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Update: Swine-Origin Influenza A (H1N1) Virus — United States and Other Countries

Since April 21, 2009, CDC has been reporting cases of respiratory infection with a swine-origin influenza A (H1N1) virus (S-OIV) transmitted through human-to-human contact (*1*–*3*). In the United States, as of April 29, a total of 91 confirmed cases had been reported, including one death (in Texas). By state, the following numbers of cases had been reported: New York (51); Texas (16); California (14); Kansas, Massachusetts, and Michigan (two each); Arizona, Indiana, Nevada, and Ohio (one each).

Outside of the United States, as of April 29, a total of 57 confirmed cases had been reported, including seven deaths (in Mexico). By country, the following numbers of laboratory-confirmed cases had been reported: Mexico (26); Canada (13); United Kingdom (five); Spain (four); Germany and New Zealand (three each); Israel (2); and Austria (one). Additional information is available at http://www.cdc.gov/swineflu and http://www.who.int/csr/don/2009_04_29/en/index.html.

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2. CDC. Update: infections with a swine-origin influenza A (H1N1) virus—United States and other countries, April 28, 2009. MMWR 2009;58:431–3.
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Prevalence and Most Common Causes of Disability Among Adults — United States, 2005

Since 1994, disability-related costs for medical care and lost productivity have exceeded an estimated $300 billion annually in the United States (*1*). To update previous reports on the prevalence and most common causes of disability among adults (*2*), CDC and the U.S. Census Bureau analyzed the most recent data from the Survey of Income and Program Participation (SIPP). This report summarizes the findings of that analysis, which indicated that the prevalence of disability in 2005 (21.8%) remained unchanged from 1999 (22.0%); however, because of the aging of the population, particularly the large group born during 1946–1964 ("baby boomers"), the estimated absolute number of persons reporting a disability increased 7.7%, from 44.1 to 47.5 million. The three most common causes of disability continued to be arthritis or rheumatism (affecting an estimated 8.6 million persons), back or spine problems (7.6 million), and heart trouble (3.0

INSIDE

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million). Women (24.4%) had a significantly higher prevalence of disability compared with men (19.1%) at all ages. For both sexes, the prevalence of disability doubled in successive age groups (18–44 years, 11.0%; 45–64 years, 23.9%; and ≥65 years, 51.8%). The number of adults reporting a disability likely will increase, along with the need for appropriate medical and public health services, as more persons enter the highest risk age group (≥65 years). To accommodate the expected increase in demand for disability-related medical and public health services, expanding the reach of effective strategies and interventions aimed at preventing progression to disability and improving disability management in the population is necessary.

SIPP is a longitudinal panel survey conducted by the U.S. Census Bureau that represents the civilian noninstitutionalized population living in the United States and excludes persons living in institutions (e.g., nursing homes). The sampling frame for SIPP selection is based on the Census Bureau's Master Address File of every address in the United States and is stratified by socioeconomic and demographic characteristics from the decennial census. All members of selected households are invited to participate voluntarily in a SIPP panel. Panels are active for 2.5–4 years, during which computer-assisted in-person interviews are conducted in 4-month intervals (waves) that include supplemental questionnaires (topic modules).

Data used for this report are cross-sectional findings from the Wave 5 disability topical module (fielded June–September 2005) of the 2004 SIPP panel and are the most recent available disability data (*3*). During Wave 5, a total of 70,312 persons aged ≥18 years from 37,400 households (representing 82.6% of eligible households) were interviewed. All household members aged ≥18 years were questioned for this analysis; proxy response was allowed for panel members unavailable at the time of interview. Responses were weighted to population controls (the actual population at the time of interview), and sampling weights for cross-sectional analysis of Wave 5 were applied to generate national estimates of disability prevalence and cause,* accounting for the complex survey design, and adjusting, in part, for undercoverage (*3,4*). All estimates in this report have been adjusted for sample size, clustering, survey design, and other features.† Differences in the prevalence of disability by sex across age groups and other comparisons were assessed by z-test and considered statistically significant if the 95% confidence interval (CI) of the difference excluded zero ($p<0.05$) (*4*).

Participants were asked, "Because of a physical or mental health condition, [do you] have difficulty doing any of the

* Additional information on SIPP methodology is available at http://www.census.gov/sipp/usrguide/sipp2001.pdf.

† Additional information available at http://www.census.gov/sipp/sourceac/S&A04_W1toW12(S&A-10).pdf.

following by yourself?" and queried about various activities (Table 1). Disability was defined as a "yes" response to at least one of the following limitation categories: 1) use of an assistive aid (cane, crutches, walker, or wheelchair), 2) difficulty performing activities of daily living (ADLs) or instrumental activities of daily living (IADLs), or specified functional activities,[§] 3) one or more selected impairments,[¶] or 4) limitation in the ability to work around the house or at a job or business. Persons reporting any of these limitations (except those with only "use of an assistive aid" or "selective impairments") also were asked "Which condition or conditions cause these difficulties?" and shown a list of 30 conditions (Table 2) from which they were asked to identify the cause of their disability.[**] Respondents indicating more than one condition were asked to identify a main condition (*3*). For this report, "cause of disability" refers to the health condition the respondents identified as the main cause of their disability.

In 2005, the prevalence of self-reported disabilities among civilian noninstitutionalized U.S. adults aged ≥18 years was 21.8%, and the total estimated population reporting a disability was 47.5 million. The proportion of persons reporting a disability increased with age (18–44 years, 11.0%; 45–64 years, 23.9%; and ≥65 years, 51.8%) (Table 1) and was significantly higher among women (24.4%; CI = 23.7–25.1) compared with men (19.1%; CI = 18.5–19.7) overall and in all age groups (Figure). The estimated population with a disability among persons aged 45–64 years (17.3 million) was not statistically different (p=0.081) than among those aged ≥65 years (18.1 million). The most commonly reported disability category was "difficulty in specified functional activities," a collection of seven subcomponent measures that affected 17.3% of adults. The most commonly reported subcomponent measures were difficulty walking three city blocks (10.3%; estimated population affected = 22.5 million) and climbing a flight of stairs (10.0%; estimated population affected = 21.7 million) (Table 1).

A total of 94% of SIPP participants self-reporting a disability self-reported a cause. Arthritis or rheumatism was the most common cause of disability overall (19.0%; estimated population affected = 8.6 million) and for women (24.3%). Back or spine problems was the second most common cause of disability overall (16.8%, estimated population affected = 7.6 million) and the most common cause for men (16.9%). Heart trouble was the third most common cause of disability overall (6.6%, estimated population affected = 3.0 million) and for both sexes (8.4% men, 5.4% women) (Table 2).

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Editorial Note: This analysis determined that the estimated percentage of U.S. adults reporting a disability has not changed since 1999, when, using the same survey and definitions, 22.0% of adults reported having a disability (*2*). Reasons for this leveling off likely include a better educated public, improved medical interventions, increased public health attention to behavior modifications (e.g., tobacco use), and increased access to assistive technology among the most advantaged socioeconomic groups (*5,6*).

Although the percentage has not changed, this analysis and other studies have determined that the absolute number of persons in the U.S. population reporting disabilities is increasing because of a rise in the at-risk population (*1–3*). The analysis in this report determined that, as of 2005, the number of baby boomers (persons aged 45–64 years) reporting disabilities had already become equal to the number of persons aged ≥65 years in the U.S. population reporting disabilities, even though they have a lower prevalence of disability as a group. After baby boomers enter the ≥65 years age group, which has a much higher risk for disability, the absolute number of persons affected likely will increase substantially. This might be particularly true for women, who, consistent with previous findings (*1,3*), report disability more often than men at all ages and also have a longer life expectancy. The added number of persons reporting disabilities is likely to place more demands on the health-care and public health systems (e.g., an increased need for additional health-care providers trained in musculoskeletal conditions).[††]

The findings in this report are subject to at least four limitations. First, because SIPP excludes persons residing in institutions, estimates of disability prevalence are conservative, especially among persons aged ≥65 years, who have higher rates of institutionalization. Second, statistics from surveys are subject

[§] Effects of temporary conditions (less than 5 months duration) were excluded. ADLs included getting around inside the home, getting in/out of a bed/chair, bathing, dressing, eating, and toileting. IADLs included getting around outside the home, taking care of money/bills, preparing meals, doing light housework, managing prescriptions, and using the telephone. Specified functional activities included seeing letters/words in newsprint, hearing normal conversation, having speech understood, walking three city blocks, climbing a flight of stairs, grasping objects, lifting/carrying 10 pounds.

[¶] Selected impairments included learning disability, mental retardation, other developmental disability, Alzheimer's disease/senility/dementia, or other emotional/mental disability.

[**] U.S. Census Bureau. Survey of Income and Program Participation (SIPP) 2004 Panel, Wave 5 Core Microdata file. Available at: http://www.census.gov/apsd/techdoc/sipp/sipp04w5c.pdf. Vision and hearing problems and difficulty with speech were included in the list of 30 conditions; persons reporting difficulty with these senses were not asked the main cause of their disability.

[††] Additional information available at http://www.cdc.gov/aging/index.htm.

TABLE 1. Estimated number* and percentage of civilian noninstitutionalized adults aged ≥18 years with self-reported disabilities, by age group — United States, 2005

Measure†	Total			18–44 yrs			45–64 yrs			≥65 yrs		
	Estimated population*	%	(95% CI§)	Estimated population	%	(95% CI)	Estimated population	%	(95% CI)	Estimated population	%	(95% CI)
Total	**47,501**	**21.8**	**(21.3–22.3)**	**12,094**	**11.0**	**(10.5–11.5)**	**17,274**	**23.9**	**(23.1–24.7)**	**18,133**	**51.8**	**(50.4–53.2)**
Difficulty with specified functional activities	**37,669**	**17.3**	**(16.9–17.7)**	**6,991**	**6.3**	**(5.9–6.7)**	**14,040**	**19.4**	**(18.6–20.2)**	**16,638**	**47.5**	**(46.1–48.9)**
Seeing words/letters in newsprint	7,707	3.5	(3.3–3.7)	1,418	1.3	(1.1–1.5)	2,755	3.8	(3.4–4.2)	3,534	10.1	(9.3–10.9)
Hearing normal conversation	7,755	3.6	(3.4–3.8)	1,249	1.1	(0.9–1.3)	2,592	3.6	(3.2–4.0)	3,915	11.2	(10.3–12.1)
Having speech understood	2,416	1.1	(1.0–1.2)	867	0.8	(0.7–0.9)	797	1.1	(0.9–1.3)	753	2.1	(1.7–2.5)
Walking three city blocks	22,455	10.3	(10.0–10.6)	3,171	2.9	(2.6–3.2)	8,185	11.3	(10.7–11.9)	11,098	31.7	(30.4–33.0)
Climbing a flight of stairs	21,666	10.0	(9.7–10.3)	2,851	2.6	(2.3–2.9)	8,238	11.4	(10.8–12.0)	10,576	30.2	(28.9–31.5)
Grasping objects	7,026	3.2	(3.0–3.4)	1,155	1.0	(0.8–1.2)	3,011	4.2	(3.8–4.6)	2,860	8.2	(7.4–9.0)
Lifting/Carrying 10 lbs	15,844	7.3	(7.0–7.6)	2,567	2.3	(2.1–2.5)	5,655	7.8	(7.3–8.3)	7,622	21.8	(20.6–23.0)
Difficulty with activities of daily living	**8,451**	**3.9**	**(3.7–4.1)**	**1,126**	**1.0**	**(0.8–1.2)**	**2,963**	**4.1**	**(3.7–4.5)**	**4,361**	**12.5**	**(11.6–13.4)**
Getting around inside home	4,032	1.9	(1.7–2.1)	482	0.4	(0.3–0.5)	1,303	1.8	(1.5–2.1)	2,247	6.4	(5.7–7.1)
Getting in/out of bed/chair	5,280	2.4	(2.2–2.6)	685	0.6	(0.5–0.7)	1,962	2.7	(2.4–3.0)	2,633	7.5	(6.8–8.2)
Bathing	5,014	2.3	(2.1–2.5)	669	0.6	(0.5–0.7)	1,564	2.2	(1.9–2.5)	2,780	7.9	(7.1–8.7)
Dressing	3,702	1.7	(1.6–1.8)	579	0.5	(0.4–0.6)	1,259	1.7	(1.4–2.0)	1,864	5.3	(4.7–5.9)
Eating	1,452	0.7	(0.6–0.8)	275	0.2	(0.1–0.3)	449	0.6	(0.4–0.8)	728	2.1	(1.7–2.5)
Toileting	2,340	1.1	(1.0–1.2)	348	0.3	(0.2–0.4)	717	1.0	(0.8–1.2)	1,275	3.6	(3.1–4.1)
Difficulty with instrumental activities of daily living	**13,485**	**6.2**	**(5.9–6.5)**	**2,478**	**2.2**	**(2.0–2.4)**	**4,331**	**6.0**	**(5.5–6.5)**	**6,676**	**19.1**	**(18.0–20.2)**
Getting around outside of home	8,709	4.0	(3.8–4.2)	1,185	1.1	(0.9–1.3)	2,716	3.8	(3.4–4.2)	4,809	13.7	(12.7–14.7)
Taking care of money and bills	5,024	2.3	(2.1–2.5)	1,216	1.1	(0.9–1.3)	1,229	1.7	(1.4–2.0)	2,579	7.4	(6.7–8.1)
Preparing meals	5,028	2.3	(2.1–2.5)	933	0.8	(0.7–0.9)	1,310	1.8	(1.5–2.1)	2,786	8.0	(7.2–8.8)
Doing light housework	6,861	3.2	(3.0–3.4)	1,035	0.9	(0.7–1.1)	2,341	3.2	(2.9–3.5)	3,485	9.9	(9.1–10.7)
Managing prescriptions	4,067	1.9	(1.7–2.1)	821	0.7	(0.6–0.8)	1,062	1.5	(1.3–1.7)	2,183	6.2	(5.5–6.9)
Using the telephone	2,679	1.2	(1.1–1.3)	459	0.4	(0.3–0.5)	600	0.8	(0.6–1.0)	1,620	4.6	(4.0–5.2)
Reporting of selected impairments	**13,923**	**6.4**	**(6.1–6.7)**	**6,141**	**5.6**	**(5.2–6.0)**	**4,956**	**6.9**	**(6.4–7.4)**	**2,826**	**8.1**	**(7.3–8.9)**
A learning disability	3,635	1.7	(1.6–1.8)	2,446	2.2	(2.0–2.4)	963	1.3	(1.1–1.5)	226	0.6	(0.4–0.8)
Mental retardation	1,168	0.5	(0.4–0.6)	765	0.7	(0.6–0.8)	307	0.4	(0.3–0.5)	96¶	0.3	(0.2–0.4)
Other developmental disability	610	0.3	(0.2–0.4)	427	0.4	(0.3–0.5)	141¶	0.2	(0.1–0.3)	42¶	0.1	(0.0–0.2)
Alzheimer's disease/senility/ dementia	2,100	1.0	(0.9–1.1)	324	0.3	(0.2–0.4)	448	0.6	(0.4–0.8)	1,328	3.8	(3.3–4.3)
Other mental/emotional disability	9,924	4.6	(4.4–4.8)	3,910	3.5	(3.2–3.8)	4,037	5.6	(5.1–6.1)	1,977	5.6	(4.9–6.3)
Use of assistive aid	**11,226**	**5.2**	**(4.9–5.5)**	**1,147**	**1.0**	**(0.8–1.2)**	**3,345**	**4.6**	**(4.2–5.0)**	**6,734**	**19.2**	**(18.1–20.3)**
Wheelchair	3,260	1.5	(1.4–1.6)	477	0.4	(0.3–0.5)	960	1.3	(1.1–1.5)	1,823	5.2	(4.6–5.8)
Cane, crutches, or walker	10,193	4.7	(4.5–4.9)	903	0.8	(0.7–0.9)	3,033	4.2	(3.8–4.6)	6,256	17.9	(16.8–19.0)
Limitation in ability to work around the house	**18,747**	**8.6**	**(8.3–8.9)**	**3,897**	**3.5**	**(3.2–3.8)**	**7,736**	**10.7**	**(10.1–11.3)**	**7,115**	**20.3**	**(19.2–21.4)**
Limitation in ability to work at a job or business**				**4,911**	**4.5**	**(4.2–4.8)**	**8,193**	**11.3**	**(10.7–11.9)**			
Received federal work disability benefits				**3,142**	**2.8**	**(2.5–3.1)**	**5,516**	**7.6**	**(7.1–8.1)**			

SOURCE: U.S. Census Bureau, 2004 Survey of Income and Program Participation, Wave 5, June–September 2005.

* Weighted number in 1,000s.

† Categories are not mutually exclusive; respondents might have answered affirmatively for more than one component. Totals across categories likely exceed the estimated number of individuals reporting disability (47.5 million).

§ Confidence interval.

¶ Weighted estimates less than 200,000 are based on a small sample size and are likely unreliable and shoud be interpeted with caution (*4*).

** Reported only for adults aged 18–64 years; receipt of federal work benefits was not included in the definition of disability, these data are provided for informational purposes only.

to sampling and nonsampling error (e.g., respondent interpretation of question meaning); statistical weighting procedures might not completely control for all sources of nonsampling error, and some bias might remain.[§§] However, all comparisons presented in this report have taken sampling error into account using statistical weighting procedures (*4*) and exceed U.S. Census Bureau minimal standards for statistical significance. Third, identifying the main cause of disability might be difficult for persons with multiple chronic conditions (*2,3*). Finally, the definition of disability used, although consistent with previous reports (*2,3*), might not be directly comparable to disability definitions used for other purposes, (e.g., qualification for Supplemental Security Income benefits).

[§§] The U.S. Census Bureau uses quality control procedures throughout production, including overall survey design, question wording, review of interviewers and coders, and statistical review of reports, to minimize all sources of error.

TABLE 2. Main cause of disability among civilian noninstitutionalized U.S.adults aged ≥18 years with self-reported disabilities,* estimated affected population† and percentages, by sex — United States, 2005

	All persons			Men			Women		
Condition§	Estimated population†	%	(95% CI¶)	Estimated population	%	(95% CI)	Estimated population	%	(95% CI)
Arthritis or rheumatism	8,552	19.0	(18.0–20.0)	2,154	11.5	(10.3–12.7)	6,398	24.3	(22.9–25.7)
Back or spine problems	7,589	16.8	(15.9–17.7)	3,158	16.9	(15.5–18.3)	4,431	16.8	(15.6–18.0)
Heart trouble	2,988	6.6	(6.0–7.2)	1,570	8.4	(7.3–9.5)	1,418	5.4	(4.7–6.1)
Lung or respiratory problem	2,224	4.9	(4.4–5.4)	925	4.9	(4.1–5.7)	1,299	4.9	(4.2–5.6)
Mental or emotional problem	2,203	4.9	(4.4–5.4)	982	5.2	(4.3–6.1)	1,222	4.6	(3.9–5.3)
Diabetes	2,012	4.5	(4.0–5.0)	907	4.8	(4.0–5.6)	1,106	4.2	(3.5–4.9)
Deafness or hearing problem	1,908	4.2	(3.7–4.7)	1,272	6.8	(5.8–7.8)	635	2.4	(1.9–2.9)
Stiffness or deformity of limbs/ extremities	1,627	3.6	(3.1–4.1)	664	3.6	(2.9–4.3)	963	3.7	(3.1–4.3)
Blindness or vision problem	1,460	3.2	(2.8–3.6)	722	3.9	(3.2–4.6)	738	2.8	(2.3–3.3)
Stroke	1,076	2.4	(2.0–2.8)	574	3.1	(2.4–3.8)	503	1.9	(1.5–2.3)
Cancer	1,007	2.2	(1.8–2.6)	449	2.4	(1.8–3.0)	558	2.1	(1.6–2.6)
Broken bone/fracture	969	2.1	(1.7–2.5)	358	1.9	(1.4–2.4)	610	2.3	(1.8–2.8)
High blood pressure	857	1.9	(1.6–2.2)	299	1.6	(1.1–2.1)	558	2.1	(1.6–2.6)
Mental retardation	671	1.5	(1.2–1.8)	327	1.7	(1.2–2.2)	344	1.3	(0.9–1.7)
Senility/Dementia/Alzheimer's disease	546	1.2	(0.9–1.5)	195**	1.0	(0.6–1.4)	350	1.3	(0.9–1.7)
Head or spinal cord injury	516	1.1	(0.8–1.4)	287	1.5	(1.0–2.0)	229	0.9	(0.6–1.2)
Learning disability	492	1.1	(0.8–1.4)	298	1.6	(1.1–2.1)	195**	0.7	(0.4–1.0)
Kidney problems	411	0.9	(0.7–1.1)	221	1.2	(0.8–1.6)	190**	0.7	(0.4–1.0)
Stomach/Digestive problems	358	0.8	(0.6–1.0)	138**	0.7	(0.4–1.0)	220	0.8	(0.5–1.1)
Paralysis of any kind	257	0.6	(0.4–0.8)	128**	0.7	(0.4–1.0)	129**	0.5	(0.3–0.7)
Epilepsy	256	0.6	(0.4–0.8)	107**	0.6	(0.3–0.9)	149**	0.6	(0.4–0.8)
Hernia or rupture	229	0.5	(0.3–0.7)	109**	0.6	(0.3–0.9)	120**	0.5	(0.3–0.7)
Cerebral palsy	223	0.5	(0.3–0.7)	145**	0.8	(0.5–1.1)	78**	0.3	(0.1–0.5)
Missing limbs/extremities	209	0.5	(0.3–0.7)	159**	0.8	(0.4–1.2)	50**	0.2	(0.1–0.3)
Alcohol or drug problem	201	0.4	(0.2–0.6)	148**	0.8	(0.5–1.1)	53**	0.2	(0.1–0.3)
Tumor/Cyst/Growth	123**	0.3	(0.2–0.4)	37**	0.2	(0.0–0.4)	86**	0.3	(0.1–0.5)
Thyroid problems	110**	0.2	(0.1–0.3)	26**	0.1	(0.0–0.2)	84**	0.3	(0.1–0.5)
AIDS or AIDS-related condition	90**	0.2	(0.1–0.3)	45**	0.2	(0.0–0.4)	45**	0.2	(0.1–0.3)
Speech disorder	72**	0.2	(0.1–0.3)	28**	0.1	(0.0–0.2)	44**	0.2	(0.1–0.3)
Other	5,830	12.9	(12.1–13.7)	2,268	12.1	(10.8–13.4)	3,562	13.5	(12.4–14.6)
Total*	**45,070**	**100.0**		**18,701**	**100.0**		**26,369**	**100.0**	

SOURCE: U.S. Census Bureau, Survey of Income and Program Participation, 2004 Panel, Wave 5, June–September 2005.

* Based on responses from an estimated 45.1 million persons (94% of total) reporting a disability (i.e., difficulty with activities of daily living, instrumental activities of daily living, specific functional limitations [except vision, hearing, or speech], limitation in ability to do housework or work at a job or business) who also reported the main cause of their disability.

† Weighted numbers in 1,000s.

§ Participants reporting disability were asked: "Which condition or conditions cause these difficulties?" and shown this list of conditions. Those who chose more than one condition were asked to identify the main cause of their disability.

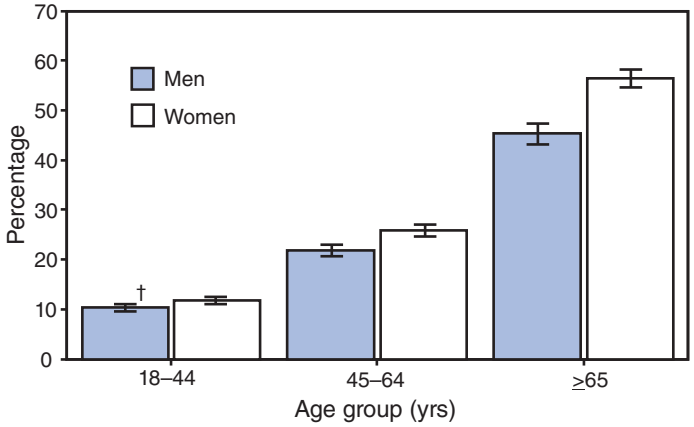
¶ Confidence interval.

** Weighted estimates less than 200,000 are based on a small sample size, are likely unreliable, and shoud be interpeted with caution (*4*).

By 2030, the number of U.S. adults aged ≥65 years will approximately double from current numbers to about 71 million. The implications of this growing number of older adults include unprecedented demands on public health and senior services and the nation's health-care system. For example, greater numbers of trained professionals will be needed to expand the reach of effective community-based programs to mitigate the effects of disability. Modifiable lifestyle characteristics (e.g., physical inactivity, obesity, and tobacco use) are major contributors to the most common causes of disability, and sometimes stem from a primary disabling condition (*7*). Widespread use of effective, population-based approaches to increase physical activity, reduce obesity and tobacco use, and provide health promotion education programs for persons with an existing disability¶¶ can reduce the incidence of various associated chronic conditions, prevent some disabilities, and reduce the severity of others. Regular physical activity is

¶¶ See the Physical Activity and Obesity chapters in *The Guide to Community Preventive Services*, available at http://www.thecommunityguide.org/index.html. *Living Well with a Disability* (http://www.livingwellweb.com/lwpage1.htm) is an example of an effective community-delivered, health promotion education program that helps adults with mobility disabilities develop tools and skills for healthy living.

FIGURE. Percentage of adults aged ≥18 years reporting disability, by sex* and age group — United States, 2005



SOURCE: U.S. Census Bureau, 2004 Survey of Income and Program Participation, Wave 5, June–September 2005.

* Disability prevalence is significantly higher among women than men for all age groups (z-test for women-men differences by age group: 18–44 years, p=0.006; 45–64 years, p<0.0001; ≥65 years, p<0.0001).

† 95% confidence interval.

effective in reducing morbidity resulting from heart disease and reducing or eliminating multiple associated risk factors (*8,9*). Physical activity also has been shown to prevent episodes of back problems (*10*), reduce pain, improve physical function, and delay disability among adults with arthritis (*8*). Healthcare providers should consider early referral to interventions that can prevent or reduce severity of disability for patients at high risk for disability (e.g., women and persons with chronic musculoskeletal conditions).

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Outbreak of Shiga Toxin–Producing *Escherichia coli* O157 Infection Associated with a Day Camp Petting Zoo — Pinellas County, Florida, May–June 2007

On June 7, 2007, the Pinellas County Health Department in central Florida was notified by a private physician regarding a positive laboratory result for Shiga toxin–producing *Escherichia coli* O157 (STEC O157) infection in a child aged 9 years. Initial interviews revealed the child had attended a week-long session at a day camp and had come into contact with animals in the camp's petting zoo. On June 8, an investigation was begun by the Pinellas County Health Department; the same day, the petting zoo was closed on the recommendation of the health department. This report summarizes the results of the investigation, which identified seven cases of STEC O157 infection: four laboratory-confirmed primary cases, two probable primary cases, and one laboratory-confirmed secondary case, all associated directly or indirectly with the petting zoo. Two children were hospitalized; all seven patients recovered. Petting zoo operators should adhere to guidelines for supervised handwashing and other prevention measures that will help minimize the risk in children for infection from animal contact.

The day camp conducted 13 week-long sessions from May 21 through August 17, with 45 children in grades 2–8 per session. A petting zoo on the premises included a 2,250 square-foot enclosed animal interaction area with 28 goats, one sheep, and one llama. Children brought their own lunches and snacks to the camp each day. Meals were eaten inside a building during scheduled hours and were not consumed in the petting zoo area. Investigators learned that campers and staff members fed the animals and had unlimited access to the animals through a single combined entry and exit. Animal contact was encouraged throughout the day, from 8 a.m. until the camp closed at 5 p.m. Staff members were responsible for maintaining and cleaning the animal area and bathing the animals.

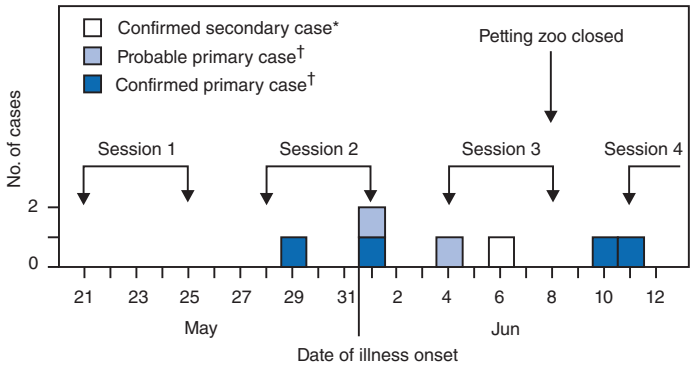
Initial investigation determined that handwashing facilities, signage, and hand hygiene compliance generally adhered to recommendations of the National Association of State Public Health Veterinarians (NASPHV) for contact with animals in public settings (*1*). Four handwashing facilities with liquid soap, running water operated by a foot pedal, and disposable towels were located outside the enclosed animal area near the entry/exit. Signs notified visitors that no food or drink was allowed in the animal area and that visitors should wash their hands upon leaving the area. In addition, signs on each handwashing facility instructed campers in handwashing. At least one staff member was required to be present near the zoo exit to instruct campers to wash their hands and direct them toward handwashing facilities. However, campers were not instructed in appropriate handwashing technique, and the staff member was stationed too far from the handwashing facilities to observe handwashing behavior.

A probable case of STEC O157 infection was defined as illness in a person with onset during May 25–June 12 of symptoms of diarrhea (i.e., three or more loose stools per 24-hour period) and any of three other symptoms (i.e., abdominal cramping, nausea, or vomiting) but no laboratory confirmation. A confirmed case was defined as a probable case with laboratory confirmation. A primary case was defined as confirmed or probable STEC O157 infection in a patient who attended a day camp session. A secondary case was defined as confirmed or probable STEC O157 infection in a patient who did not attend a day camp session but who was linked epidemiologically to a primary case.

A list of the 135 children aged 7–13 years who attended the first three sessions of the day camp (May 21–25, May 28–June 1, and June 4–8) and the 10 persons who staffed the camp sessions was obtained from the camp director. To identify any additional cases of diarrheal illness associated with attendance at the day camp, parents of 117 (87%) campers were contacted by telephone. Among those 117 campers, two persons with diarrhea, aged 8 and 10 years, met the case definition for probable STEC O157 infection. On June 11, the physician who reported the initial case reported a secondary confirmed case of STEC O157 infection in a boy aged 3 years who had not attended the day camp but became ill after a sibling who attended the camp developed symptoms. During June 14–15, a local hospital reported three additional primary laboratory-confirmed cases in children aged 7, 9, and 12 years who had attended or worked at the day camp. Two of the three children had been hospitalized, and one had been treated in the emergency department.

Symptoms reported in the seven cases were diarrhea with bloody stools (four patients), diarrhea without bloody stools (three), abdominal cramping (four), nausea (two), vomiting (two), and fever (two). Onset of illness among the seven ranged from May 29 to June 11 (Figure). One of the four campers with a confirmed case had attended the camp for the first session, one camper with a confirmed case and the two with probable cases had attended the second session, and one camper with a confirmed case had attended the third session. The other person with confirmed STEC O157 infection was a staff volunteer aged 12 years who had worked at the camp during all three sessions.

FIGURE. Number and type of cases of Shiga toxin–producing *Escherichia coli* O157 (STEC O157) infections (N = 7) associated with a day camp petting zoo, by date of illness onset and camp session — Pinellas County, Florida, May–June 2007



* Defined as confirmed STEC O157 infection in a patient who did not attend a day camp session but was epidemiologically linked to a primary patient.
† Defined as confirmed or probable STEC O157 infection in a patient who attended a day camp session.

All four campers with primary confirmed cases reported contact (e.g., petting, carrying, and feeding) with the petting zoo animals. Direct contact with the animals also was reported by a camper with probable infection; whether the second camper with probable infection had animal contact was unknown. Investigation revealed no common food, beverage, or recreational water exposures that might account for the STEC O157 infections.

Stool specimens from five of the seven children were collected during May 31–June 12. Specimens from the 30 zoo animals and four soil samples from the grounds of the petting zoo were collected by the Florida Department of Agriculture and Consumer Services on July 23. Four human clinical isolates of *E. coli* O157:NM (nonmotile), nine isolates from goats, and all four soil isolates had an identical pulsed-field gel electrophoresis (PFGE) pattern (EXHX01.0202) when tested at the Florida Public Health Laboratory. The PFGE pattern did not match any of the 30 other STEC O157 strains collected in Florida's *E. coli* database in 2007 and did not match any of the strains in the CDC PulseNet database. One isolate from a goat had a different PFGE pattern from the human clinical isolates.

On June 8, the first day of the Pinellas County Health Department investigation, the petting zoo was closed on the recommendation of the county health department. The zoo animals were placed under quarantine for *E. coli* O157:NM colonization. Subsequently, no additional cases of STEC O157 infection were reported among campers or staff members.

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Editorial Note: In a 1999 report, STEC O157:H7 was estimated to cause 73,000 illnesses in the United States annually (*2*). The disease spectrum ranges from nonbloody diarrhea to hemolytic uremic syndrome (*3*). STEC O157 infections generally are self-limiting; however, an estimated 2,000 patients are hospitalized, and 60 die from the infection each year (*2*). Asymptomatically colonized domestic ruminants are the primary animal reservoir hosts. The organisms usually are found in an animal's gastrointestinal tract but also can be isolated from the hide and oral cavity (*4*). STEC O157 is transmitted via multiple routes, including foodborne and laboratory exposure, person-to-person, or animal contact. Laboratory and epidemiologic evidence in this outbreak suggest the STEC O157 infections were attributable either to direct contact with animals and their petting zoo environment or indirect contact, possibly via contaminated clothing, which has been identified as a risk factor for *E. coli* O157 infection in previous petting zoo outbreaks (*1*). Person-to-person transmission at the day camp was unlikely because of the small number of cases spread over the three 1-week camp sessions. Possible reasons for the small number of cases include the immediate closure of the petting zoo and the handwashing requirements in effect.

The outbreak in this report is unlike previous outbreaks in petting zoos because transmission of STEC O157 occurred even though prevention measures were being used to reduce the risk for disease (*5*). Several studies have found handwashing with soap and water decreases the risk for *E. coli* O157 infection (*5*). In addition, the campers were school aged, able to read the handwashing signs and follow directions, and probably lacked some hand-to-mouth behaviors that place younger children at risk for infection (*1*). However, this outbreak also illustrates that even when prevention measures are generally followed, outbreaks still can occur when animals are colonized with STEC O157.

During 1991–2005, CDC received reports of 32 outbreaks of *E. coli* O157 that were associated with animals in public settings (*6*). Among these, venues in certain outbreaks (*5,7,8*) were not in compliance with NASPHV guidelines (*1*), with reported inadequate handwashing facilities, permitted consumption of food or drink in animal areas, unsupervised handwashing, and no signage. During 2006–2008, five *E. coli* O157 outbreaks related to animal settings were reported (CDC, unpublished data, 2009).

NASPHV guidelines include recommendations on handwashing, venue design, animal care and management, risk communication, and oversight needed for animals in public settings. Day camp leaders were not completely knowledgeable of NASPHV guidelines before this outbreak but demonstrated familiarity with certain recommendations for reducing human illness in animal settings. NASPHV recommendations should become well known to petting zoo operators and the agencies that provide regulatory oversight over these animal venues.

Acknowledgments

This report is based, in part, on contributions by C Minor, Florida Dept of Health; T Holt, DVM, W Jeter, DVM, J Crews, DVM, and J Carter, Florida Dept of Agriculture and Consumer Svcs.

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High School Students Who Tried to Quit Smoking Cigarettes — United States, 2007

In the United States, cigarette use is the leading cause of preventable death, and most adult smokers started before the age of 18 years (*1*). Nicotine dependence maintains tobacco use and makes quitting difficult. Despite their relatively short smoking histories, many adolescents who smoke are nicotine dependent, and such dependence can lead to daily smoking (*2*). To examine the extent to which high school students had tried to quit smoking cigarettes, CDC analyzed data from

the 2007 Youth Risk Behavior Survey (YRBS), a nationally representative survey of students in grades 9–12 in the United States. This report describes the results of that analysis, which found that 60.9% of students who ever smoked cigarettes daily tried to quit smoking cigarettes, and 12.2% were successful. These findings indicate that comprehensive tobacco control programs need to continue to implement community-based interventions that prevent initiation and increase cessation (*3*) and increase the use of evidence-based cessation strategies for youths (*4*).

YRBS, a component of CDC's Youth Risk Behavior Surveillance System, measures the prevalence of health risk behaviors among high school students through biennial national, state, and local surveys. The national YRBS uses a three-stage cluster sample design to obtain cross-sectional data representative of public- and private-school students in grades 9–12 in the 50 states and the District of Columbia (*5*). Students complete school-based, anonymous, self-administered questionnaires that examine the prevalence of health risk behaviors, including tobacco use. In 2007, the school response rate was 81%, the student response rate was 84%, the overall response rate was 68%, and 14,041 students completed a usable questionnaire (*5*). The following two behaviors were examined: 1) ever smoked cigarettes daily and tried to quit smoking cigarettes,* and 2) ever smoked cigarettes daily, tried to quit smoking cigarettes, and were successful.†

Race/ethnicity data are presented only for non-Hispanic black, non-Hispanic white, and Hispanic students (who might be of any race); the numbers of students from other racial/ethnic groups were too small for meaningful analysis. Data were weighted to provide national estimates. Statistical software that takes into account the complex sampling design was used to calculate prevalence estimates and 95% confidence intervals (CIs) and to conduct t-tests for subgroup comparisons ($p<0.05$).

Overall, 60.9% of students who ever smoked cigarettes daily tried to quit smoking cigarettes (Table). The prevalence of this behavior did not vary by grade but was higher among female students (67.3%) than male students (55.5%) ($t = 11.8$, $p = 0.001$), and higher among black students (68.1%) than Hispanic students (54.1%) ($t = 2.2$, $p = 0.03$). No other differences were found by race/ethnicity.

Overall, 12.2% of students who ever smoked cigarettes daily tried to quit smoking cigarettes and were successful. The prevalence of success in quitting did not vary by sex or race/ethnicity. More students in 9th grade (22.9%) than in 10th grade (10.7%, $t = 2.3$, $p = 0.02$), 11th grade (8.8%, $t = 2.4$, $p = 0.02$) and 12th grade (10.0%, $t = 2.3$, $p = 0.03$) tried to quit smoking cigarettes and were successful.

TABLE. Percentage of high school students who tried to quit smoking cigarettes,* and those who were successful,† by sex, race/ethnicity, and grade — United States, Youth Risk Behavior Survey, 2007

Characteristic	Ever smoked cigarettes daily and tried to quit smoking cigarettes		Ever smoked cigarettes daily, tried to quit smoking cigarettes, and were successful	
	%	(95% CI§)	%	(95% CI)
Sex				
Female	67.3	(62.8–71.6)	11.5	(8.1–16.1)
Male	55.5	(51.0–59.9)	13.0	(8.7–18.8)
Race/Ethnicity				
White, non-Hispanic	62.5	(59.2–65.8)	12.2	(9.1–16.1)
Black, non-Hispanic	68.1	(57.9–76.8)	8.7	(5.4–14.0)
Hispanic	54.1	(46.1–61.8)	17.7	(9.0–31.8)
Grade				
9	57.2	(48.9–65.2)	22.9	(14.7–33.9)
10	64.6	(56.4–72.1)	10.7	(6.5–17.1)
11	61.1	(55.6–66.3)	8.8	(4.8–15.5)
12	60.5	(54.5–66.3)	10.0	(6.1–16.1)
Total	**60.9**	**(58.0–63.8)**	**12.2**	**(9.7–15.2)**

* Ever smoked at least one cigarette every day for 30 days, smoked cigarettes during the 12 months before the survey, and tried to quit smoking cigarettes during the 12 months before the survey.
† Ever smoked at least one cigarette every day for 30 days, smoked cigarettes during the 12 months before the survey, tried to quit smoking cigarettes during the 12 months before the survey, and did not smoke on any of the 30 days before the survey.
§ Confidence interval.

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Editorial Note: The YRBS data presented in this report indicate that the majority of high school students who ever smoked cigarettes daily had tried to quit smoking, but few were successful. Youths experiment with or begin smoking for a variety of reasons, including societal and parental norms, tobacco product advertising, depictions of smoking in movies and other popular media, and peer influences (*4*). Studies also indicate that nicotine dependence might be established rapidly among some adolescents (*4*). The U.S. Public Health Service's 2008 update to its clinical practice guideline on treating tobacco use and dependence recommends that adolescent smokers be provided with counseling interventions to aid them in quitting smoking (*4*). However, although the use of counseling approximately doubled quit rates in the seven studies on youth cessation reviewed by the guideline panel, the panel noted that absolute

* Ever smoked at least one cigarette every day for 30 days, smoked cigarettes during the 12 months before the survey, and tried to quit smoking cigarettes during the 12 months before the survey.
† Ever smoked at least one cigarette every day for 30 days, smoked cigarettes during the 12 months before the survey, tried to quit smoking cigarettes during the 12 months before the survey, and did not smoke on any of the 30 days before the survey.

abstinence rates of those who received counseling remained low (i.e., an 11.6% quit rate at 6 months), attesting to the need for improved counseling interventions for adolescents. Tobacco control policies and community-based interventions that increase cessation among adults also might encourage youths to quit smoking. These interventions, in addition to those that prevent initiation, need to be fully implemented to further lower the prevalence of smoking among both youths and adults (*3*).

The level of dependence and intensity of withdrawal experiences are related to smoking patterns (e.g., the number of cigarettes smoked per day), and adolescents who successfully quit smoking report less intense withdrawal experiences (*2*). In this analysis, the higher quitting success rate among 9th-grade students compared with students in other grades might be attributable to lower levels of dependency from smoking fewer cigarettes per day or having smoked for shorter periods. These data suggest the importance of targeting young smokers with cessation counseling while their likelihood of success in quitting is greatest; the reasons for higher success rates among this subgroup should be examined to identify potential intervention strategies.

Other research has shown that youths often do not use evidence-based methods for their quit attempts, which might be one reason why many youths are unsuccessful (*6*). Although current guidelines for effective treatment of adolescent smoking recommend that health-care providers ask all youths about their smoking status, strongly encourage abstinence from tobacco use among nonusers, and provide counseling interventions for cessation among those who smoke (*4*), more research is needed to determine additional best practices for helping youths quit smoking. In the interim, the CDC report *Youth Tobacco Cessation: A Guide for Making Informed Decisions*[§] gives practical guidelines for programs to determine whether they should implement a youth cessation intervention as part of a comprehensive tobacco control program. This report also discusses the importance of conducting a needs assessment for the population with which the program might intervene and the importance of having an evaluation plan for the intervention. The report cautions against the use of some interventions that have not been shown to be effective with youths, such as fear-based tactics and pharmacotherapy (e.g., nicotine patch and gum). In addition, a recent review of tobacco cessation interventions for young persons concluded that psychosocial interventions and interventions based on the transtheoretical model (stage of change) show promise (including the N-O-T (Not on Tobacco) program) (*7*). N-O-T is the American Lung Association's school-based voluntary program designed to help high school students stop smoking, reduce the number of cigarettes smoked, increase healthy lifestyle behaviors, and improve life management skills.[¶]

The findings in this report are subject to at least three limitations. First, these data apply only to youths who attend school and, therefore, are not representative of all persons in this age group. Nationwide, in 2005, of persons aged 16 and 17 years, approximately 3% were not enrolled in a high school program and had not completed high school (*8*). Second, the extent of underreporting or overreporting of cigarette use cannot be determined, although the survey questions demonstrate good test-retest reliability (*9*) and high school students do not tend to underreport cigarette use (*10*). Third, the definition of successful quitting was not having smoked during the 30 days before the survey. Students were not asked directly about their success in quitting, and calculating the percentage of high school students who quit smoking before the 12 months preceding the survey was not possible. Some youths who reported not smoking during the preceding 30 days might relapse to cigarette smoking in the future.

The Institute of Medicine and CDC have concluded that state-based, comprehensive tobacco control programs that support cessation need to be implemented at CDC-recommended funding levels to lower tobacco use among youths and adults (*3*). Furthermore, current best practices recommend that, to prevent youths from starting to smoke, states establish and sustain comprehensive tobacco control programs that increase excise taxes, promote smoke-free air policies, and conduct media campaigns in conjunction with other community-based interventions, such as tobacco-use prevention programs in schools that include school policy and education components (*3*).

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[§] Available at http://www.cdc.gov/tobacco/quit_smoking/cessation/youth_tobacco_cessation/index.htm.

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Update: Infections With a Swine-Origin Influenza A (H1N1) Virus — United States and Other Countries, April 28, 2009

On April 28, this report was posted as an MMWR *Dispatch on the* MMWR *website* (http://www.cdc.gov/mmwr).

Since April 21, 2009, CDC has reported cases of respiratory infection with a swine-origin influenza A (H1N1) virus (S-OIV) transmitted through human-to-human contact (*1,2*). This report updates cases identified in U.S. states and highlights certain control measures taken by CDC. As of April 28, the total number of confirmed cases of S-OIV infection in the United States had increased to 64, with cases in California (10 cases), Kansas (two), New York (45), Ohio (one), and Texas (six). CDC and state and local health departments are investigating all reported U.S. cases to ascertain the clinical features and epidemiologic characteristics. On April 27, CDC distributed an updated case definition for infection with S-OIV (Box).

Of the 47 patients reported to CDC with known ages, the median age was 16 years (range: 3–81 years), and 38 (81%) were aged <18 years; 51% of cases were in males. Of the 25 cases with known dates of illness onset, onset ranged from March 28 to April 25 (Figure). To date, no deaths have been reported among U.S. cases, but five patients are known to have been hospitalized. Of 14 patients with known travel histories, three had traveled to Mexico; 40 of 47 patients (85%) have not been linked to travel or to another confirmed case. Information is being compiled regarding vaccination status of infected patients, but is not yet available. According to the World Health Organization (WHO), as of April 27, a total of 26 confirmed cases of S-OIV infection had been reported by Mexican authorities. Canada has reported six cases and Spain has reported one case.*

BOX. CDC interim guidance on case definitions for investigations of human swine-origin influenza A (H1N1) cases

The following case definitions are for the purposes of investigations of suspected, probable, and confirmed cases of swine-origin influenza A (H1N1) infection.

Case Definitions for Infection with Swine-Origin Influenza A (H1N1) Virus

A *confirmed case* of swine-origin influenza A (H1N1) virus infection is defined as an acute febrile respiratory illness in a person and laboratory-confirmed swine-origin influenza A (H1N1) virus infection at CDC by either of the following tests:

1) real-time reverse transcrition–polymerase chain reaction (rRT-PCR), or
2) viral culture.

A *probable case* of swine-origin influenza A (H1N1) virus infection is defined as acute febrile respiratory illness in a person who is

- positive for influenza A, but negative for H1 and H3 by influenza rRT-PCR.

A *suspected case* of swine-origin influenza A (H1N1) virus infection is defined as acute febrile respiratory illness in a person

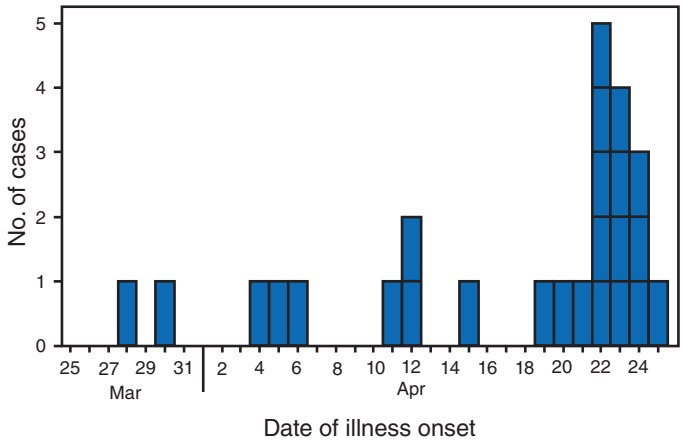
- with onset within 7 days of close contact with a person who has a confirmed case of swine-origin influenza A (H1N1) virus infection, or
- with onset within 7 days of travel to a community, either within the United States or internationally, which has one or more confirmed swine-origin influenza A (H1N1) cases, or
- who resides in a community in which one or more confirmed swine-origin influenza cases have occurred.

Emergency Use Authorizations

If an emerging public health threat is identified for which no licensed or approved product exists, the Project BioShield Act of 2004 authorizes the Food and Drug Administration (FDA) commissioner to issue an Emergency Use Authorization (EUA) so that promising countermeasures can be disseminated quickly for the protection and safety of the U.S. population (*3*).

* Additional information is available at http://www.who.int/en.

FIGURE. Confirmed human cases of swine-origin influenza A (H1N1) infection with known dates of illness onset* — United States, April 27, 2009



* Onset dates available for 25 of 64 cases.

In response to the current public health emergency involving swine-origin influenza, FDA issued four EUAs on April 27 to allow emergency use of

- oseltamivir (Tamiflu) and zanamivir (Relenza) for the treatment and prophylaxis of influenza (two EUAs),
- disposable N95 respirators for use by the general public, and
- the rRT-PCR Swine Flu Panel for diagnosis.

Oseltamivir is FDA-approved for treatment and prevention of influenza in adults and children aged ≥1 year. Zanamivir is FDA-approved for treatment of influenza in adults and children aged ≥7 years who have been symptomatic for <2 days, and for prevention of influenza in adults and children aged ≥5 years. The EUA allows the use of oseltamivir for treatment of influenza in children aged <1 year and prevention of influenza in children aged 3 months–1 year. Additionally, traditional prescribing and dispensing requirements might not be met. Under the scope and conditions of current EUAs, mass dispensing of both antiviral medications will be allowed per state and/or local public health authority.

FDA has authorized use of certain N95 respirators to help reduce wearer exposure to pathogenic biological airborne particulates during a public health emergency involving S-OIV. On April 27, CDC published guidelines for the use of N95 respirators. For example, respirators should be considered for use by persons for whom close contact with an infectious person is unavoidable. This can include selected individuals who must care for a sick person (e.g., family member with a respiratory infection) at home. Additional information is available at http://www.cdc.gov/swineflu/masks.htm.

Currently, no FDA-cleared tests specifically for the S-OIV strain exist in the United States or elsewhere. For this purpose and to meet the significant increase in demand for influenza testing throughout the country, CDC has developed the rRT-PCR Swine Flu Panel to expand and maintain the operational capabilities of public health or other qualified laboratories by providing a detection tool for the presumptive presence of S-OIV.

Control Measures at Ports of Entry and Travel Warning for Mexico

CDC, in collaboration with industry and federal partners, is continuing to conduct routine illness detection at ports of entry with heightened awareness for travelers who might be infected with S-OIV. During April 19–27, 15 cases of illness in travelers entering the United States from Mexico that were clinically consistent with S-OIV infection were detected. Of these 15 cases, two were laboratory confirmed as swine-origin influenza A (H1N1). Nine travelers remain in isolation pending completion of evaluation, and four travelers were released to complete travel after influenza virus infection was ruled out.

WHO has declared a Public Health Emergency of International Concern. As part of its responsibilities under the International Health Regulations, CDC is prepared to implement additional screening measures for international flights, if deemed necessary, to prevent exportation of S-OIV. In addition, CDC in collaboration with the U.S. Department of Homeland Security, is distributing travelers health alert notices to all persons traveling to countries with confirmed cases of S-OIV infection.

CDC has recommended that U.S. travelers avoid nonessential travel to Mexico (http://wwwn.cdc.gov/travel/contentswineflumexico.aspx). However, CDC might revise its travel guidance as the outbreak in Mexico evolves and is characterized more completely. Travelers who cannot delay travel to Mexico should visit http://www.cdc.gov/travel and follow the posted recommendations to reduce their risk for infection.

Nonpharmaceutical Community Mitigation

CDC has issued interim guidance for nonpharmaceutical community mitigation efforts in response to human infections with S-OIV (http://www.cdc.gov/swineflu/mitigation.htm). Current recommendations for isolation of patients with cases of S-OIV, household contacts, school dismissal, and other social distancing interventions also are available at http://www.cdc.gov/swineflu/mitigation.htm and will be updated as the situation evolves.

Reported by: *Strategic Science and Program Unit, Coordinating Center for Infectious Diseases; Div of Global Migration and Quarantine, National Center for Preparedness, Detection, and Control of Infectious Diseases; Influenza Div, National Center for Immunization and Respiratory Diseases, CDC Influenza Emergency Response Team, CDC.*

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Update: Drug Susceptibility of Swine-Origin Influenza A (H1N1) Viruses, April 2009

On April 28, this report was posted as an MMWR *Dispatch on the* MMWR *website* (http://www.cdc.gov/mmwr).

Since April 21, 2009, CDC has reported cases of respiratory infection with a swine-origin influenza A (H1N1) virus (S-OIV) that is being spread via human-to-human transmission (*1*). As of April 28, the total number of confirmed S-OIV cases in the United States was 64; these cases occurred in California (10 cases), Kansas (two), New York (45), Ohio (one), and Texas (six). The viruses contain a unique combination of gene segments that had not been reported previously among swine or human influenza viruses in the United States or elsewhere (*1*). Viruses from 13 (20%) of 64 patients have been tested for resistance to antiviral medications. To date, all tested viruses are resistant to amantadine and rimantadine but are susceptible to oseltamivir and zanamivir. The purpose of this report is to provide detailed information on the drug susceptibility of the newly detected S-OIVs, which will aid in making recommendations for treatment and prophylaxis for swine influenza A (H1N1) infection. These data also will contribute to antiviral-resistance monitoring and diagnostic test development.

Adamantane susceptibility was assessed by conventional sequencing or pyrosequencing assay (*2*) with modifications (*3*), using viral RNA extracted from original clinical specimens and/or virus isolates. Susceptibility of virus isolates to the neuraminidase inhibitors (NAIs), including oseltamivir and zanamivir and two investigative NAIs (peramivir and A-315675), was assessed by chemiluminescent neuraminidase inhibition assay using the NAStar Kit (Applied Biosystems, Foster City, California) (*4*). The generated IC_{50} values (i.e., drug concentration needed to inhibit 50% of neuraminidase enzyme activity) of test viruses were compared with those of sensitive seasonal control viruses. In addition, because H274Y is the most commonly detected mutation in oseltamivir-resistant viruses (*4,5*), a set of new primers for pyrosequencing of the N1 gene was designed to monitor a residue of the neuraminidase protein at 274 (275 in N1 numbering) in viruses of swine origin (*6,7*) (Table 1).

All 13 specimens tested contained the S31N mutation in the M2 protein, which confers cross-resistance to the adamantane class of anti-influenza drugs (Table 2). In addition, a partial sequence deduced from the M2 pyrograms revealed changes characteristic for the M gene of S-OIVs. Existing primers used for the detection of adamantane resistance in seasonal viruses do not work with all tested S-OIVs. Optimized primers have been designed and are currently being validated. All 13 tested virus isolates exhibited IC_{50} values characteristic of oseltamivir- and zanamivir-sensitive influenza viruses. A/Georgia/17/2006 (H1N1), which is a seasonal virus, was used as a control (Table 2). The IC_{50} for oseltamivir ranged from 0.28 nM to 1.41 nM, whereas those for zanamivir ranged from 0.30 nM to 1.34 nM. All tested viruses also were susceptible to peramivir and A-315675. A subset of viruses (n = 2) tested in the fluorescent neuraminidase inhibition assay showed IC_{50} for oseltamivir and zanamivir ranging from 1.50 nM to 2.40 nM, similar to the sensitive control. Among the 36 specimens tested to date with pyrosequencing for the H274Y mutation in N1, none had mutations at residue 274.

Reported by: *L Gubareva, PhD, M Okomo-Adhiambo, PhD, V Deyde, PhD, AM Fry, MD, TG Sheu, R Garten, PhD, C Smith, J Barnes, A Myrick, M Hillman, M Shaw, PhD, C Bridges, MD, A Klimov, PhD, N Cox, PhD, Influenza Div, National Center for Infectious and Respiratory Diseases, Coordinating Center for Infectious Diseases, CDC.*

Editorial Note: In the United States, two classes of antiviral drugs are approved by the Food and Drug Administration (FDA) for use in treating or preventing influenza virus infections: M2 ion channel blockers and NAIs. The M2 blockers (adamantanes) are effective against influenza A viruses, but not influenza B viruses, which lack the M2 protein (*8*). However, use of the M2 blockers has been associated with the rapid emergence of drug-resistance mutations of the M2 protein among human influenza A viruses of H3N2 subtype, and in H1N1 subtype viruses circulating in certain geographic areas (*2,3,9*). Adamantane resistance also has been detected in A (H5N1) viruses in Southeast Asia (*10,11*). In addition, adamantane resistance has been reported for swine viruses in Eurasia (*12–14*) but not in North America. This rapid increase in resistance has reduced the usefulness of this class of drugs for the management of influenza A infections, and since 2005, CDC has not recommended their use (*15*), although the emergence of resistance to oseltamivir in seasonal influenza viruses circulating during the 2008–09 season led to changes in CDC recommendations.*

* Available at http://www.cdc.gov/features/dsfluview2009.

TABLE 1. Sequences of swine-origin influenza A (H1N1) primers for pyrosequencing targeted NA codon 274

Primer	Primer sequence (5' to 3')
Forward primer (Uni-sw-N1-B-F780)	GGG GAA GAT TGT YAA ATC AGT YGA
Reverse primer (Uni-sw-N1-B-R1273-biot)	CWA CCC AGA ARC AAG GYC TTA TG
Sequencing primer (Uni-sw-N1-B-F804seq)	GYT GAA TGC MCC TAA TT

TABLE 2. Drug susceptibility of human influenza A (H1N1) viruses of swine origin

CDC identification no.	Strain designation	Date specimen collected	Adamantane susceptibility	M2 mutation	NAI* susceptibility (IC50, nM)†			
					Oseltamivir	Zanamivir	Peramivir	A-315675
2009712047	A/California/04/2009	04/01/09	Resistant	S31N	1.37	1.34	0.13	0.66
2009712097	A/California/05/2009	03/30/09	Resistant	S31N	1.41	1.30	0.15	1.78
2009712110	A/California/06/2009	04/16/09	Resistant	S31N	0.28	0.49	0.08	0.11
2009712111	A/California/07/2009	04/09/09	Resistant	S31N	0.56	0.31	0.10	0.18
2009712113	A/California/08/2009	04/09/09	Resistant	S31N	0.73	0.93	0.09	0.19
2009712175	A/Texas/04/2009	04/14/09	Resistant	S31N	0.64	0.62	—	—
2009712177	A/Texas/05/2009	04/15/09	Resistant	S31N	0.54	0.44	0.10	0.35
2009712190	A/Mexico/4482/2009	04/14/09	Resistant	S31N	0.39	0.51	0.06	0.63
2009712191	A/Mexico/4486/2009	04/14/09	Resistant	S31N	0.42	0.50	0.12	0.39
2009712192	A/Mexico/4108/2009	04/03/09	Resistant	S31N	0.39	0.56	0.12	0.50
2009712389	A/Mexico/4516/2009	04/03/09	Resistant	S31N	1.01	0.86	0.26	1.94
2009712390	A/Mexico/4603/2009	04/14/09	Resistant	S31N	0.34	0.35	0.07	1.03
2009712391	A/Mexico/4604/2009	04/14/09	Resistant	S31N	0.44	0.30	0.07	0.68
Control (seasonal)	A/Georgia/17/2006	—	Sensitive	S31	0.61	0.56	0.16	0.67
Control (seasonal)	A/Georgia/20/2006§	—	Sensitive	S31	200.73	0.80	13.87	1.59

* Neuraminidase inhibitor.
† Drug concentration needed to inhibit 50% of neuraminidase enzyme activity (determined by chemiluminescent NAI assay).
§ Oseltamivir resistant, zanamivir sensitive.

Two NAIs, oseltamivir (Tamiflu [Hoffman-La Roche, Ltd, Basel, Switzerland]) and zanamivir (Relenza [GlaxoSmithKline, Stevenage, United Kingdom]) are FDA-approved drugs for use against type A and type B influenza infections (*16*). The two drugs differ structurally, resulting in oseltamivir being orally bioavailable, whereas zanamivir is not and must be inhaled (*17,18*). A third NAI, peramivir (BioCryst, Inc., Birmingham, Alabama), is formulated for intravenous administration and is undergoing clinical trials, and a fourth, called A-315675 (Abbott Laboratories, Abbott Park, Illinois) has only been investigated in preclinical studies.

Compared with M2 blockers, NAIs previously exhibited lower frequency of antiviral resistance during therapeutic use (*16,19*). However, during the 2007–08 influenza season, emergence and transmission of oseltamivir-resistant A (H1N1) viruses, with a H274Y mutation in the neuraminidase protein, was simultaneously detected in several countries in the Northern Hemisphere (*4,20–22*) and spread globally (*7,9,23*). As of April 2009, similar trends have been observed in the 2008–09 influenza season, with many countries reporting up to 100% oseltamivir resistance in A (H1N1) viruses. As a result, the World Health Organization Global Influenza Surveillance Network (GISN) and CDC have emphasized the urgent need for close monitoring of resistance to NAIs. Current interim antiviral recommendations for treatment and chemoprophylaxis of swine influenza A (H1N1) viruses include the use of either zanamivir or oseltamivir and are available at http://www.cdc.gov/swineflu/recommendations.htm.

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Update: Swine Influenza A (H1N1) Infections — California and Texas, April 2009

On April 24, this report was posted as an MMWR *Dispatch on the* MMWR *website* (http://www.cdc.gov/mmwr).

On April 21, 2009, CDC reported that two recent cases of febrile respiratory illness in children in southern California had been caused by infection with genetically similar swine influenza A (H1N1) viruses. The viruses contained a unique combination of gene segments that had not been reported previously among swine or human influenza viruses in the United States or elsewhere (*1*). Neither child had known contact with pigs, resulting in concern that human-to-human transmission might have occurred. The seasonal influenza vaccine H1N1 strain is thought to be unlikely to provide protection. This report updates the status of the ongoing investigation and provides preliminary details about six additional persons infected by the same strain of swine influenza A (H1N1) virus identified in the previous cases, as of April 24. The six additional cases were reported in San Diego County, California (three cases), Imperial County, California (one case), and Guadalupe County, Texas (two cases). CDC, the California Department of Public Health, and the Texas Department of Health and Human Services are conducting case investigations, monitoring for illness in contacts of the eight patients, and enhancing surveillance to determine the extent of spread of the virus. CDC continues to recommend that any influenza A viruses that cannot be subtyped be sent promptly for testing to CDC. In addition, swine influenza A (H1N1) viruses of the same strain as those in the U.S. patients have been confirmed by CDC among specimens from patients in Mexico. Clinicians should consider swine influenza as well as seasonal influenza virus infections in the differential diagnosis for patients who have febrile respiratory illness and who 1) live in San Diego and Imperial counties, California, or Guadalupe County, Texas, or traveled to these counties or 2) who traveled recently to Mexico or were in contact with persons who had febrile respiratory illness and were in one of the three U.S. counties or Mexico during the 7 days preceding their illness onset.

Case Reports

San Diego County, California. On April 9, an adolescent girl aged 16 years and her father aged 54 years went to a San Diego County clinic with acute respiratory illness. The youth had onset of illness on April 5. Her symptoms included fever, cough, headache, and rhinorrhea. The father had onset of illness on April 6 with symptoms that included fever, cough, and rhinorrhea. Both had self-limited illnesses and have recovered. The father had received seasonal influenza vaccine in October 2008; the daughter was unvaccinated. Respiratory specimens were obtained from both, tested in the San Diego County Health Department Laboratory, and found to be positive for influenza A using reverse transcription–polymerase chain reaction (RT-PCR), but could not be further subtyped. Two household contacts of the patients have reported recent mild acute respiratory illnesses; specimens have been collected from these household members for testing. One additional case, in a child residing in San Diego County, was identified on April 24; epidemiologic details regarding this case are pending.

Imperial County, California. A woman aged 41 years with an autoimmune illness who resided in Imperial County developed fever, headache, sore throat, diarrhea, vomiting, and myalgias on April 12. She was hospitalized on April 15. She

recovered and was discharged on April 22. A respiratory specimen obtained April 16 was found to be influenza A positive by RT-PCR at the San Diego Country Health Department Laboratory, but could not be further subtyped. The woman had not been vaccinated against seasonal influenza viruses during the 2008–09 season. Three household contacts of the woman reported no recent respiratory illness.

Guadalupe County, Texas. Two adolescent boys aged 16 years who resided in Guadalupe County near San Antonio were tested for influenza and found to be positive for influenza A on April 15. The youths had become ill with acute respiratory symptoms on April 10 and April 14, respectively, and both had gone to an outpatient clinic for evaluation on April 15. Identification and tracking of the youths' contacts is under way.

Five of the new cases were identified through diagnostic specimens collected by the health-care facility in which the patients were examined, based on clinical suspicion of influenza; information regarding the sixth case is pending. The positive specimens were sent to public health laboratories for further evaluation as part of routine influenza surveillance in the three counties.

Outbreaks in Mexico

Mexican public health authorities have reported increased levels of respiratory disease, including reports of severe pneumonia cases and deaths, in recent weeks. Most reported disease and outbreaks are reported from central Mexico, but outbreaks and severe respiratory disease cases also have been reported from states along the U.S.-Mexico border. Testing of specimens collected from persons with respiratory disease in Mexico by the CDC laboratory has identified the same strain of swine influenza A (H1N1) as identified in the U.S. cases. However, no clear data are available to assess the link between the increased disease reports in Mexico and the confirmation of swine influenza in a small number of specimens. CDC is assisting public health authorities in Mexico in testing additional specimens and providing epidemiologic support. None of the U.S. patients traveled to Mexico within 7 days of the onset of their illness.

Epidemiologic and Laboratory Investigations

As of April 24, epidemiologic links identified among the new cases included 1) the household of the father and daughter in San Diego County, and 2) the school attended by the two youths in Guadalupe County. As of April 24, no epidemiologic link between the Texas cases and the California cases had been identified, nor between the three new California cases and the two cases previously reported. No recent exposure to pigs has been identified for any of the seven patients. Close contacts of all patients are being investigated to determine whether person-to-person spread has occurred.

Enhanced surveillance for additional cases is ongoing in California and in Texas. Clinicians have been advised to test patients who visit a clinic or hospital with febrile respiratory illness for influenza. Positive samples should be sent to public health laboratories for further characterization. Seasonal influenza activity continues to decline in the United States, including in Texas and California, but remains a cause of influenza-like illness in both areas.

Viruses from six of the eight patients have been tested for resistance to antiviral medications. All six have been found resistant to amantadine and rimantidine but sensitive to zanamivir and oseltamivir.

Reported by: *San Diego County Health and Human Svcs; Imperial County Public Health Dept; California Dept of Public Health. Dallas County Health and Human Svcs; Texas Dept of State Health Svcs. Naval Health Research Center; Navy Medical Center, San Diego, California. Animal and Plant Health Inspection Svc, US Dept of Agriculture. Div of Global Migration and Quarantine, National Center for Preparedness, Detection, and Control of Infectious Diseases; National Center for Zoonotic, Vector-Borne, and Enteric Diseases; Influenza Div, National Center for Infectious and Respiratory Diseases, CDC.*

Editorial Note: In the United States, novel influenza A virus infections in humans, including swine influenza A (H1N1) infections, have been nationally notifiable conditions since 2007. Recent pandemic influenza preparedness activities have greatly increased the capacity of public health laboratories in the United States to perform RT-PCR for influenza and to subtype influenza A viruses they receive from their routine surveillance, enhancing the ability of U.S. laboratories to identify novel influenza A virus infections. Before the cases described in this ongoing investigation, recent cases of swine influenza in humans reported to CDC occurred in persons who either had exposure to pigs or to a family member with exposure to pigs. Transmission of swine influenza viruses between persons with no pig exposure has been described previously, but that transmission has been limited (*2,3*). The lack of a known history of pig exposure for any of the patients in the current cases indicates that they acquired infection through contact with other infected persons.

The spectrum of illness in the current cases is not yet fully defined. In the eight cases identified to date, six patients had self-limited illnesses and were treated as outpatients. One patient was hospitalized. Previous reports of swine influenza, although in strains different from the one identified in the current cases, mostly included mild upper respiratory illness; but severe lower respiratory illness and death also have been reported (*2,3*).

The extent of spread of the strain of swine influenza virus in this investigation is not known. Ongoing investigations by California and Texas authorities of the two previously reported patients, a boy aged 10 years and a girl aged 9 years, include identification of persons in close contact with the children during the period when they were likely infectious (defined as from 1 day before symptom onset to 7 days after symptom onset). These contacts have included household members, extended family members, clinic staff members who cared for the children, and persons in close contact with the boy during his travel to Texas on April 3. Respiratory specimens are being collected from contacts found to have ongoing illness. In addition, enhanced surveillance for possible cases is under way in clinics and hospitals in the areas where the patients reside. Similar investigations and enhanced surveillance are now under way in the additional six cases.

Clinicians should consider swine influenza infection in the differential diagnosis of patients with febrile respiratory illness and who 1) live in San Diego and Imperial counties, California, or Guadalupe County, Texas, or traveled to these counties or 2) who traveled recently to Mexico or were in contact with persons who had febrile respiratory illness and were in one of the three U.S. counties or Mexico during the 7 days preceding their illness onset. Any unusual clusters of febrile respiratory illness elsewhere in the United States also should be investigated.

Patients who meet these criteria should be tested for influenza, and specimens positive for influenza should be sent to public health laboratories for further characterization. Clinicians who suspect swine influenza virus infections in humans should obtain a nasopharyngeal swab from the patient, place the swab in a viral transport medium, refrigerate the specimen, and then contact their state or local health department to facilitate transport and timely diagnosis at a state public health laboratory. CDC requests that state public health laboratories promptly send all influenza A specimens that cannot be subtyped to the CDC, Influenza Division, Virus Surveillance and Diagnostics Branch Laboratory. As a precautionary step, CDC is working with other partners to develop a vaccine seed strain specific to these recent swine influenza viruses in humans.

As always, persons with febrile respiratory illness should stay home from work or school to avoid spreading infections (including influenza and other respiratory illnesses) to others in their communities. In addition, frequent hand washing can lessen the spread of respiratory illness (*5*). Interim guidance on infection control, treatment, and chemoprophylaxis for swine influenza is available at http://www.cdc.gov/flu/swine/recommendations.htm. Additional information about swine influenza is available at http://www.cdc.gov/flu/swine/index.htm.

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Notice to Readers

Arthritis Awareness Month — May 2009

May is Arthritis Awareness Month, an observance intended to focus attention on the large and growing problem of arthritis in the United States. Arthritis, which in 2005 affected 46 million (one in five) U.S. adults and nearly 300,000 children, is projected to affect 67 million adults by 2030 (*1*) and remains the most common cause of disability in the United States (*2*).

The emphasis of this year's observance is on the benefits of physical activity for persons with arthritis. For adults with arthritis, physical activity can reduce pain, improve function, reduce the risk for disability, and lower the risk for heart disease or type 2 diabetes. Any physical activity is better than none, but the *2008 Physical Activity Guidelines for Americans* (available at http://www.health.gov/paguidelines) suggest that low impact, moderate-intensity aerobic activity totaling 150 minutes a week and muscle strengthening exercise at least 2 days a week generally are safe, beneficial, and achievable for persons with chronic conditions such as arthritis.

Information about physical activity and self-management education programs for adults with arthritis is available from CDC at http://www.cdc.gov/arthritis/intervention/index.htm. Additional information about Arthritis Awareness Month activities is available from the Arthritis Foundation online (http://www.arthritis.org) or by telephone (800-283-7800). Tips, podcasts, and online tools to help persons with arthritis achieve better overall health by being physically active are available at http://www.letsmovetogether.org.

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Notice to Readers

National Drinking Water Week — May 3–9, 2009

Water plays a critical role in the success of a society, from meeting basic public health needs to supporting agricultural and other economic activities. Worldwide, approximately 1.1 billion persons do not have access to an improved water supply, and 2.6 billion (nearly half of the developing world) lack access to adequate sanitation (*1,2*). This year, May 3–9 is National Drinking Water Week, which highlights the critical importance of safe drinking water to protect public health.

Although the United States has one of the safest public drinking water supplies in the world (*3*), sources of drinking water can become contaminated through naturally occurring chemicals and minerals (e.g., arsenic), local land use practices (e.g., pesticides), malfunctioning wastewater treatment systems (e.g., sewer overflows), and other sources. The presence of contaminants in water can lead to adverse health effects, including gastrointestinal illness, reproductive problems, and neurologic disorders.

Approximately 15 million U.S. households obtain their drinking water from private wells, which are not covered by federal regulations protecting public drinking water systems (*4*). Owners of private wells are responsible for ensuring that their water is safe from contaminants. Additional information about protecting private groundwater wells is available at http://www.cdc.gov/healthywater/drinking/private/wells/index.html.

National Drinking Water Week is a time to recognize the importance of safe drinking water. New challenges, such as aging drinking water infrastructure, climate change, chemical contamination, increased drought, and the emergence of new water supply paradigms (e.g., water reuse), will require continued vigilance to protect the water supply.

References

1. United Nations Department of Economic and Social Affairs. International year of sanitation: sanitation is vital for human health. Available at http://esa.un.org/iys/health.shtml.
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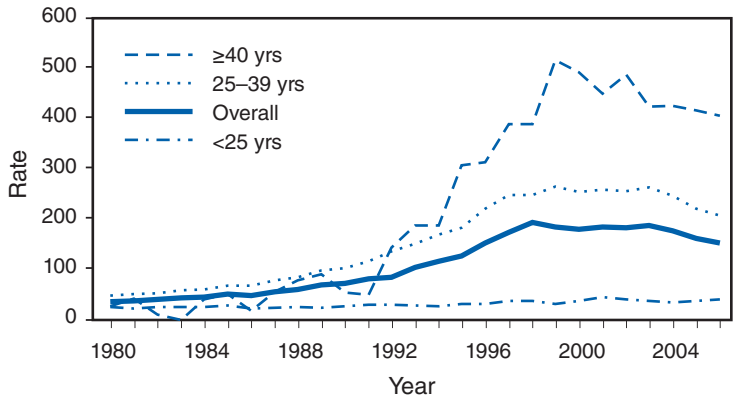
4. US Census Bureau. American housing survey for the United States: 2007. Current housing reports. Series H150/07. Washington, DC: US Government Printing Office; 2008:20401. Available at http://www.census.gov/prod/2008pubs/h150-07.pdf.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Rate* of Triplet and Higher Order Births, by Age Group of Mother — United States, 1980–2006



* Per 100,000 live births.

Triplet and higher order births have greater risk for preterm birth, low birthweight, and infant mortality than singleton and twin births. The rate of triplet and higher order births increased approximately 400% overall from 1980 to 1998, with the greatest increases among mothers aged 25–39 years and ≥40 years. After peaking in 1998 at 193.5 per 100,000 live births, the overall rate decreased to 153.3 in 2006. This decrease largely resulted from a decrease in the rate among mothers aged 25–39 years, from 276.9 per 100,000 live births in 1998 to 207.8 in 2006. During this period, the rate for mothers aged ≥40 years also declined.

SOURCE: Martin JA, Hamilton BE, Sutton PD, et al. Births: final data for 2006. Natl Vital Stat Rep 2009;57(7). Available at http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 25, 2009 (16th week)*

Disease	Current week	Cum 2009	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2008	2007	2006	2005	2004	
Anthrax	—	—	—	—	1	1	—	—	
Botulism:									
foodborne	1	6	0	17	32	20	19	16	WA (1)
infant	—	16	1	106	85	97	85	87	
other (wound and unspecified)	1	11	1	19	27	48	31	30	CA (1)
Brucellosis§	3	25	2	78	131	121	120	114	FL (2), CA (1)
Chancroid	1	14	1	30	23	33	17	30	IN (1)
Cholera	—	1	0	3	7	9	8	6	
Cyclosporiasis§	—	27	6	137	93	137	543	160	
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	0	62	55	67	80	112	
eastern equine	—	—	—	4	4	8	21	6	
Powassan	—	—	—	2	7	1	1	1	
St. Louis	—	—	0	13	9	10	13	12	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
Ehrlichia chaffeensis	—	41	3	931	828	578	506	338	
Ehrlichia ewingii	—	—	—	8	—	—	—	—	
Anaplasma phagocytophilum	2	14	3	705	834	646	786	537	NY (2)
undetermined	—	5	1	111	337	231	112	59	
Haemophilus influenzae,†† invasive disease (age <5 yrs):									
serotype b	—	11	0	28	22	29	9	19	
nonserotype b	1	68	3	198	199	175	135	135	MN (1)
unknown serotype	1	59	4	180	180	179	217	177	GA (1)
Hansen disease§	1	16	2	79	101	66	87	105	CO (1)
Hantavirus pulmonary syndrome§	—	1	0	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	—	34	3	270	292	288	221	200	
Hepatitis C viral, acute	12	232	14	867	845	766	652	720	NY (3), PA (1), MI (1), IA (3), MO (1), GA (1), WA (1), CA (1)
HIV infection, pediatric (age <13 years)§§	—	—	2	—	—	—	380	436	
Influenza-associated pediatric mortality§,¶¶	1	57	2	88	77	43	45	—	OH (1)
Listeriosis	9	140	11	753	808	884	896	753	NY (1), FL (1), WA (1), CA (6)
Measles***	—	16	2	138	43	55	66	37	
Meningococcal disease, invasive†††:									
A, C, Y, and W-135	3	101	6	330	325	318	297	—	MN (1), TX (1), WA (1)
serogroup B	1	50	3	183	167	193	156	—	WA (1)
other serogroup	—	7	1	31	35	32	27	—	
unknown serogroup	5	157	15	608	550	651	765	—	ME (1), NY (1), CA (3)
Mumps	3	98	128	437	800	6,584	314	258	PA (1), CO (1), CA (1)
Novel influenza A virus infections	—	1	—	2	4	N	N	N	
Plague	—	—	0	1	7	17	8	3	
Poliomyelitis, paralytic	—	—	—	—	—	—	1	—	
Polio virus infection, nonparalytic§	—	—	—	—	—	N	N	N	
Psittacosis§	—	5	0	9	12	21	16	12	
Q fever total§,§§§:	2	16	2	104	171	169	136	70	
acute	2	13	1	92	—	—	—	—	OH (1), CA (1)
chronic	—	3	0	12	—	—	—	—	
Rabies, human	—	—	—	1	1	3	2	7	
Rubella¶¶¶	1	1	0	18	12	11	11	10	MN (1)
Rubella, congenital syndrome	—	1	0	—	—	1	1	—	
SARS-CoV§,****	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	2	57	4	151	132	125	129	132	CT (1), MN (1)
Syphilis, congenital (age <1 yr)	—	47	7	349	430	349	329	353	
Tetanus	—	4	0	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	1	26	1	73	92	101	90	95	CA (1)
Trichinellosis	—	7	0	37	5	15	16	5	
Tularemia	—	5	1	117	137	95	154	134	
Typhoid fever	2	107	6	441	434	353	324	322	OH (1), GA (1)
Vancomycin-intermediate *Staphylococcus aureus*§	—	17	0	46	37	6	2	—	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	0	—	2	1	3	1	
Vibriosis (noncholera *Vibrio* species infections)§	2	46	2	488	549	N	N	N	FL (1), CA (1)
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 25, 2009 (16th week)*

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting year 2008 and 2009 are provisional, whereas data for 2004, 2005, 2006, and 2007 are finalized.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

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

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

** The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).

†† Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

§§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Fifty-six influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.

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

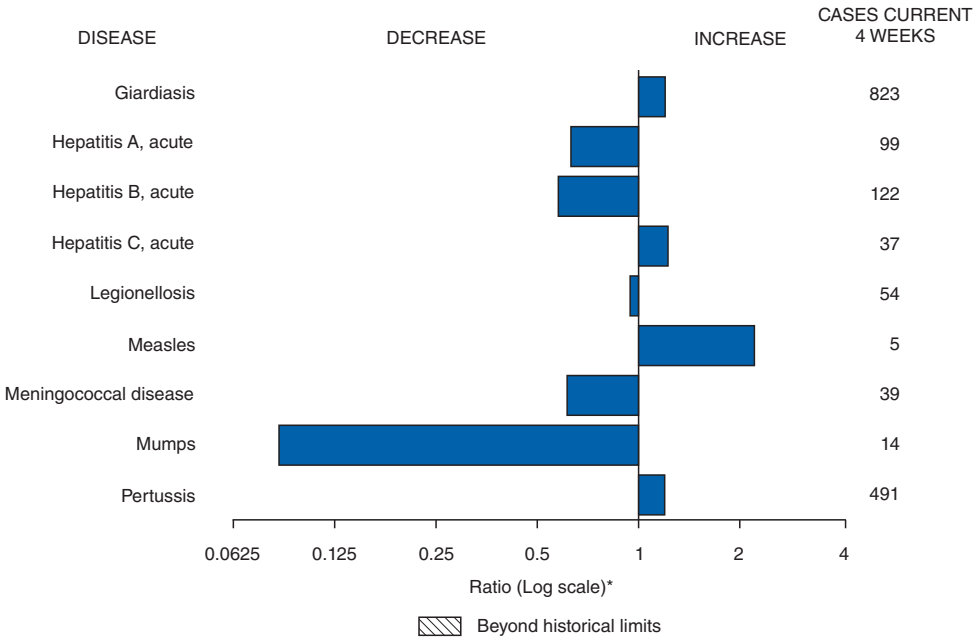
††† Data for meningococcal disease (all serogroups) are available in Table II.

§§§ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

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

**** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 25, 2009, with historical data



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

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Chlamydia†					Coccidiodomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 week		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	11,510	22,262	24,934	311,969	356,933	114	128	334	2,237	2,087	60	104	475	1,172	1,178
New England	848	746	1,656	12,302	10,805	—	0	0	—	1	2	5	23	71	112
Connecticut	272	224	1,306	3,448	2,630	N	0	0	N	N	—	0	7	7	41
Maine§	—	48	72	763	808	N	0	0	N	N	1	0	6	8	6
Massachusetts	308	329	950	6,295	5,404	N	0	0	N	N	—	2	13	29	31
New Hampshire	1	35	63	328	645	—	0	0	—	1	—	1	4	14	18
Rhode Island§	244	52	208	1,100	961	—	0	0	—	—	—	0	3	1	3
Vermont§	23	21	53	368	357	N	0	0	N	N	1	1	7	12	13
Mid. Atlantic	2,736	2,883	6,807	46,923	46,190	—	0	0	—	—	7	13	35	140	150
New Jersey	286	394	774	5,314	7,195	N	0	0	N	N	—	0	4	—	13
New York (Upstate)	635	571	4,554	9,484	7,795	N	0	0	N	N	3	4	17	43	35
New York City	1,332	1,103	3,389	19,372	17,984	N	0	0	N	N	—	1	8	22	30
Pennsylvania	483	797	1,074	12,753	13,216	N	0	0	N	N	4	5	15	75	72
E.N. Central	1,191	3,311	4,248	43,329	58,827	—	1	3	11	17	6	25	125	261	264
Illinois	—	1,045	1,315	11,554	17,674	N	0	0	N	N	—	2	13	17	29
Indiana	403	378	713	6,661	6,426	N	0	0	N	N	1	3	13	31	30
Michigan	552	832	1,208	13,967	14,189	—	0	3	3	13	1	5	13	58	55
Ohio	46	791	1,300	6,172	14,048	—	0	2	8	4	3	6	59	89	64
Wisconsin	190	291	439	4,975	6,490	N	0	0	N	N	1	9	46	66	86
W.N. Central	784	1,321	1,550	19,821	20,491	—	0	1	1	—	11	16	68	154	171
Iowa	—	182	256	2,816	2,715	N	0	0	N	N	—	4	30	30	41
Kansas	216	182	401	2,993	2,741	N	0	0	N	N	4	1	8	18	15
Minnesota	—	266	310	3,243	4,597	—	0	0	—	—	5	4	14	35	40
Missouri	398	494	578	8,198	7,457	—	0	1	1	—	1	3	13	32	34
Nebraska§	93	99	254	1,475	1,539	N	0	0	N	N	—	2	8	18	25
North Dakota	—	27	60	156	589	N	0	0	N	N	—	0	2	1	1
South Dakota	77	56	85	940	853	N	0	0	N	N	1	1	9	20	15
S. Atlantic	1,735	3,992	4,975	52,656	62,537	—	0	1	4	2	12	18	47	255	217
Delaware	180	68	163	1,547	1,156	—	0	1	1	—	—	0	1	—	5
District of Columbia	119	127	229	2,235	2,078	—	0	0	—	—	—	0	2	—	2
Florida	520	1,404	1,906	22,684	20,718	N	0	0	N	N	3	8	35	83	99
Georgia	—	711	1,772	3,144	11,252	N	0	0	N	N	1	5	13	103	66
Maryland§	—	431	692	6,006	6,749	—	0	1	3	2	—	1	4	9	3
North Carolina	—	0	460	—	2,530	N	0	0	N	N	8	0	16	35	9
South Carolina§	2	563	917	6,954	8,450	N	0	0	N	N	—	1	6	13	11
Virginia§	883	618	908	8,877	8,534	N	0	0	N	N	—	1	4	8	14
West Virginia	31	67	102	1,209	1,070	N	0	0	N	N	—	0	3	4	8
E.S. Central	670	1,669	2,157	26,560	25,139	—	0	0	—	—	—	3	9	34	34
Alabama§	—	470	553	6,268	7,796	N	0	0	N	N	—	1	6	10	16
Kentucky	110	245	380	3,550	3,326	N	0	0	N	N	—	1	4	9	4
Mississippi	—	413	841	7,215	5,555	N	0	0	N	N	—	0	2	4	3
Tennessee§	560	559	797	9,527	8,462	N	0	0	N	N	—	1	5	11	11
W.S. Central	344	2,847	3,965	36,955	45,159	—	0	1	—	1	8	8	256	48	53
Arkansas§	235	276	394	4,778	4,472	N	0	0	N	N	4	0	7	8	7
Louisiana	19	431	1,090	4,582	5,699	—	0	1	—	1	—	1	5	6	11
Oklahoma	90	176	407	1,934	4,002	N	0	0	N	N	4	1	16	14	12
Texas§	—	1,900	2,496	25,661	30,986	N	0	0	N	N	—	5	250	20	23
Mountain	1,398	1,258	1,984	17,322	22,126	74	89	212	1,538	1,416	3	8	37	82	98
Arizona	386	468	645	5,712	7,357	73	88	210	1,508	1,381	—	1	10	9	11
Colorado	488	144	588	2,334	5,118	N	0	0	N	N	3	2	12	26	19
Idaho§	—	67	314	1,146	1,239	N	0	0	N	N	—	1	5	9	20
Montana§	35	59	87	926	950	N	0	0	N	N	—	0	4	8	11
Nevada§	292	174	415	3,254	3,044	1	1	7	23	16	—	0	4	6	5
New Mexico§	127	146	455	2,270	2,205	—	0	2	2	11	—	2	23	17	16
Utah	70	97	251	1,065	1,805	—	0	1	5	8	—	0	6	1	10
Wyoming§	—	33	97	615	408	—	0	1	—	—	—	0	2	6	6
Pacific	1,804	3,942	4,947	56,101	65,659	40	37	172	683	650	11	7	112	127	79
Alaska	99	87	200	1,406	1,435	N	0	0	N	N	—	0	1	1	1
California	1,451	2,873	3,333	43,533	45,508	40	37	172	683	650	4	5	14	71	59
Hawaii	—	110	248	1,614	1,807	N	0	0	N	N	—	0	1	—	1
Oregon§	—	187	631	2,849	3,176	N	0	0	N	N	3	1	5	42	18
Washington	254	723	1,006	6,699	13,733	N	0	0	N	N	4	0	99	13	—
American Samoa	—	0	8	—	56	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	4	24	—	40	—	0	0	—	—	—	0	0	—	—
Puerto Rico	159	140	333	2,349	1,768	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	9	22	41	222	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	240	307	840	4,270	4,342	3,405	5,922	6,713	72,231	99,340	22	49	114	829	1,021
New England	3	28	65	323	391	90	99	301	1,513	1,467	—	3	17	49	49
Connecticut	—	6	14	69	92	53	50	275	666	554	—	0	11	10	2
Maine§	2	4	12	61	34	—	2	9	48	29	—	0	2	7	5
Massachusetts	—	11	27	117	172	27	38	112	648	732	—	1	5	26	33
New Hampshire	—	3	11	22	30	—	2	6	31	34	—	0	2	2	5
Rhode Island§	—	1	8	14	23	6	5	16	101	108	—	0	7	2	1
Vermont§	1	3	15	40	40	4	1	3	19	10	—	0	3	2	3
Mid. Atlantic	23	61	119	725	872	447	608	1,148	9,024	10,081	3	10	25	156	178
New Jersey	—	8	21	—	146	68	85	144	1,081	1,788	—	1	7	11	30
New York (Upstate)	18	23	76	325	275	117	116	666	1,735	1,780	1	3	20	43	45
New York City	2	15	30	218	251	187	208	584	3,467	3,066	—	2	4	25	33
Pennsylvania	3	16	46	182	200	75	196	267	2,741	3,447	2	4	10	77	70
E.N. Central	24	47	88	580	670	427	1,167	1,558	13,354	21,282	1	7	18	99	162
Illinois	—	10	32	77	182	—	361	480	3,292	5,870	—	2	9	30	53
Indiana	N	0	7	N	N	122	146	254	2,157	2,635	—	1	13	17	34
Michigan	5	12	22	160	148	224	297	493	4,661	5,566	—	1	3	10	9
Ohio	13	17	31	234	240	15	254	531	1,879	5,297	1	2	6	35	53
Wisconsin	6	9	20	109	100	66	78	141	1,365	1,914	—	0	2	7	13
W.N. Central	78	27	143	449	440	178	314	391	4,275	5,147	4	3	14	59	70
Iowa	2	6	18	67	77	—	28	53	394	470	—	0	1	—	1
Kansas	6	3	11	41	30	41	41	83	715	674	—	0	4	8	6
Minnesota	61	0	106	134	135	—	53	78	522	1,030	2	0	10	13	14
Missouri	9	8	22	146	125	96	145	193	2,086	2,412	2	1	4	25	35
Nebraska§	—	3	10	37	47	27	26	50	427	440	—	0	2	10	10
North Dakota	—	0	4	3	9	—	2	7	6	39	—	0	3	3	4
South Dakota	—	2	11	21	17	14	8	20	125	82	—	0	0	—	—
S. Atlantic	57	63	108	1,058	667	512	1,279	1,723	14,559	21,798	12	12	23	245	273
Delaware	—	1	3	8	11	27	16	35	254	392	1	0	2	2	2
District of Columbia	—	0	5	—	14	61	55	101	923	693	—	0	2	—	4
Florida	41	31	57	580	305	218	432	592	6,511	7,164	5	4	9	95	66
Georgia	9	9	63	249	151	—	271	801	1,027	4,203	4	2	9	56	65
Maryland§	5	5	10	73	54	—	114	210	1,574	1,869	2	1	5	34	47
North Carolina	N	0	0	N	N	—	0	203	—	1,397	—	1	6	20	24
South Carolina§	—	2	8	30	33	1	175	325	2,037	3,034	—	1	5	15	23
Virginia§	2	8	31	105	71	201	177	321	2,067	2,797	—	1	5	11	33
West Virginia	—	1	5	13	28	4	12	26	166	249	—	0	3	12	9
E.S. Central	—	8	22	82	126	206	547	771	7,711	9,087	—	3	6	46	61
Alabama§	—	4	12	45	65	—	172	216	1,877	3,129	—	0	2	11	7
Kentucky	N	0	0	N	N	37	87	153	1,029	1,263	—	0	2	5	5
Mississippi	N	0	0	N	N	—	136	253	2,201	2,110	—	0	1	—	9
Tennessee§	—	3	13	37	61	169	163	301	2,604	2,585	—	2	5	30	40
W.S. Central	2	7	21	87	77	981	929	1,300	11,388	15,686	1	2	17	40	46
Arkansas§	1	2	8	32	34	59	84	167	1,389	1,444	—	0	2	6	2
Louisiana	—	3	10	33	27	3	162	410	1,523	2,830	—	0	1	8	4
Oklahoma	1	3	11	22	16	919	68	142	1,535	1,509	1	1	16	26	35
Texas§	N	0	0	N	N	—	599	725	6,941	9,903	—	0	1	—	5
Mountain	12	27	62	302	359	341	191	339	2,112	3,474	1	5	11	92	136
Arizona	1	3	10	49	32	43	62	84	650	1,107	—	1	7	34	58
Colorado	6	10	27	95	130	221	53	101	446	891	1	1	5	23	26
Idaho§	—	3	14	29	38	—	3	13	32	58	—	0	4	2	1
Montana§	—	2	9	26	22	—	2	6	24	33	—	0	1	1	1
Nevada§	3	2	8	19	33	56	33	129	597	785	—	0	2	9	7
New Mexico§	—	1	8	21	31	15	24	48	282	391	—	1	4	12	22
Utah	2	7	18	47	62	6	6	16	60	182	—	1	2	11	21
Wyoming§	—	0	3	16	11	—	2	8	21	27	—	0	2	—	—
Pacific	41	46	539	664	740	223	608	730	8,295	11,318	—	2	6	43	46
Alaska	2	2	10	20	22	15	12	24	227	151	—	0	2	3	6
California	25	36	59	483	563	187	467	572	6,827	8,401	—	0	3	7	13
Hawaii	—	0	4	3	10	—	12	21	167	177	—	0	2	12	7
Oregon§	2	7	16	89	145	—	23	48	324	417	—	1	4	18	20
Washington	12	0	486	69	—	21	98	162	750	2,172	—	0	2	3	—
American Samoa	—	0	0	—	—	—	0	1	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	—	18	—	0	0	—	—
Puerto Rico	—	3	15	25	46	4	5	22	60	71	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	2	6	12	38	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Hepatitis (viral, acute), by type† A: Current week	A: Previous 52 weeks Med	A: Previous 52 weeks Max	A: Cum 2009	A: Cum 2008	B: Current week	B: Previous 52 weeks Med	B: Previous 52 weeks Max	B: Cum 2009	B: Cum 2008	Legionellosis: Current week	Legionellosis: Previous 52 weeks Med	Legionellosis: Previous 52 weeks Max	Legionellosis: Cum 2009	Legionellosis: Cum 2008
United States	29	40	106	526	768	27	73	189	964	1,103	10	52	149	431	546
New England	—	2	8	25	44	—	1	4	7	27	1	2	18	14	28
Connecticut	—	0	4	7	9	—	0	2	3	12	1	0	5	6	5
Maine§	—	0	5	1	3	—	0	2	3	4	—	0	2	—	1
Massachusetts	—	1	3	12	23	—	0	2	—	7	—	1	7	6	9
New Hampshire	—	0	2	2	2	—	0	2	1	2	—	0	5	—	4
Rhode Island§	—	0	2	3	7	—	0	1	—	1	—	0	14	1	5
Vermont§	—	0	1	—	—	—	0	1	—	1	—	0	1	1	4
Mid. Atlantic	1	5	13	60	103	5	7	17	75	151	1	15	59	104	115
New Jersey	—	1	5	5	23	—	1	5	2	51	—	2	14	6	14
New York (Upstate)	—	1	4	15	20	3	1	11	21	18	1	5	24	39	29
New York City	1	2	6	17	30	—	1	6	16	27	—	2	12	10	14
Pennsylvania	—	1	4	23	30	2	3	8	36	55	—	6	33	49	58
E.N. Central	3	6	16	65	112	1	9	19	127	139	—	8	41	81	137
Illinois	—	2	10	11	37	—	2	7	16	40	—	2	13	8	21
Indiana	—	0	4	5	6	—	1	7	14	9	—	1	6	7	9
Michigan	1	2	5	25	50	—	3	8	37	47	—	2	16	17	40
Ohio	2	1	4	19	10	1	2	14	45	37	—	3	18	44	62
Wisconsin	—	0	3	5	9	—	0	3	15	6	—	0	3	5	5
W.N. Central	1	2	15	32	93	1	2	15	53	18	1	2	8	11	27
Iowa	—	1	7	4	41	—	0	3	6	7	—	0	2	4	7
Kansas	—	0	3	2	5	—	0	3	1	3	—	0	1	1	1
Minnesota	1	0	12	7	9	—	0	11	7	—	—	0	4	—	2
Missouri	—	0	3	12	11	1	1	5	28	7	1	1	7	3	9
Nebraska§	—	0	5	6	25	—	0	3	10	1	—	0	3	2	7
North Dakota	—	0	1	—	—	—	0	1	—	—	—	0	1	1	—
South Dakota	—	0	1	1	2	—	0	1	1	—	—	0	1	—	1
S. Atlantic	6	7	16	135	95	12	19	34	329	282	4	9	22	109	107
Delaware	—	0	1	1	1	2	0	2	10	8	—	0	2	—	2
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	2	—	3
Florida	2	4	8	71	43	3	7	11	106	101	—	3	7	46	44
Georgia	1	1	4	20	13	3	3	8	47	43	—	1	5	17	10
Maryland§	—	1	4	13	12	—	2	5	33	27	1	2	10	21	20
North Carolina	2	0	9	14	9	3	0	19	93	25	3	0	7	17	7
South Carolina§	—	0	3	8	4	—	1	4	6	26	—	0	2	1	2
Virginia§	1	1	6	8	10	1	2	10	19	24	—	1	5	7	12
West Virginia	—	0	1	—	3	—	1	6	15	28	—	0	3	—	7
E.S. Central	—	1	9	9	13	2	8	13	94	117	—	2	10	18	25
Alabama§	—	0	2	1	4	—	2	7	30	31	—	0	2	2	3
Kentucky	—	0	3	1	4	2	2	7	25	33	—	1	4	8	14
Mississippi	—	0	2	5	—	—	1	3	5	12	—	0	1	—	—
Tennessee§	—	0	6	2	5	—	3	8	34	41	—	0	5	8	8
W.S. Central	—	4	15	45	73	1	12	56	148	226	2	2	17	20	12
Arkansas§	—	0	1	2	1	—	0	4	6	12	—	0	2	1	—
Louisiana	—	0	2	2	6	—	1	4	16	27	—	0	2	1	1
Oklahoma	—	0	5	1	3	1	2	10	31	19	—	0	6	1	—
Texas§	—	4	11	40	63	—	7	45	95	168	2	1	16	17	11
Mountain	3	3	31	44	65	—	3	11	36	55	—	2	8	23	27
Arizona	1	1	28	23	22	—	1	5	14	21	—	0	2	8	7
Colorado	2	0	2	7	13	—	0	3	8	9	—	0	2	1	3
Idaho§	—	0	1	—	11	—	0	2	1	3	—	0	1	—	1
Montana§	—	0	1	2	—	—	0	1	—	—	—	0	2	4	2
Nevada§	—	0	3	6	2	—	0	3	6	14	—	0	2	5	4
New Mexico§	—	0	1	3	12	—	0	2	4	6	—	0	2	—	3
Utah	—	0	2	3	2	—	0	3	3	1	—	0	2	5	7
Wyoming§	—	0	0	—	3	—	0	1	—	1	—	0	0	—	—
Pacific	15	8	59	111	170	5	6	84	95	88	1	4	25	51	68
Alaska	1	0	1	3	2	—	0	1	1	3	—	0	1	2	—
California	12	6	25	87	150	4	5	28	75	69	1	3	8	42	61
Hawaii	1	0	2	3	3	—	0	1	1	3	—	0	1	1	3
Oregon§	—	0	2	6	15	—	1	2	9	13	—	0	2	3	4
Washington	1	0	51	12	—	1	0	56	9	—	—	0	19	3	—
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	4	6	8	—	0	5	2	16	—	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for acute hepatitis C, viral are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serotypes				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	103	529	1,680	1,994	2,651	8	23	56	254	222	9	18	68	315	467
New England	3	89	550	198	543	1	1	6	8	9	1	0	4	14	14
Connecticut	—	0	0	—	—	1	0	3	1	—	—	0	1	1	1
Maine§	1	5	73	33	37	—	0	0	—	1	1	0	1	2	1
Massachusetts	—	39	375	67	312	—	0	4	6	6	—	0	3	8	12
New Hampshire	—	17	143	68	83	—	0	2	—	1	—	0	1	1	—
Rhode Island§	—	0	74	5	99	—	0	1	—	1	—	0	1	1	—
Vermont§	2	4	41	25	12	—	0	1	1	—	—	0	1	1	—
Mid. Atlantic	81	271	1,395	1,051	1,318	1	5	16	55	56	1	2	5	29	53
New Jersey	1	37	220	205	381	—	0	4	—	10	—	0	1	1	9
New York (Upstate)	40	99	1,332	418	164	—	1	10	15	5	1	0	2	8	15
New York City	—	4	36	—	48	—	3	10	32	33	—	0	2	4	7
Pennsylvania	40	97	519	428	725	1	1	3	8	8	—	1	4	16	22
E.N. Central	2	11	147	61	89	—	2	7	28	43	—	3	8	55	80
Illinois	—	0	13	—	3	—	1	5	9	22	—	1	6	11	32
Indiana	—	0	8	1	—	—	0	2	5	1	—	0	4	11	12
Michigan	—	1	10	4	5	—	0	2	4	6	—	0	3	10	12
Ohio	—	0	6	6	5	—	0	2	10	12	—	0	4	17	16
Wisconsin	2	9	129	50	76	—	0	3	—	2	—	0	2	6	8
W.N. Central	—	8	212	36	56	—	1	10	7	11	1	1	7	25	46
Iowa	—	1	9	5	10	—	0	3	2	1	—	0	1	1	11
Kansas	—	0	4	2	2	—	0	2	1	1	—	0	2	6	2
Minnesota	—	5	202	28	44	—	0	8	1	3	1	0	4	6	15
Missouri	—	0	1	—	—	—	0	3	3	2	—	0	2	8	11
Nebraska§	—	0	2	—	—	—	0	1	—	4	—	0	1	3	5
North Dakota	—	0	10	—	—	—	0	0	—	—	—	0	1	—	1
South Dakota	—	0	1	1	—	—	0	0	—	—	—	0	1	1	1
S. Atlantic	13	76	225	571	573	3	6	15	105	53	—	3	9	57	62
Delaware	2	11	36	108	149	—	0	1	1	1	—	0	1	1	—
District of Columbia	—	2	11	—	32	—	0	2	—	—	—	0	0	—	—
Florida	3	1	6	12	7	—	1	7	29	15	—	1	4	27	24
Georgia	—	0	6	14	1	1	1	5	20	11	—	0	2	8	7
Maryland§	5	30	162	301	310	—	1	7	28	20	—	0	3	1	4
North Carolina	1	1	6	16	2	2	0	7	16	2	—	0	3	9	3
South Carolina§	—	0	2	4	4	—	0	1	1	1	—	0	2	5	11
Virginia§	2	15	61	99	54	—	1	3	9	3	—	0	2	4	11
West Virginia	—	2	11	17	14	—	0	1	1	—	—	0	1	2	2
E.S. Central	—	0	5	4	4	—	0	2	7	3	—	0	6	10	25
Alabama§	—	0	2	—	1	—	0	1	2	2	—	0	2	2	1
Kentucky	—	0	2	—	1	—	0	1	1	1	—	0	1	2	5
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	2	1	7
Tennessee§	—	0	3	4	2	—	0	2	4	—	—	0	3	5	12
W.S. Central	—	2	21	7	15	—	1	10	5	11	1	2	10	26	47
Arkansas§	—	0	0	—	—	—	0	0	—	—	—	0	2	5	7
Louisiana	—	0	1	—	—	—	0	1	—	—	—	0	3	9	15
Oklahoma	—	0	1	—	—	—	0	2	—	1	—	0	3	2	6
Texas§	—	2	21	7	15	—	1	10	5	10	1	1	9	10	19
Mountain	—	1	13	6	5	—	0	3	3	10	—	1	4	29	26
Arizona	—	0	2	—	2	—	0	2	1	3	—	0	2	8	2
Colorado	—	0	1	1	1	—	0	1	1	3	—	0	2	9	5
Idaho§	—	0	1	2	1	—	0	1	—	—	—	0	1	4	2
Montana§	—	0	13	1	—	—	0	0	—	—	—	0	1	2	2
Nevada§	—	0	2	2	—	—	0	0	—	4	—	0	2	3	5
New Mexico§	—	0	2	—	1	—	0	1	—	—	—	0	1	1	4
Utah	—	0	1	—	—	—	0	1	1	—	—	0	1	1	4
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	2
Pacific	4	4	30	60	48	3	2	36	36	26	5	4	39	70	114
Alaska	—	0	2	1	—	—	0	2	1	—	—	0	2	2	—
California	4	3	8	51	41	3	2	8	26	22	3	2	8	40	102
Hawaii	N	0	0	N	N	—	0	1	1	1	—	0	1	1	1
Oregon§	—	1	3	8	7	—	0	2	4	3	—	1	7	19	11
Washington	—	0	23	—	—	—	0	32	4	—	2	0	31	8	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	1	—	0	1	—	2
U.S. Virgin Islands	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	108	225	1,879	3,091	2,218	31	88	162	777	1,238	8	41	148	212	91
New England	—	18	34	136	304	5	8	21	86	99	1	0	2	2	1
Connecticut	—	1	4	5	19	1	3	17	36	50	—	0	0	—	—
Maine†	—	1	7	26	12	1	1	5	15	15	1	0	1	2	—
Massachusetts	—	12	30	81	241	—	0	0	—	—	—	0	1	—	1
New Hampshire	—	1	4	15	10	—	1	8	7	10	—	0	1	—	—
Rhode Island†	—	1	6	3	17	—	0	3	7	8	—	0	2	—	—
Vermont†	—	0	2	6	5	3	1	6	21	16	—	0	0	—	—
Mid. Atlantic	15	23	64	248	268	7	29	67	115	353	—	2	30	5	20
New Jersey	—	4	12	20	40	—	0	0	—	—	—	1	6	—	10
New York (Upstate)	4	7	41	57	72	7	9	20	95	99	—	0	29	1	—
New York City	—	1	20	23	31	—	0	2	—	7	—	0	2	4	7
Pennsylvania	11	9	34	148	125	—	21	52	20	247	—	0	2	—	3
E.N. Central	23	36	174	693	537	3	3	29	12	5	1	2	15	6	3
Illinois	—	13	45	155	46	—	1	21	2	1	—	1	11	2	3
Indiana	—	2	96	63	15	—	0	2	—	—	—	0	3	—	—
Michigan	1	8	21	156	57	3	1	9	10	3	—	0	1	1	—
Ohio	22	10	57	304	399	—	1	7	—	1	1	0	4	3	—
Wisconsin	—	2	7	15	20	N	0	0	N	N	—	0	1	—	—
W.N. Central	10	30	839	690	183	1	5	17	63	49	—	4	33	12	6
Iowa	—	4	21	36	27	—	0	5	6	3	—	0	2	—	—
Kansas	5	2	12	50	24	—	1	6	34	27	—	0	0	—	—
Minnesota	—	2	781	150	29	—	0	10	7	9	—	0	0	—	—
Missouri	5	12	51	391	85	1	1	8	8	1	—	4	32	12	6
Nebraska†	—	3	32	55	14	—	0	0	—	—	—	0	4	—	—
North Dakota	—	0	18	2	—	—	0	9	3	3	—	0	0	—	—
South Dakota	—	0	10	6	4	—	0	2	5	6	—	0	1	—	—
S. Atlantic	19	23	71	407	208	5	23	78	370	602	5	16	71	158	37
Delaware	—	0	3	4	2	—	0	0	—	—	—	0	5	1	2
District of Columbia	—	0	1	—	2	—	0	0	—	—	—	0	2	—	2
Florida	7	7	20	129	44	—	0	18	45	138	—	0	3	1	1
Georgia	—	2	9	27	11	—	0	47	88	119	—	1	8	6	5
Maryland†	3	3	9	31	29	—	7	17	85	139	—	1	7	11	8
North Carolina	7	0	65	132	59	N	2	4	N	N	5	9	55	124	11
South Carolina†	—	2	11	44	24	—	0	0	—	—	—	1	9	4	2
Virginia†	—	3	24	35	32	—	10	24	122	176	—	2	15	10	4
West Virginia	2	0	2	5	5	5	1	6	30	30	—	0	1	1	2
E.S. Central	—	10	33	173	74	1	3	7	33	48	—	4	23	16	13
Alabama†	—	2	7	38	17	—	0	0	—	—	—	1	8	7	6
Kentucky	—	4	15	82	11	1	1	4	21	8	—	0	1	—	—
Mississippi	—	1	5	17	30	—	0	1	—	1	—	0	3	1	2
Tennessee†	—	2	14	36	16	—	2	6	12	39	—	2	19	8	5
W.S. Central	—	34	276	304	158	—	1	9	15	25	1	2	41	11	8
Arkansas†	—	1	20	20	20	—	0	6	11	13	—	0	14	3	1
Louisiana	—	2	7	29	4	—	0	0	—	—	—	0	1	—	2
Oklahoma	—	0	29	9	2	—	0	9	4	11	1	0	26	2	—
Texas†	—	28	232	246	132	—	0	1	—	1	—	1	6	6	5
Mountain	8	15	31	249	318	—	2	9	32	15	—	1	3	2	3
Arizona	1	2	10	38	82	N	0	0	N	N	—	0	2	1	1
Colorado	7	3	12	76	56	—	0	0	—	—	—	0	1	—	—
Idaho†	—	1	5	22	9	—	0	0	—	—	—	0	1	—	—
Montana†	—	0	4	9	54	—	0	4	10	—	—	0	1	—	—
Nevada†	—	0	3	6	11	—	0	5	—	—	—	0	2	—	—
New Mexico†	—	1	10	26	21	—	0	3	12	11	—	0	1	—	1
Utah	—	4	19	71	81	—	0	6	—	—	—	0	1	1	1
Wyoming†	—	0	2	1	4	—	0	4	10	4	—	0	2	—	—
Pacific	33	16	463	191	168	9	4	13	51	42	—	0	1	—	—
Alaska	—	3	21	26	27	—	0	2	7	10	N	0	0	N	N
California	—	5	23	13	95	9	3	12	44	31	—	0	1	—	—
Hawaii	1	0	3	8	4	—	0	0	—	—	N	0	0	N	N
Oregon†	1	3	16	51	42	—	0	2	—	1	—	0	1	—	—
Washington	31	0	459	93	—	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	1	—	1	1	5	12	17	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	388	959	2,844	8,420	8,461	24	79	323	639	1,011	124	443	919	4,102	4,288
New England	6	31	116	393	798	—	4	15	39	80	—	3	10	49	78
Connecticut	—	0	90	90	491	—	0	15	15	47	—	0	4	4	40
Maine§	2	2	8	29	35	—	0	3	—	2	—	0	6	2	1
Massachusetts	—	20	51	192	219	—	2	11	12	20	—	3	9	35	32
New Hampshire	3	3	10	39	23	—	1	3	9	8	—	0	1	1	1
Rhode Island§	—	2	9	29	18	—	0	3	—	1	—	0	1	4	3
Vermont§	1	1	7	14	12	—	0	6	3	2	—	0	2	3	1
Mid. Atlantic	34	105	203	914	1,049	1	8	27	49	313	20	54	96	726	516
New Jersey	—	21	55	72	249	—	1	12	5	34	—	19	38	206	104
New York (Upstate)	24	29	65	261	224	1	3	12	26	254	3	8	31	51	145
New York City	1	21	54	234	267	—	1	5	15	9	—	11	31	134	232
Pennsylvania	9	28	78	347	309	—	0	8	3	16	17	9	32	335	35
E.N. Central	38	98	194	1,019	1,006	3	11	75	80	110	11	83	128	870	828
Illinois	—	27	72	220	298	—	1	10	7	21	—	17	35	145	262
Indiana	—	8	53	64	84	—	1	14	11	6	—	6	39	21	240
Michigan	3	18	38	224	202	1	2	43	22	24	—	5	24	86	18
Ohio	33	27	65	353	246	2	3	17	24	24	11	42	80	512	227
Wisconsin	2	13	50	158	176	—	3	20	16	35	—	8	33	106	81
W.N. Central	36	52	148	688	569	7	11	59	88	90	7	14	39	141	257
Iowa	8	7	16	89	93	2	2	21	21	21	—	4	12	31	23
Kansas	7	7	29	75	57	—	0	7	5	7	—	2	6	48	2
Minnesota	10	12	69	165	157	3	2	21	26	12	—	4	25	16	56
Missouri	11	13	48	123	152	2	2	11	23	35	7	2	14	39	98
Nebraska§	—	5	41	151	70	—	1	30	11	10	—	0	3	5	—
North Dakota	—	0	10	9	8	—	0	1	—	—	—	0	3	1	20
South Dakota	—	3	22	76	32	—	1	4	2	5	—	0	5	1	58
S. Atlantic	108	250	455	2,255	2,110	8	13	51	153	148	39	54	100	627	949
Delaware	—	2	9	8	30	—	0	2	2	3	1	0	2	7	2
District of Columbia	—	0	4	—	14	—	0	1	—	3	—	0	3	—	5
Florida	60	97	174	966	1,023	6	2	10	49	46	7	12	34	138	293
Georgia	16	44	86	365	261	—	1	7	13	8	6	15	48	152	365
Maryland§	15	14	36	167	136	2	2	9	22	19	5	3	12	91	20
North Carolina	17	25	106	407	231	—	2	21	42	14	19	4	27	123	31
South Carolina§	—	18	55	146	193	—	1	3	4	13	1	6	32	51	178
Virginia§	—	20	89	156	158	—	3	27	15	30	—	4	59	60	39
West Virginia	—	3	10	40	64	—	0	3	6	12	—	0	3	5	16
E.S. Central	2	60	140	455	501	1	5	12	38	57	—	30	67	231	538
Alabama§	—	16	49	142	159	—	1	3	7	25	—	5	18	55	147
Kentucky	2	10	18	100	89	1	1	7	8	9	—	2	24	33	59
Mississippi	—	14	57	85	104	—	0	2	2	2	—	2	18	7	157
Tennessee§	—	15	62	128	149	—	2	6	21	21	—	17	48	136	175
W.S. Central	10	139	1,118	549	661	—	6	54	36	82	14	98	523	811	631
Arkansas§	3	11	40	97	82	—	1	3	6	13	7	11	27	75	68
Louisiana	—	17	50	88	125	—	0	0	—	2	—	9	26	54	137
Oklahoma	7	15	36	114	79	—	1	19	4	3	5	3	43	42	28
Texas§	—	93	1,057	250	375	—	5	48	26	64	2	65	463	640	398
Mountain	17	61	112	637	746	2	10	39	82	89	6	25	54	296	189
Arizona	2	23	43	233	198	—	1	4	8	18	3	15	35	208	79
Colorado	9	12	20	142	255	2	4	18	47	22	3	2	11	29	22
Idaho§	—	3	15	38	35	—	2	15	7	20	—	0	2	—	3
Montana§	—	2	7	35	21	—	0	3	3	10	—	0	5	8	—
Nevada§	4	4	14	64	59	—	0	3	2	3	—	3	13	24	64
New Mexico§	—	7	32	47	80	—	1	6	8	10	—	2	12	23	14
Utah	2	6	19	66	80	—	1	9	6	4	—	1	3	4	4
Wyoming§	—	1	4	12	18	—	0	1	1	2	—	0	1	—	3
Pacific	137	102	1,174	1,510	1,021	2	8	205	74	42	27	31	162	351	302
Alaska	1	1	4	14	13	—	0	1	—	2	—	0	1	2	—
California	97	86	516	1,161	872	—	6	39	56	35	17	27	75	269	270
Hawaii	2	5	15	72	56	—	0	2	1	2	—	1	3	5	13
Oregon§	4	8	20	100	80	—	1	8	—	3	—	1	10	18	19
Washington	33	0	843	163	—	2	0	189	17	—	10	0	116	57	—
American Samoa	—	0	1	—	1	—	0	0	—	—	—	0	2	3	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	—	4	—	0	0	—	—	—	0	3	—	5
Puerto Rico	—	14	40	72	149	—	0	0	—	—	—	0	4	1	7
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Streptococcal diseases, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max		
United States	105	101	214	2,006	2,229	28	35	94	618	687
New England	—	5	31	108	142	—	1	12	19	37
Connecticut	—	0	26	23	12	—	0	11	—	—
Maine§	—	0	3	7	12	—	0	1	—	1
Massachusetts	—	3	7	45	88	—	1	3	13	29
New Hampshire	—	1	4	20	14	—	0	1	4	7
Rhode Island§	—	0	8	4	9	—	0	2	—	—
Vermont§	—	0	3	9	7	—	0	1	2	—
Mid. Atlantic	27	18	36	373	471	9	4	25	89	81
New Jersey	—	1	9	2	86	—	1	4	11	27
New York (Upstate)	15	6	24	140	134	9	2	19	51	33
New York City	—	4	12	81	97	—	0	23	27	21
Pennsylvania	12	6	17	150	154	N	0	2	N	N
E.N. Central	18	16	39	394	454	1	6	10	87	129
Illinois	—	3	11	82	135	—	1	5	9	40
Indiana	—	3	19	64	61	—	0	5	11	16
Michigan	1	3	9	65	81	—	1	5	25	33
Ohio	13	4	14	123	116	1	1	5	30	20
Wisconsin	4	1	10	60	61	—	0	3	12	20
W.N. Central	18	5	37	170	186	7	2	14	55	39
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	2	0	8	23	24	N	0	1	N	N
Minnesota	13	0	34	65	83	7	0	9	22	15
Missouri	2	1	8	48	46	—	1	4	24	16
Nebraska§	—	1	3	22	16	—	0	1	2	3
North Dakota	—	0	2	2	7	—	0	3	3	1
South Dakota	1	0	2	10	10	—	0	2	4	4
S. Atlantic	24	22	46	452	434	5	6	14	125	139
Delaware	—	0	1	7	6	—	0	0	—	—
District of Columbia	—	0	4	—	9	N	0	0	N	N
Florida	4	6	12	114	96	2	1	6	30	24
Georgia	3	5	14	108	87	1	2	6	37	36
Maryland§	10	3	10	69	81	2	1	3	28	32
North Carolina	7	2	12	48	51	N	0	0	N	N
South Carolina§	—	1	5	31	28	—	1	6	23	22
Virginia§	—	3	9	59	58	—	0	3	1	21
West Virginia	—	1	4	16	18	—	0	2	6	4
E.S. Central	—	4	9	83	70	—	2	6	22	38
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	5	15	16	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	—	12
Tennessee§	—	3	8	68	54	—	2	6	22	26
W.S. Central	6	9	58	185	177	4	6	36	114	91
Arkansas§	1	0	2	9	4	—	0	3	11	4
Louisiana	—	0	2	6	8	—	0	3	12	3
Oklahoma	3	2	13	70	50	4	1	7	24	33
Texas§	2	6	45	100	115	—	4	27	67	51
Mountain	9	10	22	188	249	1	4	16	95	116
Arizona	3	3	8	53	82	—	2	10	55	52
Colorado	6	3	8	70	63	1	1	4	20	24
Idaho§	—	0	2	3	9	—	0	1	2	2
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	3	5	—	0	1	—	1
New Mexico§	—	2	7	37	66	—	0	3	7	19
Utah	—	1	6	21	21	—	0	4	11	18
Wyoming§	—	0	1	1	3	—	0	1	—	—
Pacific	3	3	8	53	46	1	1	5	12	17
Alaska	1	0	4	8	11	—	0	4	8	10
California	N	0	0	N	N	N	0	0	N	N
Hawaii	2	3	8	45	35	1	0	2	4	7
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	8	—	13	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N

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* Incidence data for reporting year 2008 and 2009 are provisional.
† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Aged <5 years									
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	39	57	109	1,172	1,353	4	8	19	172	173	96	257	433	3,518	3,767
New England	1	1	48	22	23	—	0	5	1	2	8	5	15	108	99
Connecticut	—	0	48	—	—	—	0	5	—	—	—	1	5	24	6
Maine§	—	0	2	4	8	—	0	1	—	—	—	0	2	1	3
Massachusetts	—	0	1	1	—	—	0	1	1	—	8	4	11	71	75
New Hampshire	—	0	3	5	—	—	0	0	—	—	—	0	2	8	6
Rhode Island§	—	0	4	5	8	—	0	1	—	1	—	0	5	4	4
Vermont§	1	0	2	7	7	—	0	1	—	1	—	0	2	—	5
Mid. Atlantic	3	3	10	54	134	—	0	3	10	12	34	33	51	568	532
New Jersey	—	0	0	—	—	—	0	0	—	—	5	4	12	77	74
New York (Upstate)	1	1	8	22	24	—	0	2	6	4	1	2	8	29	39
New York City	—	1	5	2	51	—	0	0	—	—	24	23	37	373	323
Pennsylvania	2	1	8	30	59	—	0	1	4	8	4	5	11	89	96
E.N. Central	10	9	28	211	304	1	1	5	32	38	12	20	36	276	366
Illinois	N	0	0	N	N	N	0	0	N	N	—	5	14	44	141
Indiana	—	2	19	38	111	—	0	3	7	13	3	2	10	51	44
Michigan	—	0	2	10	11	—	0	0	—	2	9	4	18	76	57
Ohio	10	7	18	163	182	1	1	4	25	23	—	6	28	89	106
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	4	16	18
W.N. Central	3	2	8	45	97	1	0	2	12	6	4	6	14	85	141
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	8	7
Kansas	1	1	4	14	44	—	0	2	8	2	2	0	3	6	9
Minnesota	—	0	0	—	—	—	0	0	—	—	—	2	6	16	34
Missouri	2	1	4	27	50	1	0	1	4	1	2	3	10	52	86
Nebraska§	—	0	0	—	—	—	0	0	—	—	—	0	2	3	5
North Dakota	—	0	2	4	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	—	3	—	0	0	—	3	—	0	1	—	—
S. Atlantic	18	22	53	602	550	1	4	14	80	80	24	60	250	832	690
Delaware	—	0	1	7	2	—	0	0	—	—	—	0	4	11	1
District of Columbia	N	0	0	N	N	N	0	0	N	N	3	2	9	55	36
Florida	11	14	36	380	292	1	3	13	57	46	2	20	38	329	265
Georgia	5	7	25	159	196	—	1	5	21	29	—	13	222	87	97
Maryland§	—	0	1	4	4	—	0	0	—	1	—	8	16	93	99
North Carolina	N	0	0	N	N	N	0	0	N	N	19	6	19	149	78
South Carolina§	—	0	0	—	—	—	0	0	—	—	—	2	6	20	26
Virginia§	N	0	0	N	N	N	0	0	N	N	—	5	16	87	86
West Virginia	2	1	13	52	56	—	0	3	2	4	—	0	1	1	2
E.S. Central	2	5	25	142	145	—	1	4	19	20	7	22	36	347	313
Alabama§	N	0	0	N	N	N	0	0	N	N	—	8	17	125	136
Kentucky	2	1	5	40	36	—	0	2	6	6	1	1	10	22	20
Mississippi	—	0	2	—	1	—	0	1	—	—	—	3	18	59	36
Tennessee§	—	3	22	102	108	—	0	3	13	14	6	8	19	141	121
W.S. Central	1	2	7	42	47	—	0	3	8	9	—	45	81	639	626
Arkansas§	1	0	5	23	7	—	0	3	5	3	—	4	35	81	27
Louisiana	—	1	6	19	40	—	0	1	3	6	—	11	33	128	151
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	7	20	27
Texas§	—	0	0	—	—	—	0	0	—	—	—	28	40	410	421
Mountain	1	3	7	52	52	1	0	3	10	5	4	9	19	75	177
Arizona	—	0	0	—	—	—	0	0	—	—	1	5	13	20	100
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	4	34
Idaho§	N	0	1	N	N	N	0	1	N	N	—	0	2	2	1
Montana§	—	0	1	—	—	—	0	0	—	—	—	0	7	—	—
Nevada§	1	1	4	24	24	1	0	2	6	1	1	1	7	33	24
New Mexico§	—	0	1	—	—	—	0	0	—	—	2	1	5	16	7
Utah	—	1	6	22	28	—	0	3	4	4	—	0	2	—	10
Wyoming§	—	0	2	6	—	—	0	0	—	—	—	0	1	—	1
Pacific	—	0	1	2	1	—	0	1	—	1	3	46	76	588	823
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
California	N	0	0	N	N	N	0	0	N	N	2	40	65	526	690
Hawaii	—	0	1	2	1	—	0	1	—	1	—	0	3	10	9
Oregon§	N	0	0	N	N	N	0	0	N	N	—	0	3	9	6
Washington	N	0	0	N	N	N	0	0	N	N	1	4	18	43	118
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	3	11	49	40
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 25, 2009, and April 19, 2008 (16th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	210	421	1,016	5,669	11,194	—	1	75	—	2	—	1	77	—	5
New England	3	12	29	107	322	—	0	2	—	—	—	0	1	—	1
Connecticut	—	0	0	—	—	—	0	2	—	—	—	0	1	—	1
Maine¶	—	2	11	—	114	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
New Hampshire	1	4	12	69	114	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Vermont¶	2	4	17	38	94	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	32	39	83	574	924	—	0	8	—	—	—	0	4	—	—
New Jersey	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	2	—	—
New York City	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
Pennsylvania	32	39	83	574	924	—	0	2	—	—	—	0	1	—	—
E.N. Central	78	147	312	2,560	2,576	—	0	8	—	—	—	0	3	—	—
Illinois	—	38	73	664	294	—	0	4	—	—	—	0	2	—	—
Indiana	—	0	9	56	—	—	0	1	—	—	—	0	1	—	—
Michigan	20	53	116	787	1,121	—	0	4	—	—	—	0	2	—	—
Ohio	58	42	106	940	1,006	—	0	3	—	—	—	0	1	—	—
Wisconsin	—	5	50	113	155	—	0	2	—	—	—	0	1	—	—
W.N. Central	14	22	72	483	501	—	0	6	—	1	—	0	21	—	—
Iowa	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Kansas	4	6	22	115	237	—	0	2	—	1	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	2	—	—	—	0	4	—	—
Missouri	10	12	51	332	243	—	0	3	—	—	—	0	1	—	—
Nebraska¶	N	0	0	N	N	—	0	1	—	—	—	0	6	—	—
North Dakota	—	0	39	36	4	—	0	2	—	—	—	0	11	—	—
South Dakota	—	0	4	—	17	—	0	5	—	—	—	0	6	—	—
S. Atlantic	63	65	163	885	1,924	—	0	4	—	—	—	0	4	—	—
Delaware	—	0	5	2	10	—	0	0	—	—	—	0	1	—	—
District of Columbia	—	0	3	—	10	—	0	2	—	—	—	0	1	—	—
Florida	47	29	68	606	690	—	0	2	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	—
North Carolina	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
South Carolina¶	—	7	67	71	331	—	0	0	—	—	—	0	1	—	—
Virginia¶	—	13	60	28	598	—	0	0	—	—	—	0	1	—	—
West Virginia	16	10	32	178	285	—	0	1	—	—	—	0	0	—	—
E.S. Central	—	7	101	17	451	—	0	7	—	—	—	0	9	—	2
Alabama¶	—	7	101	16	444	—	0	3	—	—	—	0	2	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	1	7	—	0	4	—	—	—	0	8	—	1
Tennessee¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	1
W.S. Central	—	77	355	498	3,497	—	0	8	—	—	—	0	7	—	1
Arkansas¶	—	4	61	19	270	—	0	1	—	—	—	0	1	—	—
Louisiana	—	1	5	21	35	—	0	3	—	—	—	0	5	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Texas¶	—	67	345	458	3,192	—	0	6	—	—	—	0	4	—	1
Mountain	18	31	83	499	959	—	0	12	—	1	—	0	22	—	1
Arizona	—	0	0	—	—	—	0	10	—	1	—	0	8	—	—
Colorado	17	12	44	220	382	—	0	4	—	—	—	0	10	—	—
Idaho¶	N	0	0	N	N	—	0	1	—	—	—	0	6	—	1
Montana¶	—	4	27	70	131	—	0	0	—	—	—	0	2	—	—
Nevada¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	—
New Mexico¶	—	3	10	47	103	—	0	1	—	—	—	0	1	—	—
Utah	1	11	31	162	334	—	0	2	—	—	—	0	5	—	—
Wyoming¶	—	0	1	—	9	—	0	0	—	—	—	0	2	—	—
Pacific	2	3	8	46	40	—	0	38	—	—	—	0	23	—	—
Alaska	1	1	6	27	13	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	37	—	—	—	0	20	—	—
Hawaii	1	1	4	19	27	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	1	17	—	21	—	0	0	—	—	—	0	0	—	—
Puerto Rico	10	8	26	107	213	—	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† 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 notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending April 25, 2009 (16th week)

Reporting area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
New England	432	308	87	18	7	12	33
Boston, MA	125	77	33	9	2	4	9
Bridgeport, CT	41	31	7	1	—	2	3
Cambridge, MA	15	14	—	—	—	1	5
Fall River, MA	28	20	6	1	1	—	—
Hartford, CT	40	30	8	1	1	—	2
Lowell, MA	16	13	2	1	—	—	2
Lynn, MA	8	6	1	1	—	—	1
New Bedford, MA	26	24	2	—	—	—	2
New Haven, CT	U	U	U	U	U	U	U
Providence, RI	49	41	5	—	1	2	3
Somerville, MA	3	1	1	—	1	—	—
Springfield, MA	45	28	12	2	—	3	2
Waterbury, CT	36	23	10	2	1	—	4
Worcester, MA	U	U	U	U	U	U	U
Mid. Atlantic	1,943	1,365	410	115	33	20	97
Albany, NY	38	24	8	3	1	2	2
Allentown, PA	18	15	2	1	—	—	—
Buffalo, NY	70	45	15	9	—	1	5
Camden, NJ	35	23	10	1	1	—	1
Elizabeth, NJ	14	9	1	4	—	—	—
Erie, PA	46	36	9	1	—	—	7
Jersey City, NJ	21	14	5	1	1	—	2
New York City, NY	959	683	197	53	17	9	34
Newark, NJ	35	18	11	1	1	4	4
Paterson, NJ	9	1	4	4	—	—	—
Philadelphia, PA	317	203	81	20	9	4	13
Pittsburgh, PA§	U	U	U	U	U	U	U
Reading, PA	31	26	4	1	—	—	3
Rochester, NY	134	106	24	4	—	—	12
Schenectady, NY	27	22	2	1	2	—	5
Scranton, PA	29	20	7	2	—	—	—
Syracuse, NY	93	69	20	4	—	—	6
Trenton, NJ	31	21	7	2	1	—	—
Utica, NY	14	12	1	1	—	—	1
Yonkers, NY	22	18	2	2	—	—	2
E.N. Central	2,072	1,352	520	129	35	36	154
Akron, OH	62	41	17	4	—	—	1
Canton, OH	46	32	13	1	—	—	2
Chicago, IL	339	178	96	45	13	7	23
Cincinnati, OH	90	56	25	6	—	3	8
Cleveland, OH	232	168	51	10	2	1	11
Columbus, OH	205	138	51	9	3	4	25
Dayton, OH	121	89	26	4	1	1	5
Detroit, MI	138	70	52	10	4	2	10
Evansville, IN	49	32	14	2	—	1	2
Fort Wayne, IN	75	50	16	6	1	2	7
Gary, IN	13	8	4	1	—	—	1
Grand Rapids, MI	51	38	9	2	2	—	4
Indianapolis, IN	192	116	50	12	6	8	15
Lansing, MI	41	30	10	—	—	1	4
Milwaukee, WI	86	55	24	3	1	3	13
Peoria, IL	56	41	8	5	1	1	4
Rockford, IL	56	46	8	2	—	—	11
South Bend, IN	46	35	8	3	—	—	2
Toledo, OH	104	78	21	2	1	2	3
Youngstown, OH	70	51	17	2	—	—	3
W.N. Central	675	422	166	52	20	14	41
Des Moines, IA	113	71	28	9	2	3	8
Duluth, MN	26	18	6	—	1	1	2
Kansas City, KS	28	19	6	3	—	—	3
Kansas City, MO	102	60	25	12	5	—	3
Lincoln, NE	24	15	6	1	1	1	3
Minneapolis, MN	65	40	18	2	3	2	1
Omaha, NE	101	70	16	9	1	5	8
St. Louis, MO	86	43	28	7	5	2	4
St. Paul, MN	69	46	20	2	1	—	4
Wichita, KS	61	40	13	7	1	—	5
S. Atlantic	1,301	818	338	77	30	36	75
Atlanta, GA	134	86	33	11	2	2	3
Baltimore, MD	150	92	39	11	4	4	18
Charlotte, NC	97	63	27	3	2	1	10
Jacksonville, FL	188	117	52	12	3	4	12
Miami, FL	121	75	33	9	2	2	12
Norfolk, VA	41	29	8	1	—	3	1
Richmond, VA	68	44	15	4	4	1	6
Savannah, GA	66	40	15	7	2	2	3
St. Petersburg, FL	44	27	11	2	2	2	—
Tampa, FL	205	145	44	7	6	3	7
Washington, D.C.	170	87	58	10	3	12	1
Wilmington, DE	17	13	3	—	—	—	2
E.S. Central	866	577	214	42	17	16	82
Birmingham, AL	198	136	42	10	4	6	22
Chattanooga, TN	68	40	17	6	3	2	7
Knoxville, TN	117	82	25	6	3	1	12
Lexington, KY	68	50	16	2	—	—	7
Memphis, TN	164	109	44	3	5	3	17
Mobile, AL	66	37	27	2	—	—	4
Montgomery, AL	51	36	10	4	—	1	2
Nashville, TN	134	87	33	9	2	3	11
W.S. Central	1,278	830	304	84	21	39	79
Austin, TX	97	64	25	4	1	3	13
Baton Rouge, LA	76	49	11	13	3	—	1
Corpus Christi, TX	66	41	17	4	2	2	5
Dallas, TX	206	126	52	14	5	9	14
El Paso, TX	110	78	25	4	1	2	2
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	306	184	85	20	4	13	14
Little Rock, AR	86	54	20	6	—	6	6
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	179	120	43	10	5	1	11
Shreveport, LA	31	24	6	—	—	1	3
Tulsa, OK	121	90	20	9	—	2	10
Mountain	1,151	782	239	79	30	21	77
Albuquerque, NM	141	90	31	13	4	3	7
Boise, ID	30	25	3	1	1	—	2
Colorado Springs, CO	111	75	18	10	7	1	4
Denver, CO	96	58	28	5	1	4	1
Las Vegas, NV	297	219	57	14	7	—	28
Ogden, UT	40	29	6	3	1	1	4
Phoenix, AZ	157	94	40	15	6	2	12
Pueblo, CO	40	29	10	—	1	—	1
Salt Lake City, UT	118	73	28	11	1	5	11
Tucson, AZ	121	90	18	7	1	5	7
Pacific	1,752	1,193	386	89	43	38	183
Berkeley, CA	16	8	6	—	1	1	2
Fresno, CA	144	95	32	10	4	3	18
Glendale, CA	43	35	5	2	1	—	10
Honolulu, HI	76	55	15	1	2	3	7
Long Beach, CA	61	41	19	1	—	—	11
Los Angeles, CA	261	161	67	22	5	6	28
Pasadena, CA	17	14	3	—	—	—	1
Portland, OR	121	84	24	10	2	1	5
Sacramento, CA	212	146	41	12	7	6	29
San Diego, CA	164	116	34	5	3	5	14
San Francisco, CA	119	79	27	4	3	4	13
San Jose, CA	195	133	47	8	4	3	19
Santa Cruz, CA	30	23	5	1	1	—	1
Seattle, WA	119	77	29	6	3	4	10
Spokane, WA	61	45	10	3	3	—	7
Tacoma, WA	113	81	22	4	4	2	8
Total¶	**11,470**	**7,647**	**2,664**	**685**	**236**	**232**	**821**

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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