—	2	1	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	1	15	2	782	789	588	549	NN	FL (1)
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 February 12, 2011 (6th week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.
 * Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/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/ncphi/diss/nndss/phs/files/5yearweeklyaverage.pdf>.
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/ncphi/diss/nndss/phs/infdis.htm>.
 § Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
 ** Data for H. influenzae (all ages, all serotypes) are available in Table II.
 †† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 35 influenza-associated pediatric deaths occurred during the 2010-11 influenza season have been reported.
 ‡‡ Of the five measles cases reported for the current week, four were indigenous and one was imported.
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.
 *** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. 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 one case reported in 2011 were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were 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 February 12, 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.

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 12, 2011, and February 13, 2010 (6th 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	13,224	24,012	26,456	109,744	140,986	92	0	373	1,387	NN	38	119	352	355	668
New England	695	804	1,811	3,490	3,427	—	0	0	—	NN	—	7	19	6	108
Connecticut	—	177	1,322	87	468	N	0	0	N	NN	—	0	4	4	71
Maine†	—	49	100	—	299	N	0	0	N	NN	—	1	7	—	9
Massachusetts	470	402	694	2,422	1,932	N	0	0	N	NN	—	3	9	—	14
New Hampshire	59	51	113	347	232	—	0	0	—	NN	—	1	5	—	7
Rhode Island†	143	66	135	503	372	—	0	0	—	NN	—	0	2	—	1
Vermont†	23	23	51	131	124	N	0	0	N	NN	—	1	5	2	6
Mid. Atlantic	1,602	3,363	5,198	11,056	18,574	—	0	0	—	NN	7	15	38	48	52
New Jersey	476	509	709	2,789	2,624	N	0	0	N	NN	—	0	4	—	3
New York (Upstate)	589	701	1,723	3,382	2,984	N	0	0	N	NN	2	4	13	10	7
New York City	—	1,219	2,772	—	7,565	N	0	0	N	NN	—	2	6	5	3
Pennsylvania	537	938	1,181	4,885	5,401	N	0	0	N	NN	5	8	26	33	39
E.N. Central	1,076	3,573	4,005	15,383	22,401	—	0	3	3	NN	10	29	127	94	156
Illinois	18	812	1,016	2,402	6,007	N	0	0	N	NN	—	4	21	3	27
Indiana	—	402	798	1,537	1,327	N	0	0	N	NN	—	3	10	10	23
Michigan	765	941	1,417	5,409	6,360	—	0	0	—	NN	1	5	18	21	36
Ohio	223	991	1,129	4,075	6,023	—	0	3	3	NN	7	8	24	49	32
Wisconsin	70	426	516	1,960	2,684	N	0	0	N	NN	2	10	63	11	38
W.N. Central	297	1,366	1,533	5,549	8,536	—	0	0	—	NN	2	21	83	39	68
Iowa	18	202	237	929	1,291	N	0	0	N	NN	—	4	24	6	18
Kansas	24	189	258	863	1,158	N	0	0	N	NN	—	2	9	4	8
Minnesota	—	284	350	894	1,887	—	0	0	—	NN	—	0	16	—	17
Missouri	145	503	619	2,052	2,910	—	0	0	—	NN	2	4	30	13	11
Nebraska†	85	92	185	441	670	N	0	0	N	NN	—	3	26	13	8
North Dakota	—	27	79	—	230	N	0	0	N	NN	—	0	9	—	—
South Dakota	25	62	88	370	390	N	0	0	N	NN	—	1	6	3	6
S. Atlantic	3,852	4,751	5,454	26,368	27,362	—	0	0	—	NN	13	18	47	81	120
Delaware	105	84	220	456	451	—	0	0	—	NN	1	0	1	2	1
District of Columbia	—	89	161	265	573	—	0	0	—	NN	—	0	1	—	1
Florida	704	1,454	1,705	7,504	8,419	N	0	0	N	NN	7	7	19	32	42
Georgia	472	662	1,220	3,970	3,188	N	0	0	N	NN	4	5	16	22	59
Maryland†	—	482	994	1,575	1,894	—	0	0	—	NN	1	1	3	5	1
North Carolina	902	742	1,436	4,606	6,021	N	0	0	N	NN	—	0	12	3	3
South Carolina†	606	525	847	2,530	3,006	N	0	0	N	NN	—	2	8	14	4
Virginia†	971	623	882	4,896	3,378	N	0	0	N	NN	—	2	8	3	7
West Virginia	92	75	123	566	432	N	0	0	N	NN	—	0	3	—	2
E.S. Central	1,280	1,768	2,415	8,776	9,160	—	0	0	—	NN	—	4	19	9	24
Alabama†	398	536	780	2,926	2,618	N	0	0	N	NN	—	2	13	5	6
Kentucky	243	271	614	1,098	1,058	N	0	0	N	NN	—	1	6	3	8
Mississippi	379	370	780	1,986	2,286	N	0	0	N	NN	—	0	2	—	4
Tennessee†	260	575	797	2,766	3,198	N	0	0	N	NN	—	1	5	1	6
W.S. Central	1,843	3,003	4,076	16,022	22,064	—	0	0	—	NN	—	7	29	12	18
Arkansas†	—	273	391	1,377	1,552	N	0	0	N	NN	—	0	3	—	5
Louisiana	298	327	742	2,503	3,931	—	0	0	—	NN	—	1	6	1	2
Oklahoma	590	250	1,374	1,208	2,500	N	0	0	N	NN	—	1	8	—	4
Texas†	955	2,272	3,049	10,934	14,081	N	0	0	N	NN	—	4	22	11	7
Mountain	748	1,431	1,915	6,496	8,245	49	0	318	1,078	NN	5	10	30	38	59
Arizona	305	496	706	1,704	2,726	49	0	314	1,068	NN	—	1	3	3	4
Colorado	—	336	560	1,702	2,061	N	0	0	N	NN	4	3	6	18	15
Idaho†	—	68	199	242	459	N	0	0	N	NN	—	2	7	6	11
Montana†	53	62	81	362	317	N	0	0	N	NN	1	1	4	3	7
Nevada†	—	175	329	912	1,019	—	0	4	8	NN	—	0	7	1	1
New Mexico†	390	154	274	1,103	598	—	0	0	—	NN	—	2	12	6	11
Utah	—	118	155	471	787	—	0	0	—	NN	—	1	5	—	6
Wyoming†	—	38	90	—	278	—	0	2	2	NN	—	0	2	1	4
Pacific	1,831	3,684	4,862	16,604	21,217	43	0	82	306	NN	1	12	29	28	63
Alaska	—	111	148	564	741	N	0	0	N	NN	—	0	1	—	2
California	1,319	2,810	4,193	12,985	15,774	43	0	82	306	NN	1	7	18	16	35
Hawaii	—	109	158	—	737	N	0	0	N	NN	—	0	0	—	1
Oregon	124	212	496	1,141	1,451	N	0	0	N	NN	—	3	13	12	19
Washington	388	400	505	1,914	2,514	N	0	0	N	NN	—	1	6	—	6
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	NN	N	0	0	N	NN
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	8	31	—	3	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	87	103	265	631	586	N	0	0	N	NN	N	0	0	N	NN
U.S. Virgin Islands	—	12	29	—	62	—	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 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 12, 2011, and February 13, 2010 (6th 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	—	6	40	—	37	—	0	2	—	—
New England	—	0	3	—	1	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine [¶]	—	0	2	—	1	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island [¶]	—	0	1	—	—	—	0	0	—	—
Vermont [¶]	—	0	1	—	—	—	0	0	—	—
Mid. Atlantic	—	1	15	—	14	—	0	1	—	—
New Jersey	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	0	—	—	—	0	0	—	—
New York City	—	1	15	—	10	—	0	1	—	—
Pennsylvania	—	0	3	—	4	—	0	0	—	—
E.N. Central	—	1	7	—	7	—	0	1	—	—
Illinois	—	0	2	—	1	—	0	0	—	—
Indiana	—	0	2	—	1	—	0	0	—	—
Michigan	—	0	2	—	—	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	—	—	—	0	1	—	—
W.N. Central	—	0	6	—	3	—	0	1	—	—
Iowa	—	0	1	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	2	—	3	—	0	0	—	—
Missouri	—	0	0	—	—	—	0	0	—	—
Nebraska [¶]	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	2	17	—	7	—	0	1	—	—
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	2	14	—	6	—	0	1	—	—
Georgia	—	0	2	—	1	—	0	0	—	—
Maryland [¶]	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	—	—	—	0	0	—	—
South Carolina [¶]	—	0	3	—	—	—	0	0	—	—
Virginia [¶]	—	0	3	—	—	—	0	0	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—
E.S. Central	—	0	2	—	—	—	0	0	—	—
Alabama [¶]	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee [¶]	—	0	1	—	—	—	0	0	—	—
W.S. Central	—	0	1	—	—	—	0	1	—	—
Arkansas [¶]	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	1	—	—	—	0	0	—	—
Texas [¶]	—	0	1	—	—	—	0	0	—	—
Mountain	—	0	2	—	2	—	0	0	—	—
Arizona	—	0	1	—	—	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho [¶]	—	0	1	—	—	—	0	0	—	—
Montana [¶]	—	0	1	—	—	—	0	0	—	—
Nevada [¶]	—	0	1	—	1	—	0	0	—	—
New Mexico [¶]	—	0	0	—	1	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—
Wyoming [¶]	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	6	—	3	—	0	0	—	—
Alaska	—	0	1	—	—	—	0	0	—	—
California	—	0	5	—	1	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	—	2	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	108	526	81	519	—	1	14	—	9
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 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

† 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).

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 12, 2011, and February 13, 2010 (6th 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	—	8	48	6	12	—	12	58	4	8	—	1	10	1	—
New England	—	0	1	—	1	—	1	8	1	4	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	5	—	—	—	0	2	—	—
Maine [§]	—	0	1	—	1	—	0	2	1	2	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	3	—	—	—	0	1	—	—
Rhode Island [§]	—	0	0	—	—	—	0	5	—	2	—	0	0	—	—
Vermont [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	1	6	—	1	—	4	14	2	—	—	0	1	—	—
New Jersey	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	—	0	6	—	—	—	4	14	2	—	—	0	1	—	—
New York City	—	0	3	—	—	—	0	1	—	—	—	0	0	—	—
Pennsylvania	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
E.N. Central	—	0	4	1	1	—	4	40	—	2	—	1	7	1	—
Illinois	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	1	—
Michigan	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Ohio	—	0	3	1	—	—	0	1	—	—	—	0	0	—	—
Wisconsin	—	0	1	—	1	—	4	40	—	2	—	0	4	—	—
W.N. Central	—	1	13	—	1	—	0	3	—	—	—	0	3	—	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	—	1	13	—	1	—	0	3	—	—	—	0	3	—	—
Nebraska [§]	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	4	19	5	8	—	1	7	1	2	—	0	2	—	—
Delaware	—	0	3	1	1	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	2	1	1	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	4	1	2	—	0	1	—	1	—	0	1	—	—
Maryland [§]	—	0	3	1	3	—	0	2	—	1	—	0	2	—	—
North Carolina	—	1	13	1	1	—	0	4	1	—	—	0	0	—	—
South Carolina [§]	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Virginia [§]	—	1	8	—	—	—	0	2	—	—	—	0	1	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	1	11	—	—	—	0	2	—	—	—	0	1	—	—
Alabama [§]	—	0	3	—	—	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Tennessee [§]	—	0	7	—	—	—	0	2	—	—	—	0	1	—	—
W.S. Central	—	0	5	—	—	—	0	2	—	—	—	0	1	—	—
Arkansas [§]	—	0	5	—	—	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	5	—	—	—	0	1	—	—	—	0	0	—	—
Texas [§]	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pubs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

† Cumulative total *E. ewingii* cases reported for year 2010 = 10 and one case report for 2011.

§ 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 February 12, 2011, and February 13, 2010 (6th 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	175	338	502	1,112	1,894	2,948	5,600	6,433	26,358	33,482	27	57	77	306	404
New England	3	32	54	18	174	70	100	196	435	492	—	3	9	7	21
Connecticut	—	5	13	—	46	—	39	169	141	186	—	0	6	—	—
Maine [§]	1	4	12	8	17	—	2	7	—	39	—	0	2	5	1
Massachusetts	—	13	25	—	72	52	47	80	252	209	—	2	5	—	14
New Hampshire	—	2	8	3	19	2	3	7	9	19	—	0	1	1	4
Rhode Island [§]	—	0	7	—	2	13	4	15	28	33	—	0	2	—	2
Vermont [§]	2	4	10	7	18	3	0	17	5	6	—	0	3	1	—
Mid. Atlantic	31	60	106	239	337	304	693	1,170	2,522	3,803	6	11	24	65	95
New Jersey	—	5	18	—	46	106	116	175	767	599	—	2	5	10	10
New York (Upstate)	23	22	54	89	111	98	109	227	524	478	4	3	14	15	23
New York City	5	17	33	81	90	—	231	534	—	1,469	1	2	6	11	16
Pennsylvania	3	14	27	69	90	100	256	366	1,231	1,257	1	4	11	29	46
E.N. Central	18	55	90	154	361	295	984	1,206	4,248	6,118	4	10	20	42	68
Illinois	—	12	32	12	77	5	200	252	624	1,401	—	3	7	2	16
Indiana	—	5	12	3	50	—	100	222	410	393	—	1	6	3	11
Michigan	1	12	25	40	74	209	254	471	1,552	1,782	2	1	3	8	—
Ohio	14	17	29	76	101	66	317	382	1,262	1,966	2	2	6	24	20
Wisconsin	3	8	33	23	59	15	93	156	400	576	—	1	5	5	21
W.N. Central	13	24	101	101	122	91	287	356	1,169	1,609	1	3	14	10	15
Iowa	—	5	11	24	32	2	34	57	143	191	—	0	1	—	—
Kansas	2	3	10	16	26	4	40	62	150	215	—	0	2	—	3
Minnesota	—	0	75	—	—	—	37	61	110	283	—	0	9	—	—
Missouri	8	7	26	36	36	70	142	181	611	723	1	2	4	5	9
Nebraska [§]	3	4	9	20	20	15	22	50	115	129	—	0	3	5	1
North Dakota	—	0	5	—	—	—	1	8	—	14	—	0	2	—	2
South Dakota	—	1	7	5	8	—	7	20	40	54	—	0	0	—	—
S. Atlantic	44	74	108	257	370	952	1,344	1,798	7,060	8,250	10	14	26	91	93
Delaware	1	0	5	2	4	30	18	48	111	102	—	0	1	—	1
District of Columbia	—	1	5	—	4	—	34	66	94	223	—	0	1	—	—
Florida	24	41	75	156	191	189	384	486	1,986	2,389	6	4	9	36	19
Georgia	8	13	51	44	68	159	222	392	1,229	994	—	3	6	18	35
Maryland [§]	5	5	11	24	32	—	136	224	463	547	—	1	5	8	5
North Carolina	N	0	0	N	N	293	242	596	1,567	2,042	2	2	9	8	11
South Carolina [§]	1	2	9	6	12	169	151	262	753	928	—	1	5	4	16
Virginia [§]	5	9	23	25	55	96	148	223	745	975	2	2	6	17	5
West Virginia	—	0	6	—	4	16	12	26	112	50	—	0	3	—	1
E.S. Central	—	5	12	9	31	303	478	697	2,443	2,604	1	3	10	20	28
Alabama [§]	—	4	11	8	12	95	158	236	904	793	—	0	4	6	2
Kentucky	N	0	0	N	N	59	73	160	285	312	1	1	3	6	5
Mississippi	N	0	0	N	N	94	109	216	568	666	—	0	2	—	3
Tennessee [§]	—	0	6	1	19	55	135	195	686	833	—	2	5	8	18
W.S. Central	2	6	14	12	45	493	832	1,130	4,263	6,168	1	2	10	18	11
Arkansas [§]	2	2	7	5	12	—	79	133	419	479	1	0	3	2	1
Louisiana	—	3	8	7	22	108	93	238	732	1,242	—	0	4	7	4
Oklahoma	—	0	5	—	11	183	74	332	390	676	—	1	7	9	6
Texas [§]	N	0	0	N	N	202	599	870	2,722	3,771	—	0	1	—	—
Mountain	19	31	51	95	172	87	178	235	904	981	4	5	15	34	58
Arizona	2	3	8	9	17	46	57	87	283	335	1	2	7	14	22
Colorado	12	13	27	53	64	—	56	91	248	305	2	1	5	11	12
Idaho [§]	—	4	9	18	23	—	2	14	1	18	—	0	2	2	2
Montana [§]	—	2	7	1	10	—	2	6	10	12	—	0	1	1	—
Nevada [§]	—	1	11	4	6	—	29	94	162	183	—	0	1	1	4
New Mexico [§]	1	2	5	4	9	41	22	34	184	85	1	1	3	5	9
Utah	—	4	11	—	30	—	5	15	16	37	—	0	3	—	5
Wyoming [§]	4	0	3	6	13	—	0	4	—	6	—	0	1	—	4
Pacific	45	52	116	227	282	353	612	815	3,314	3,457	—	3	20	19	15
Alaska	—	2	6	6	8	—	22	37	95	161	—	0	2	5	5
California	39	33	57	168	196	302	506	691	2,872	2,803	—	0	17	4	—
Hawaii	—	1	4	—	6	—	14	26	—	88	—	0	2	—	3
Oregon	4	9	20	38	53	7	19	34	110	119	—	1	5	10	5
Washington	2	8	62	15	19	44	53	86	237	286	—	0	2	—	2
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	5	—	—	—	0	0	—	—
Puerto Rico	—	1	8	3	3	9	6	14	36	28	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	3	7	—	10	—	0	0	—	—

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

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† Data for H. influenzae (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

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Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 12, 2011, and February 13, 2010 (6th 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	12	29	44	114	190	17	62	90	185	324	5	14	26	57	68
New England	1	1	5	6	19	—	1	4	1	9	—	1	4	—	9
Connecticut	1	0	3	4	6	—	0	2	—	3	—	0	4	—	5
Maine†	—	0	1	—	—	—	0	1	—	2	—	0	0	—	—
Massachusetts	—	0	5	—	13	—	0	2	—	4	—	0	1	—	4
New Hampshire	—	0	1	—	—	—	0	2	1	—	N	0	0	N	N
Rhode Island†	—	0	4	—	—	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	1	2	—	—	0	1	—	—	—	0	1	—	—
Mid. Atlantic	—	4	10	16	25	2	5	10	19	30	—	2	6	3	6
New Jersey	—	0	2	—	4	—	1	5	—	6	—	0	2	—	—
New York (Upstate)	—	1	4	3	2	1	1	7	7	5	—	1	4	3	5
New York City	—	1	7	7	11	—	1	4	3	12	—	0	1	—	—
Pennsylvania	—	1	3	6	8	1	1	5	9	7	—	0	3	—	1
E.N. Central	1	4	9	14	35	—	9	18	30	71	1	2	7	12	10
Illinois	—	1	3	—	7	—	2	6	3	12	—	0	1	—	—
Indiana	—	0	2	1	1	—	1	5	1	12	—	0	4	6	3
Michigan	—	1	5	3	8	—	2	5	8	20	1	1	6	6	6
Ohio	1	1	5	9	8	—	2	15	16	14	—	0	1	—	—
Wisconsin	—	0	2	1	11	—	1	8	2	13	—	0	2	—	1
W.N. Central	—	1	13	4	8	1	2	7	12	14	—	0	8	—	—
Iowa	—	0	3	1	4	—	0	1	—	3	—	0	0	—	—
Kansas	—	0	2	—	2	—	0	2	2	—	—	0	1	—	—
Minnesota	—	0	12	—	—	—	0	4	—	—	—	0	6	—	—
Missouri	—	0	2	1	1	—	1	3	6	8	—	0	2	—	—
Nebraska†	—	0	4	—	1	1	0	3	4	3	—	0	1	—	—
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	—	—	—	0	0	—	—
S. Atlantic	5	6	14	28	33	8	16	32	63	90	—	2	6	12	7
Delaware	—	0	1	1	1	—	0	2	—	3	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	1	—	1	—	0	1	—	1
Florida	3	3	7	10	15	2	5	11	26	34	—	0	3	4	—
Georgia	1	1	3	6	4	3	3	6	14	27	—	0	2	—	—
Maryland†	—	0	3	4	2	—	1	6	8	3	—	0	3	3	2
North Carolina	—	1	5	2	1	2	1	16	8	8	—	1	3	3	4
South Carolina†	—	0	3	1	7	—	1	4	2	3	—	0	1	—	—
Virginia†	1	1	6	4	2	1	1	6	5	7	—	0	2	2	—
West Virginia	—	0	5	—	—	—	0	12	—	4	—	0	5	—	—
E.S. Central	—	0	5	2	5	2	8	13	36	46	4	3	8	14	15
Alabama†	—	0	2	—	2	—	1	4	5	12	—	0	1	—	1
Kentucky	—	0	5	2	1	1	2	8	16	16	1	2	6	8	13
Mississippi	—	0	1	—	—	—	0	3	1	1	U	0	0	U	U
Tennessee†	—	0	2	—	2	1	2	8	14	17	3	1	4	6	1
W.S. Central	1	2	7	2	8	4	9	29	14	25	—	2	5	9	4
Arkansas†	—	0	1	—	—	—	0	4	—	2	—	0	0	—	—
Louisiana	—	0	2	—	2	—	1	3	5	9	—	0	2	4	—
Oklahoma	—	0	1	—	—	2	2	6	2	2	—	0	3	3	1
Texas†	1	2	7	2	6	2	5	25	7	12	—	0	3	2	3
Mountain	1	2	8	10	22	—	3	8	6	14	—	1	5	3	5
Arizona	1	1	4	4	12	—	0	2	—	4	U	0	0	U	U
Colorado	—	1	2	4	6	—	0	5	—	3	—	0	2	1	2
Idaho†	—	0	2	—	1	—	0	1	1	—	—	0	2	2	1
Montana†	—	0	1	1	1	—	0	0	—	—	—	0	1	—	—
Nevada†	—	0	2	—	1	—	1	3	5	4	—	0	1	—	—
New Mexico†	—	0	1	1	—	—	0	1	—	—	—	0	2	—	1
Utah	—	0	1	—	1	—	0	1	—	3	—	0	2	—	1
Wyoming†	—	0	3	—	—	—	0	1	—	—	—	0	0	—	—
Pacific	3	5	16	32	35	—	6	20	4	25	—	1	7	4	12
Alaska	—	0	1	—	—	—	0	1	—	1	U	0	0	U	U
California	3	4	16	28	29	—	3	16	1	19	—	0	2	—	7
Hawaii	—	0	1	—	3	—	0	1	—	1	U	0	0	U	U
Oregon	—	0	2	3	2	—	1	3	3	4	—	0	3	3	5
Washington	—	0	2	1	1	—	1	5	—	—	—	0	5	1	—
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	6	—	—	—	1	6	—	5	—	0	7	—	2
Puerto Rico	—	0	2	—	2	—	0	2	—	1	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 12, 2011, and February 13, 2010 (6th 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	23	55	116	163	251	36	403	1,674	438	1,431	12	26	80	111	144
New England	—	4	15	1	12	—	126	504	15	451	—	1	5	2	8
Connecticut	—	0	6	—	3	—	47	213	—	193	—	0	1	—	—
Maine†	—	0	4	—	—	—	12	65	5	14	—	0	1	—	—
Massachusetts	—	2	10	—	6	—	41	223	—	151	—	1	4	—	8
New Hampshire	—	0	5	—	1	—	24	68	7	82	—	0	2	—	—
Rhode Island†	—	0	4	—	1	—	1	40	1	1	—	0	1	—	—
Vermont†	—	0	2	—	1	—	4	27	2	10	—	0	1	2	—
Mid. Atlantic	5	14	47	43	58	22	179	738	281	663	4	7	17	33	45
New Jersey	—	1	11	—	8	—	49	220	—	192	—	0	1	—	—
New York (Upstate)	2	5	19	14	19	14	38	200	40	62	1	1	6	4	10
New York City	—	2	17	11	12	—	2	7	—	17	2	4	14	25	26
Pennsylvania	3	6	18	18	19	8	91	387	241	392	1	1	3	4	9
E.N. Central	2	12	44	26	60	—	26	325	3	58	1	3	9	9	12
Illinois	—	2	15	—	8	—	1	18	—	3	—	1	7	—	7
Indiana	—	2	7	3	7	—	1	7	—	5	—	0	2	—	1
Michigan	—	3	20	5	9	—	1	14	—	—	—	0	4	1	2
Ohio	2	4	15	18	22	—	0	9	2	3	1	1	5	7	2
Wisconsin	—	1	11	—	14	—	21	297	1	47	—	0	1	1	—
W.N. Central	1	2	9	4	5	—	1	11	—	3	—	1	4	1	9
Iowa	—	0	2	—	—	—	0	10	—	2	—	0	2	—	2
Kansas	—	0	2	—	1	—	0	1	—	1	—	0	2	—	2
Minnesota	—	0	8	—	—	—	0	0	—	—	—	0	3	—	—
Missouri	1	1	4	3	2	—	0	1	—	—	—	0	3	—	2
Nebraska†	—	0	2	—	2	—	0	2	—	—	—	0	1	1	3
North Dakota	—	0	1	—	—	—	0	5	—	—	—	0	1	—	—
South Dakota	—	0	2	1	—	—	0	1	—	—	—	0	2	—	—
S. Atlantic	8	9	28	27	44	9	57	176	122	233	4	7	44	44	42
Delaware	—	0	3	—	3	—	10	33	33	63	—	0	1	—	—
District of Columbia	—	0	4	—	—	—	0	4	2	1	—	0	2	1	—
Florida	5	3	9	16	16	1	2	10	5	6	—	2	7	10	18
Georgia	—	1	4	—	5	—	0	2	—	1	—	0	6	8	2
Maryland†	—	2	6	3	12	4	23	105	40	110	1	1	24	9	10
North Carolina	2	0	7	4	2	—	1	9	5	5	—	0	13	4	3
South Carolina†	—	0	2	—	—	—	0	3	—	1	—	0	1	—	—
Virginia†	1	1	10	4	5	4	18	83	37	44	3	1	5	12	9
West Virginia	—	0	3	—	1	—	0	29	—	2	—	0	1	—	—
E.S. Central	1	2	10	8	15	—	0	4	—	5	—	0	3	1	3
Alabama†	—	0	2	1	2	—	0	1	—	—	—	0	1	—	1
Kentucky	—	0	4	3	5	—	0	1	—	1	—	0	1	—	2
Mississippi	—	0	3	1	2	—	0	0	—	—	—	0	2	—	—
Tennessee†	1	1	6	3	6	—	0	4	—	4	—	0	2	1	—
W.S. Central	—	3	8	5	5	—	2	9	—	1	2	1	10	3	8
Arkansas†	—	0	2	—	—	—	0	0	—	—	—	0	1	—	1
Louisiana	—	0	2	—	1	—	0	1	—	—	—	0	1	—	1
Oklahoma	—	0	3	1	—	—	0	0	—	—	1	0	1	1	1
Texas†	—	2	7	4	4	—	2	9	—	1	1	1	10	2	5
Mountain	1	3	10	6	17	—	0	3	—	2	1	1	4	7	5
Arizona	1	1	7	4	4	—	0	1	—	—	1	0	3	3	1
Colorado	—	0	2	1	7	—	0	1	—	—	—	0	3	2	1
Idaho†	—	0	1	—	—	—	0	2	—	1	—	0	1	—	—
Montana†	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
Nevada†	—	0	2	1	3	—	0	1	—	—	—	0	2	2	1
New Mexico†	—	0	2	—	1	—	0	2	—	—	—	0	1	—	—
Utah	—	0	2	—	1	—	0	1	—	1	—	0	1	—	2
Wyoming†	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	5	5	15	43	35	5	4	10	17	15	—	4	10	11	12
Alaska	—	0	2	—	—	—	0	1	—	1	—	0	1	—	—
California	3	4	14	38	35	5	3	8	15	10	—	2	9	6	10
Hawaii	—	0	1	—	—	N	0	0	N	N	—	0	1	—	—
Oregon	—	0	3	1	—	—	1	4	2	4	—	0	3	3	—
Washington	2	0	5	4	—	—	0	3	—	—	—	0	5	2	2
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	N	0	0	N	N	—	0	2	—	3
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

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† 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 February 12, 2011, and February 13, 2010 (6th 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	12	15	29	76	109	4	17	221	24	448	119	504	1,041	1,216	1,190
New England	—	0	3	1	1	—	0	2	—	10	2	9	24	6	23
Connecticut	—	0	1	1	—	—	0	2	—	5	—	1	8	—	5
Maine [§]	—	0	1	—	—	—	0	1	—	1	2	1	5	3	1
Massachusetts	—	0	2	—	1	—	0	2	—	4	—	5	13	—	14
New Hampshire	—	0	0	—	—	—	0	1	—	—	—	0	2	3	1
Rhode Island [§]	—	0	0	—	—	—	0	0	—	—	—	0	9	—	—
Vermont [§]	—	0	1	—	—	—	0	0	—	—	—	0	4	—	2
Mid. Atlantic	—	1	5	9	13	—	7	209	1	416	18	37	123	151	60
New Jersey	—	0	2	—	2	—	2	16	1	107	—	3	9	1	14
New York (Upstate)	—	0	2	1	2	—	1	75	—	279	9	11	85	54	9
New York City	—	0	3	6	5	—	0	201	—	30	—	0	10	—	—
Pennsylvania	—	0	2	2	4	—	0	16	—	—	9	15	70	96	37
E.N. Central	1	2	9	6	20	—	1	7	7	9	29	112	190	356	356
Illinois	—	0	3	1	3	—	0	2	1	3	—	21	51	37	47
Indiana	—	0	2	1	8	—	0	1	—	1	—	12	26	8	32
Michigan	—	0	4	—	2	—	0	2	1	3	4	29	57	90	101
Ohio	1	0	2	4	3	—	0	5	5	—	25	34	80	191	129
Wisconsin	—	0	3	—	4	—	0	2	—	2	—	9	22	30	47
W.N. Central	—	1	5	9	5	—	1	14	5	2	12	35	193	73	109
Iowa	—	0	3	1	1	—	0	7	—	1	—	12	34	11	24
Kansas	—	0	2	1	—	—	0	1	1	—	—	3	9	5	22
Minnesota	—	0	1	—	—	—	0	1	—	—	—	0	144	—	—
Missouri	—	0	4	4	3	—	0	2	3	1	4	8	44	37	44
Nebraska [§]	—	0	2	3	1	—	0	10	1	—	5	4	13	16	10
North Dakota	—	0	1	—	—	—	0	1	—	—	3	0	30	3	—
South Dakota	—	0	0	—	—	—	0	1	—	—	—	0	2	1	9
S. Atlantic	—	2	7	9	25	—	0	4	—	7	9	34	78	204	158
Delaware	—	0	1	—	1	—	0	0	—	—	—	0	4	3	—
District of Columbia	—	0	0	—	—	—	0	1	—	—	—	0	2	1	—
Florida	—	1	5	4	10	—	0	3	—	1	2	6	28	34	22
Georgia	—	0	2	—	3	—	0	1	—	—	1	5	18	28	24
Maryland [§]	—	0	1	1	—	—	0	1	—	2	—	3	6	12	23
North Carolina	—	0	2	3	3	—	0	0	—	—	—	1	34	58	61
South Carolina [§]	—	0	1	1	2	—	0	2	—	1	1	6	25	23	16
Virginia [§]	—	0	2	—	6	—	0	2	—	2	5	6	39	45	11
West Virginia	—	0	1	—	—	—	0	1	—	1	—	1	21	—	1
E.S. Central	1	1	3	5	4	—	0	2	1	—	2	15	35	54	81
Alabama [§]	1	0	1	5	1	—	0	2	1	—	—	4	8	8	20
Kentucky	—	0	2	—	2	—	0	1	—	—	—	5	16	30	28
Mississippi	—	0	1	—	1	—	0	0	—	—	—	1	8	—	7
Tennessee [§]	—	0	2	—	—	—	0	1	—	—	2	4	11	16	26
W.S. Central	—	1	9	4	10	4	2	11	7	2	10	56	119	48	195
Arkansas [§]	—	0	1	1	2	—	0	1	—	—	—	2	14	—	12
Louisiana	—	0	2	1	6	—	0	2	—	—	—	1	3	1	6
Oklahoma	—	0	7	1	1	—	0	0	—	—	2	0	23	2	—
Texas [§]	—	1	7	1	1	4	1	11	7	2	8	48	116	45	177
Mountain	—	1	6	4	5	—	0	4	1	—	21	31	102	188	124
Arizona	—	0	2	2	2	—	0	1	—	—	1	8	27	32	38
Colorado	—	0	4	—	1	—	0	1	—	—	15	8	76	113	14
Idaho [§]	—	0	1	2	—	—	0	1	—	—	2	2	15	17	27
Montana [§]	—	0	1	—	—	—	0	0	—	—	3	1	16	15	4
Nevada [§]	—	0	1	—	1	—	0	1	—	—	—	0	7	3	—
New Mexico [§]	—	0	1	—	1	—	0	2	1	—	—	1	11	1	21
Utah	—	0	1	—	—	—	0	1	—	—	—	5	13	7	20
Wyoming [§]	—	0	1	—	—	—	0	1	—	—	—	0	2	—	—
Pacific	10	3	13	29	26	—	0	18	2	2	16	116	468	136	84
Alaska	—	0	1	—	—	—	0	1	—	—	—	0	6	11	3
California	9	2	9	23	17	—	0	18	—	—	8	100	343	90	28
Hawaii	—	0	1	—	—	—	0	1	—	1	—	1	6	—	9
Oregon	1	0	2	4	8	—	0	1	2	1	—	6	15	12	41
Washington	—	0	4	2	1	—	0	2	—	—	8	7	117	23	3
Territories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	1	—	—	—	0	1	1	—
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.

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† 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 February 12, 2011, and February 13, 2010 (6th 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	24	60	143	129	298	256	909	1,746	2,151	3,707	42	92	214	227	283
New England	2	4	13	8	21	—	31	68	46	605	—	2	13	4	69
Connecticut	—	0	9	—	5	—	0	25	25	480	—	0	2	2	57
Maine [§]	1	1	4	2	7	—	2	7	8	4	—	0	3	—	—
Massachusetts	—	0	0	—	—	—	23	52	—	96	—	1	9	—	9
New Hampshire	—	0	5	1	2	—	3	12	10	12	—	0	2	2	3
Rhode Island [§]	—	0	4	—	—	—	1	17	—	11	—	0	1	—	—
Vermont [§]	1	1	3	5	7	—	2	5	3	2	—	0	2	—	—
Mid. Atlantic	3	19	41	27	75	24	95	218	209	400	4	9	32	28	24
New Jersey	—	0	0	—	—	—	16	57	8	75	—	1	9	—	5
New York (Upstate)	3	9	19	27	33	12	25	63	55	77	—	4	13	12	6
New York City	—	1	12	—	20	1	23	56	61	112	—	1	7	1	6
Pennsylvania	—	8	24	—	22	11	31	81	85	136	4	3	13	15	7
E.N. Central	—	2	27	4	5	18	91	243	194	379	5	13	43	17	42
Illinois	—	1	11	3	1	—	33	114	40	131	—	2	9	—	12
Indiana	—	0	0	—	—	—	13	62	7	43	—	2	10	4	3
Michigan	—	1	5	1	2	3	16	49	43	72	—	2	16	—	10
Ohio	—	0	12	—	2	15	24	47	94	95	5	2	11	10	4
Wisconsin	—	0	0	—	—	—	10	47	10	38	—	3	17	3	13
W.N. Central	—	4	14	1	15	11	45	97	109	164	1	11	39	14	31
Iowa	—	0	3	—	—	1	9	34	22	16	—	2	16	2	4
Kansas	—	1	4	1	8	—	7	18	18	23	1	1	5	3	3
Minnesota	—	0	4	—	3	—	0	32	—	34	—	0	7	—	7
Missouri	—	1	6	—	1	8	13	44	54	60	—	4	27	5	12
Nebraska [§]	—	1	4	—	3	2	4	13	10	18	—	1	6	4	4
North Dakota	—	0	3	—	—	—	0	13	—	2	—	0	10	—	—
South Dakota	—	0	0	—	—	—	2	17	5	11	—	0	4	—	1
S. Atlantic	19	20	36	79	161	95	262	616	756	1,083	20	14	31	81	40
Delaware	—	0	0	—	—	1	3	11	11	6	—	0	2	—	—
District of Columbia	—	0	0	—	—	—	1	6	—	6	—	0	1	1	1
Florida	1	0	5	6	96	43	108	226	324	460	11	5	23	34	13
Georgia	—	0	0	—	—	15	45	133	122	193	—	2	16	7	6
Maryland [§]	7	6	14	17	27	8	18	56	60	69	3	2	9	14	8
North Carolina	—	0	0	—	—	18	29	240	111	202	4	1	10	13	1
South Carolina [§]	—	0	0	—	—	2	25	99	52	62	—	0	2	—	1
Virginia [§]	11	12	25	56	31	8	20	61	76	74	2	2	9	12	10
West Virginia	—	1	7	—	7	—	2	13	—	11	—	0	3	—	—
E.S. Central	—	3	7	6	7	18	55	177	168	177	2	5	22	16	7
Alabama [§]	—	1	4	5	—	7	19	52	58	52	—	1	4	2	5
Kentucky	—	0	4	1	—	3	11	32	24	35	1	1	6	4	—
Mississippi	—	0	1	—	—	—	18	67	30	29	—	0	12	—	1
Tennessee [§]	—	1	4	—	7	8	17	53	56	61	1	2	7	10	1
W.S. Central	—	0	30	—	—	10	123	267	157	205	6	6	32	13	12
Arkansas [§]	—	0	7	—	—	2	12	43	33	16	—	0	5	1	3
Louisiana	—	0	0	—	—	—	20	49	26	66	—	0	2	—	2
Oklahoma	—	0	30	—	—	5	12	39	25	23	2	0	8	4	1
Texas [§]	—	0	0	—	—	3	77	219	73	100	4	4	32	8	6
Mountain	—	1	7	1	3	16	48	108	156	268	1	11	34	14	31
Arizona	—	0	0	—	—	1	15	42	37	99	—	1	13	2	4
Colorado	—	0	0	—	—	8	10	24	53	58	1	3	21	5	8
Idaho [§]	—	0	2	—	—	4	3	9	23	18	—	2	7	4	6
Montana [§]	—	0	3	1	—	1	1	5	3	19	—	1	5	1	2
Nevada [§]	—	0	2	—	—	—	5	22	13	16	—	0	5	1	1
New Mexico [§]	—	0	2	—	—	—	6	19	15	29	—	1	6	1	5
Utah	—	0	2	—	—	—	5	17	9	22	—	1	7	—	5
Wyoming [§]	—	0	4	—	3	2	1	8	3	7	—	0	3	—	—
Pacific	—	2	12	3	11	64	116	264	356	426	3	12	44	40	27
Alaska	—	0	2	1	4	—	1	5	7	9	—	0	1	—	1
California	—	1	12	—	4	53	79	217	302	330	2	6	27	34	20
Hawaii	—	0	0	—	—	—	6	14	—	30	—	0	4	—	3
Oregon	—	0	2	2	3	4	8	48	31	41	—	2	12	4	3
Washington	—	0	0	—	—	7	14	67	16	16	1	3	17	2	—
Territories															
American Samoa	N	0	0	N	N	—	0	1	—	1	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	—	1	3	2	7	1	10	21	5	62	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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[†] 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 February 12, 2011, and February 13, 2010 (6th week)*

Reporting area	Shigellosis						Spotted Fever Rickettsiosis (including RMSF) [†]								
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Confirmed				Probable				
		Med	Max				Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010	
United States	98	275	453	764	1,376	—	2	11	8	5	3	24	91	27	23
New England	—	4	17	4	89	—	0	0	—	—	—	0	1	—	—
Connecticut	—	0	2	2	63	—	0	0	—	—	—	0	0	—	—
Maine [§]	—	0	1	1	1	—	0	0	—	—	—	0	1	—	—
Massachusetts	—	3	16	—	22	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	2	—	2	—	0	0	—	—	—	0	1	—	—
Rhode Island [§]	—	0	2	—	1	—	0	0	—	—	—	0	1	—	—
Vermont [§]	—	0	1	1	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	3	30	69	52	247	—	0	1	—	—	—	1	4	1	—
New Jersey	—	5	16	5	35	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	2	3	15	15	16	—	0	1	—	—	—	0	3	—	—
New York City	1	5	14	22	43	—	0	1	—	—	—	0	4	1	—
Pennsylvania	—	11	55	10	153	—	0	0	—	—	—	0	3	—	—
E.N. Central	3	25	239	49	167	—	0	1	—	—	—	1	10	2	1
Illinois	—	9	229	4	64	—	0	1	—	—	—	0	5	—	—
Indiana [§]	—	1	4	4	4	—	0	1	—	—	—	0	5	—	1
Michigan	—	5	10	10	23	—	0	0	—	—	—	0	1	1	—
Ohio	3	5	18	31	44	—	0	0	—	—	—	0	2	1	—
Wisconsin	—	3	21	—	32	—	0	0	—	—	—	0	1	—	—
W.N. Central	2	30	81	54	321	—	0	4	—	—	—	4	21	1	1
Iowa	—	1	4	2	7	—	0	0	—	—	—	0	1	—	—
Kansas [§]	—	5	13	12	16	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	3	—	4	—	0	0	—	—	—	0	0	—	—
Missouri	2	18	66	38	293	—	0	4	—	—	—	4	20	1	1
Nebraska [§]	—	1	10	1	1	—	0	1	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	1	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	36	53	134	276	188	—	1	9	4	4	3	7	60	13	19
Delaware [§]	—	0	3	—	16	—	0	1	—	—	—	0	3	—	—
District of Columbia	—	0	4	2	3	—	0	1	—	—	—	0	0	—	—
Florida [§]	24	25	53	181	58	—	0	1	1	—	—	0	2	2	—
Georgia	4	14	40	43	65	—	1	6	1	4	—	0	0	—	—
Maryland [§]	4	2	8	10	9	—	0	1	1	—	—	0	5	1	1
North Carolina	2	3	36	26	19	—	0	3	1	—	2	2	48	7	17
South Carolina [§]	—	1	5	3	11	—	0	1	—	—	—	0	3	1	1
Virginia [§]	2	3	8	11	7	—	0	2	—	—	1	2	12	2	—
West Virginia	—	0	66	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	3	14	40	38	49	—	0	3	—	—	—	5	29	3	—
Alabama [§]	1	4	14	19	9	—	0	1	—	—	—	1	8	2	—
Kentucky	2	3	28	4	21	—	0	2	—	—	—	0	0	—	—
Mississippi	—	1	4	5	2	—	0	0	—	—	—	0	3	—	—
Tennessee [§]	—	5	14	10	17	—	0	2	—	—	—	4	20	1	—
W.S. Central	15	52	113	112	136	—	0	3	—	—	—	1	18	—	1
Arkansas [§]	—	1	6	3	6	—	0	2	—	—	—	0	17	—	—
Louisiana	—	6	13	10	13	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	5	13	7	16	—	0	3	—	—	—	0	6	—	—
Texas [§]	15	43	92	92	101	—	0	1	—	—	—	0	3	—	1
Mountain	9	15	32	61	73	—	0	5	4	—	—	0	3	7	1
Arizona	3	8	18	29	45	—	0	5	4	—	—	0	3	7	—
Colorado [§]	2	2	8	16	13	—	0	1	—	—	—	0	1	—	—
Idaho [§]	—	0	3	3	1	—	0	0	—	—	—	0	1	—	—
Montana [§]	3	0	1	4	1	—	0	1	—	—	—	0	1	—	—
Nevada [§]	—	0	6	1	2	—	0	0	—	—	—	0	0	—	—
New Mexico [§]	1	3	10	8	8	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	—	3	—	0	0	—	—	—	0	1	—	—
Wyoming [§]	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Pacific	27	22	70	118	106	—	0	2	—	1	—	0	0	—	—
Alaska	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
California	25	19	56	109	93	—	0	2	—	1	—	0	0	—	—
Hawaii	—	1	4	—	5	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	5	5	—	0	1	—	—	—	0	0	—	—
Washington	2	1	17	4	3	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	—	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 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pubs/files/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).

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 12, 2011, and February 13, 2010 (6th week)*

Reporting area	<i>Streptococcus pneumoniae</i> , [†] invasive disease										Syphilis, primary and secondary					
	All ages					Age <5					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	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
		Med	Max				Med	Max				Med			Max	
United States	161	273	654	1,775	1,994	10	35	84	134	305	76	247	327	735	1,362	
New England	—	9	99	23	64	—	1	14	—	12	3	9	20	27	38	
Connecticut	—	0	91	—	—	—	0	12	—	—	—	1	8	1	1	
Maine [§]	—	2	10	18	15	—	0	1	—	2	—	0	3	—	6	
Massachusetts	—	1	5	—	13	—	0	4	—	8	2	5	15	17	27	
New Hampshire	—	0	7	—	25	—	0	1	—	2	—	0	2	3	1	
Rhode Island [§]	—	0	36	1	—	—	0	3	—	—	1	1	4	6	3	
Vermont [§]	—	1	6	4	11	—	0	1	—	—	—	0	2	—	—	
Mid. Atlantic	14	30	57	218	152	1	7	19	15	44	7	32	45	62	173	
New Jersey	—	1	8	7	15	—	1	5	5	9	4	4	12	21	20	
New York (Upstate)	1	3	11	12	23	1	2	9	5	15	2	2	12	14	4	
New York City	5	14	32	104	46	—	2	14	—	8	—	18	31	—	105	
Pennsylvania	8	11	22	95	68	—	1	5	5	12	1	7	16	27	44	
E.N. Central	42	61	100	336	432	—	6	18	24	51	—	26	48	38	195	
Illinois	—	2	7	5	13	—	2	5	5	12	—	7	26	1	93	
Indiana	—	9	24	17	97	—	0	6	—	10	—	3	14	9	3	
Michigan	6	13	29	67	90	—	1	6	6	10	—	4	9	6	42	
Ohio	32	25	45	199	179	—	2	6	10	9	—	9	19	21	53	
Wisconsin	4	7	22	48	53	—	0	4	3	10	—	1	3	1	4	
W.N. Central	10	10	61	58	70	—	1	12	8	17	1	6	18	19	27	
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	—	2	
Kansas	4	2	7	15	7	—	0	2	—	2	—	0	3	—	1	
Minnesota	—	0	46	—	13	—	0	8	—	4	—	2	9	8	4	
Missouri	5	2	10	27	23	—	0	4	7	8	1	2	9	11	19	
Nebraska [§]	1	2	9	16	24	—	0	2	1	2	—	0	2	—	1	
North Dakota	—	0	11	—	—	—	0	1	—	—	—	0	0	—	—	
South Dakota	—	0	3	—	3	—	0	2	—	1	—	0	1	—	—	
S. Atlantic	47	62	144	530	529	3	9	27	40	80	22	57	103	218	287	
Delaware	1	1	4	12	3	—	0	1	—	—	—	0	4	3	—	
District of Columbia	—	0	3	2	5	—	0	2	—	2	—	2	20	9	13	
Florida	31	26	89	284	218	2	3	18	18	23	3	22	44	85	104	
Georgia	6	10	26	71	104	1	2	9	11	26	2	10	27	20	25	
Maryland [§]	6	9	31	84	81	—	1	6	4	7	—	6	15	32	13	
North Carolina	—	0	0	—	—	—	0	0	—	—	9	5	19	26	77	
South Carolina [§]	3	8	24	72	94	—	1	4	2	12	8	3	10	24	19	
Virginia [§]	—	1	4	5	9	—	1	4	5	8	—	4	22	19	34	
West Virginia	—	1	9	—	15	—	0	4	—	2	—	0	2	—	2	
E.S. Central	14	25	48	162	195	—	2	7	14	21	13	16	39	51	81	
Alabama [§]	—	0	0	—	—	—	0	0	—	—	8	4	11	20	31	
Kentucky	1	4	16	31	12	—	0	3	4	2	5	2	12	16	11	
Mississippi	—	1	8	1	17	—	0	2	—	4	—	4	16	5	8	
Tennessee [§]	13	21	43	130	166	—	2	6	10	15	—	5	17	10	31	
W.S. Central	3	35	261	144	182	1	5	21	10	35	18	37	67	138	232	
Arkansas [§]	2	3	21	24	13	—	0	3	1	4	—	3	10	10	39	
Louisiana	—	2	7	18	24	—	0	2	—	8	4	7	32	13	53	
Oklahoma	1	1	5	5	11	1	1	5	5	11	4	1	7	5	9	
Texas [§]	—	27	238	97	134	—	3	17	4	12	10	24	33	110	131	
Mountain	28	35	72	267	338	5	4	12	21	39	2	10	26	26	51	
Arizona	10	13	38	144	183	1	2	7	10	19	—	3	8	2	18	
Colorado	14	11	22	64	77	3	1	4	4	8	—	2	8	4	18	
Idaho [§]	—	0	2	2	1	—	0	2	1	1	—	0	2	2	1	
Montana [§]	—	0	2	1	1	—	0	1	—	—	—	0	2	1	—	
Nevada [§]	—	2	4	12	14	—	0	1	2	2	—	2	9	11	7	
New Mexico [§]	3	3	11	27	22	1	0	4	2	2	2	1	4	4	5	
Utah	—	3	9	12	37	—	0	3	2	7	—	1	5	2	2	
Wyoming [§]	1	0	15	5	3	—	0	1	—	—	—	0	0	—	—	
Pacific	3	5	23	37	32	—	0	7	2	6	10	46	63	156	278	
Alaska	—	2	9	13	17	—	0	5	1	4	—	0	1	—	—	
California	3	3	22	24	15	—	0	5	1	2	5	39	52	138	237	
Hawaii	—	0	3	—	—	—	0	0	—	—	—	0	5	—	3	
Oregon	—	0	0	—	—	—	0	0	—	—	3	1	7	5	7	
Washington	—	0	0	—	—	—	0	0	—	—	2	4	11	13	31	
Territories																
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	
Puerto Rico	—	0	0	—	—	—	0	0	—	—	10	4	15	21	28	
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	

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

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

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 12, 2011, and February 13, 2010 (6th 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	151	268	563	1,070	1,739	—	0	71	—	1	—	1	53	—	—
New England	3	20	45	60	121	—	0	3	—	—	—	0	2	—	—
Connecticut	—	5	20	—	25	—	0	2	—	—	—	0	2	—	—
Maine [¶]	3	5	16	28	39	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	4	12	—	25	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	2	9	9	20	—	0	1	—	—	—	0	0	—	—
Rhode Island [¶]	—	0	3	1	1	—	0	0	—	—	—	0	0	—	—
Vermont [¶]	—	0	10	22	11	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	12	30	62	88	198	—	0	19	—	—	—	0	13	—	—
New Jersey	—	7	30	7	59	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	—	—	0	7	—	—
New York City	—	0	1	—	—	—	0	7	—	—	—	0	4	—	—
Pennsylvania	12	20	41	81	139	—	0	3	—	—	—	0	3	—	—
E.N. Central	38	94	176	389	666	—	0	15	—	—	—	0	8	—	—
Illinois	5	19	45	69	157	—	0	10	—	—	—	0	5	—	—
Indiana [¶]	—	5	30	26	78	—	0	2	—	—	—	0	2	—	—
Michigan	11	30	62	120	217	—	0	6	—	—	—	0	1	—	—
Ohio	22	27	58	174	174	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	7	22	—	40	—	0	0	—	—	—	0	1	—	—
W.N. Central	1	15	32	32	91	—	0	7	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas [¶]	1	4	22	20	40	—	0	1	—	—	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	3	—	—
Missouri	—	7	23	10	42	—	0	1	—	—	—	0	0	—	—
Nebraska [¶]	N	0	0	N	N	—	0	3	—	—	—	0	7	—	—
North Dakota	—	0	10	—	7	—	0	2	—	—	—	0	2	—	—
South Dakota	—	1	7	2	2	—	0	2	—	—	—	0	3	—	—
S. Atlantic	38	35	100	143	202	—	0	4	—	—	—	0	4	—	—
Delaware [¶]	—	0	3	1	—	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	4	2	—	—	0	1	—	—	—	0	1	—	—
Florida [¶]	32	16	57	111	108	—	0	3	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	3	—	—
Maryland [¶]	N	0	0	N	N	—	0	3	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina [¶]	—	0	35	—	7	—	0	1	—	—	—	0	0	—	—
Virginia [¶]	6	10	29	29	39	—	0	1	—	—	—	0	1	—	—
West Virginia	—	7	26	—	48	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	5	22	23	25	—	0	1	—	1	—	0	3	—	—
Alabama [¶]	—	5	22	23	25	—	0	1	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	2	—	—	—	0	1	—	1	—	0	2	—	—
Tennessee [¶]	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	35	42	177	168	247	—	0	16	—	—	—	0	3	—	—
Arkansas [¶]	1	2	32	2	13	—	0	3	—	—	—	0	1	—	—
Louisiana	—	2	4	5	14	—	0	3	—	—	—	0	1	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas [¶]	34	39	171	161	220	—	0	15	—	—	—	0	2	—	—
Mountain	24	19	48	158	184	—	0	18	—	—	—	0	15	—	—
Arizona	—	0	0	—	—	—	0	13	—	—	—	0	9	—	—
Colorado [¶]	13	8	31	80	67	—	0	5	—	—	—	0	11	—	—
Idaho [¶]	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana [¶]	11	3	28	61	30	—	0	0	—	—	—	0	0	—	—
Nevada [¶]	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
New Mexico [¶]	—	1	8	5	14	—	0	5	—	—	—	0	2	—	—
Utah	—	4	17	12	72	—	0	1	—	—	—	0	1	—	—
Wyoming [¶]	—	0	3	—	1	—	0	1	—	—	—	0	1	—	—
Pacific	—	1	7	9	5	—	0	7	—	—	—	0	6	—	—
Alaska	—	1	5	9	4	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	7	—	—	—	0	6	—	—
Hawaii	—	0	7	—	1	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	—	1	—	0	0	—	—	—	0	0	—	—
Puerto Rico	5	9	30	25	41	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† 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/ncphi/diss/nndss/phs/infdis.htm>.

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

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TABLE III. Deaths in 122 U.S. cities,* week ending February 12, 2011 (6th 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	594	435	122	27	4	6	79	S. Atlantic	1,516	934	416	107	35	22	113
Boston, MA	156	105	35	10	3	3	23	Atlanta, GA	177	101	52	20	1	3	8
Bridgeport, CT	30	22	8	—	—	—	3	Baltimore, MD	286	156	100	19	6	4	21
Cambridge, MA	20	17	3	—	—	—	2	Charlotte, NC	110	73	21	11	4	1	7
Fall River, MA	23	18	4	1	—	—	4	Jacksonville, FL	186	117	55	6	5	3	14
Hartford, CT	56	45	9	2	—	—	12	Miami, FL	135	102	24	7	2	—	13
Lowell, MA	24	22	2	—	—	—	1	Norfolk, VA	41	26	13	1	1	—	3
Lynn, MA	6	4	2	—	—	—	1	Richmond, VA	81	49	23	5	3	1	9
New Bedford, MA	37	26	9	2	—	—	4	Savannah, GA	81	53	22	4	1	1	8
New Haven, CT	29	21	6	2	—	—	3	St. Petersburg, FL	55	34	11	6	2	2	4
Providence, RI	63	49	11	2	—	1	4	Tampa, FL	223	143	51	17	5	6	14
Somerville, MA	7	4	3	—	—	—	—	Washington, D.C.	131	74	42	9	5	1	11
Springfield, MA	45	28	10	5	—	2	3	Wilmington, DE	10	6	2	2	—	—	1
Waterbury, CT	27	21	4	2	—	—	6	E.S. Central	846	575	198	44	17	11	105
Worcester, MA	71	53	16	1	1	—	13	Birmingham, AL	186	131	33	14	4	3	32
Mid. Atlantic	2,021	1,392	461	102	36	30	160	Chattanooga, TN	84	57	21	4	2	—	5
Albany, NY	39	28	9	2	—	—	—	Knoxville, TN	109	83	17	6	3	—	12
Allentown, PA	28	26	2	—	—	—	2	Lexington, KY	88	55	27	3	1	2	6
Buffalo, NY	93	59	23	4	2	5	6	Memphis, TN	149	102	38	5	—	4	25
Camden, NJ	23	12	9	1	—	1	—	Mobile, AL	46	37	7	1	1	—	5
Elizabeth, NJ	13	9	4	—	—	—	3	Montgomery, AL	40	27	12	1	—	—	11
Erie, PA	63	48	10	3	—	2	4	Nashville, TN	144	83	43	10	6	2	9
Jersey City, NJ	25	18	4	—	3	—	4	W.S. Central	1,227	842	287	61	20	17	90
New York City, NY	1,148	818	244	54	19	13	97	Austin, TX	112	64	37	5	2	4	7
Newark, NJ	41	18	14	7	2	—	—	Baton Rouge, LA	67	57	7	2	1	—	—
Paterson, NJ	17	15	2	—	—	—	—	Corpus Christi, TX	85	70	11	3	1	—	10
Philadelphia, PA	209	114	64	19	5	7	11	Dallas, TX	232	150	63	10	3	6	19
Pittsburgh, PA [§]	27	20	5	2	—	—	6	El Paso, TX	156	115	32	7	2	—	10
Reading, PA	34	22	9	1	1	1	4	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	73	43	25	2	3	—	4	Houston, TX	94	61	22	8	1	2	8
Schenectady, NY	24	14	9	1	—	—	3	Little Rock, AR	55	40	8	6	—	1	—
Scranton, PA	24	21	2	1	—	—	1	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	73	53	17	1	1	1	9	San Antonio, TX	250	168	66	9	5	2	20
Trenton, NJ	22	18	2	2	—	—	1	Shreveport, LA	53	32	14	5	2	—	1
Utica, NY	14	8	5	1	—	—	—	Tulsa, OK	123	85	27	6	3	2	15
Yonkers, NY	31	28	2	1	—	—	5	Mountain	1,061	726	238	54	30	13	74
E.N. Central	2,166	1,454	503	130	43	36	189	Albuquerque, NM	144	105	29	4	4	2	17
Akron, OH	110	85	21	1	1	2	12	Boise, ID	45	35	7	—	1	2	2
Canton, OH	54	35	15	3	1	—	3	Colorado Springs, CO	83	53	22	7	1	—	2
Chicago, IL	249	165	58	22	4	—	27	Denver, CO	97	63	20	5	4	5	4
Cincinnati, OH	117	73	27	11	3	3	11	Las Vegas, NV	225	159	52	7	6	1	23
Cleveland, OH	261	186	56	15	3	1	14	Ogden, UT	35	23	8	2	2	—	4
Columbus, OH	127	79	33	9	2	4	17	Phoenix, AZ	172	108	47	14	3	—	8
Dayton, OH	153	112	32	7	1	1	11	Pueblo, CO	37	29	5	—	3	—	2
Detroit, MI	151	86	50	10	4	1	8	Salt Lake City, UT	129	80	32	9	5	3	6
Evansville, IN	49	39	7	3	—	—	3	Tucson, AZ	94	71	16	6	1	—	6
Fort Wayne, IN	86	57	21	4	3	1	6	Pacific	1,959	1,392	409	93	35	30	224
Gary, IN	11	6	4	1	—	—	2	Berkeley, CA	16	11	4	1	—	—	2
Grand Rapids, MI	71	44	23	1	2	1	6	Fresno, CA	136	101	25	6	3	1	17
Indianapolis, IN	250	170	45	15	5	15	35	Glendale, CA	42	38	4	—	—	—	11
Lansing, MI	53	34	12	5	2	—	5	Honolulu, HI	95	73	16	2	1	3	18
Milwaukee, WI	95	54	33	3	2	3	2	Long Beach, CA	72	42	20	8	1	1	9
Peoria, IL	48	28	6	11	3	—	3	Los Angeles, CA	291	197	71	11	7	5	32
Rockford, IL	56	43	10	1	1	1	5	Pasadena, CA	24	16	5	2	—	1	6
South Bend, IN	54	38	13	1	—	2	7	Portland, OR	158	108	38	5	3	4	15
Toledo, OH	108	67	27	7	6	1	4	Sacramento, CA	227	167	44	13	2	1	32
Youngstown, OH	63	53	10	—	—	—	8	San Diego, CA	174	117	40	10	4	3	16
W.N. Central	757	478	194	48	19	17	46	San Francisco, CA	130	92	21	10	4	3	14
Des Moines, IA	125	82	35	5	1	2	10	San Jose, CA	218	158	48	7	2	3	17
Duluth, MN	37	31	5	—	—	1	4	Santa Cruz, CA	49	42	5	2	—	—	5
Kansas City, KS	35	19	11	5	—	—	1	Seattle, WA	131	91	24	7	6	3	13
Kansas City, MO	127	77	33	9	7	1	2	Spokane, WA	74	58	14	1	—	1	6
Lincoln, NE	59	37	14	6	1	1	3	Tacoma, WA	122	81	30	8	2	1	11
Minneapolis, MN	72	46	15	7	2	2	2	Total¶	12,147	8,228	2,828	666	239	182	1,080
Omaha, NE	88	56	20	8	1	3	9								
St. Louis, MO	78	33	29	4	5	6	5								
St. Paul, MN	68	47	17	2	2	—	5								
Wichita, KS	68	50	15	2	—	1	5								

U: Unavailable. —: No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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