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National Stroke Awareness Month — May 2008

May is National Stroke Awareness Month. In 2008, an estimated 780,000 persons in the United States will have a stroke; of these, 150,000 will die from stroke, and 15%–30% of stroke survivors will be permanently disabled (*1*). Stroke ranks third among all causes of death, behind heart disease and cancer. In 2008, the direct and indirect cost of stroke in the United States is expected to amount to approximately $65.5 billion (*1*).

Preventing and controlling stroke risk factors (e.g., high blood pressure, heart disease, atrial fibrillation, high blood cholesterol levels, diabetes, tobacco use, alcohol use, physical inactivity, and obesity) are the most important measures in reducing the incidence of stroke (*2*). Recognizing stroke warning symptoms and immediately telephoning for emergency medical care are critical to preventing death and disability.

CDC supports six state-based registries in the Paul Coverdell National Acute Stroke Registry, which has a long-term goal of ensuring that all persons in the United States receive the highest quality acute stroke care to reduce deaths, prevent disability, and avoid recurrent strokes. Additional information about stroke programs, warning symptoms, prevention, and care is available at http://www.cdc.gov/stroke, http://www.strokeassociation.org, http://www.stroke.org, and http://www.ninds.nih.gov.

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Awareness of Stroke Warning Symptoms — 13 States and the District of Columbia, 2005

Although the number of deaths from stroke has declined substantially since the 1960s (*1,2*), in 2004, stroke remained the third leading cause of death in the United States, after heart disease and cancer (*3*). Approximately 54% of U.S. stroke deaths in 2004 occurred outside of a hospital (*4*). Intravenous administration of tissue plasminogen activator has clinical benefits for patients with acute ischemic stroke; however, treatment should begin within 3 hours of symptom onset for these benefits to be realized (*5*). For hemorrhagic stroke, immediate surgery (e.g., aneurysm repair) is crucial to prevent rebleeding that results in serious impairment or death in 40% to 60% of cases (*6*). A revised objective of *Healthy People 2010* is to increase to 83% the proportion of persons who are aware of the warning symptoms of stroke and the need to telephone 9-1-1 immediately if someone appears to be having a stroke (objective no. 12-8) (*7*). To assess public awareness of stroke warning symptoms and the importance of seeking emergency care, CDC analyzed data from an optional module of the 2005 Behavioral Risk Factor Surveillance System (BRFSS) survey that was used in 13 states and the District of Columbia (DC). The results indicated that the percentages of respondents who recognized all five correct symptoms, identified an incorrect symptom, and recognized the need to tele-

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phone 9-1-1 was low; the percentage who met all three measures was 16.4%. In addition, disparities were observed by race/ethnicity, sex, and education level. Public health agencies, clinicians, and educators should continue to stress the importance of learning to recognize stroke symptoms and the need to telephone 9-1-1 when someone appears to be having a stroke.

BRFSS is a state-based, random-digit–dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥18 years and is conducted in all 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands. However, in 2005, the optional heart attack and stroke module was included in the BRFSS surveys of 13 states* and DC. A total of 71,994 respondents answered questions regarding symptoms of stroke.† An incorrect symptom was included in another question ("Do you think sudden chest pain or discomfort is a symptom of stroke?") to assess the possibility that respondents might answer "yes" to all of the questions in the series without actually considering them. Respondents also were asked to select the one action they would do first, from the following list of actions, if they thought that someone was having a heart attack or stroke: take the person to the hospital, advise the person to call a doctor, call 9-1-1, call a spouse or family member, or do something else. Median response rate for the 13 states and DC, based on Council of American Survey and Research Organizations (CASRO) guidelines, was 54.5% (range: 45.1%–61.3%). Data were weighted to 2005 state population estimates. Age-adjusted prevalence estimates and 95% confidence intervals (CIs) were calculated; statistically significant differences between characteristics were determined by nonoverlapping CIs.

Respondent awareness of stroke warning symptoms was 92.6% for sudden numbness or weakness of the face, arm, or leg, especially on one side; 86.5% for sudden confusion or trouble speaking; 83.4% for sudden trouble walking, dizziness, or loss of balance; 68.8% for sudden trouble seeing in one or both eyes; and 60.4% for a severe headache with no known cause. In addition, 85.9% of respondents said they would call 9-1-1 if they thought someone was having a heart attack or stroke. However, 39.5% of respon-

* Alabama, Florida, Iowa, Louisiana, Maine, Minnesota, Mississippi, Missouri, Montana, Oklahoma, Tennessee, Virginia, and West Virginia.

† "Do you think sudden confusion or trouble speaking are symptoms of stroke?" "Do you think sudden numbness or weakness of face, arm, or leg, especially on one side, are symptoms of stroke?" "Do you think sudden trouble seeing in one or both eyes is a symptom of stroke?" "Do you think sudden trouble walking, dizziness, or loss of balance are symptoms of stroke?" "Do you think a severe headache with no known cause is a symptom of stroke?"

dents incorrectly identified sudden chest pain or discomfort (which is a warning symptom of a heart attack) as a warning symptom of stroke (Table 1).

Awareness of individual stroke warning symptoms varied by race/ethnicity, sex, and level of education. Whites, women, and persons at higher education levels were more likely to be aware of individual stroke warning symptoms and more likely to call 9-1-1 if they thought that someone was having a heart attack or stroke than were blacks, Hispanics, men, and persons at lower levels of education (Table 1).

Awareness of individual stroke warning symptoms also varied by area. Respondent awareness ranged from 87.2% (Louisiana) to 96.4% (Minnesota) for sudden numbness or weakness of the face, arm, or leg, especially on one side; from 79.0% (Louisiana) to 92.9% (West Virginia) for sudden confusion or trouble speaking; from 77.1% (Louisiana) to 91.4% (Minnesota) for sudden trouble walking, dizziness, or loss of balance; from 62.0% (Oklahoma) to 76.5% (Minnesota) for sudden trouble seeing in one or both eyes; and from 51.8% (DC) to 68.8% (Minnesota) for severe headache with no known cause. The percentage of respondents who reported that they would call 9-1-1 if they thought someone was having a heart attack or stroke ranged from 77.7% (Mississippi) to 89.0% (Minnesota) (Table 1).

All five stroke warning symptoms were identified by 43.6% of respondents; 18.6% were aware of all stroke warning symptoms and knew that sudden chest pain is not a stroke warning sign; 38.1% were aware of all stroke warning symptoms and would first call 9-1-1 if they thought that someone was having a heart attack or stroke, and 16.4%

TABLE 1. Age-adjusted percentage of respondents who recognized stroke warning symptoms, misidentified an incorrect symptom,* and said they would first call 9-1-1 if someone appeared to be having a stroke or heart attack, by symptom, selected characteristics, and area — Behavioral Risk Factor Surveillance System, 13 states and the District of Columbia (DC), 2005

Characteristic/ Area	No. of respondents	Sudden confusion or trouble speaking		Sudden numbness or weakness of face, arm, or leg, especially on one side		Sudden trouble seeing in one or both eyes		Sudden trouble walking, dizziness, or loss of balance		A severe headache with no known cause		Sudden chest pain or discomfort		Would first call 9-1-1 if someone was possibly having a stroke or heart attack	
		%	(95% CI†)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Total	**71,994**	**86.5**	**(86.0–87.0)**	**92.6**	**(92.2–93.0)**	**68.8**	**(68.2–69.4)**	**83.4**	**(82.9–83.9)**	**60.4**	**(59.8–61.1)**	**39.5**	**(38.8–40.1)**	**85.9**	**(85.4–86.4)**
Race/Ethnicity															
White	57,761	90.1	(89.6–90.5)	94.9	(94.5–95.3)	72.2	(71.5–72.8)	86.2	(85.7–86.7)	61.9	(59.9–63.2)	37.3	(36.6–38.0)	86.8	(86.3–87.3)
Black	7,673	79.0	(77.4–80.5)	88.0	(86.6–89.2)	58.8	(56.6–60.3)	75.8	(74.1–77.5)	55.8	(53.8–57.7)	47.9	(40.6–49.8)	83.7	(82.3–85.1)
Hispanic	2,548	67.8	(64.5–70.9)	79.2	(76.1–81.9)	53.8	(50.8–56.9)	70.0	(66.9–70.3)	57.9	(54.7–61.1)	43.6	(40.5–46.8)	83.1	(80.3–85.6)
Other	3,351	76.0	(72.4–79.3)	87.1	(84.1–89.5)	61.3	(57.7–64.9)	76.4	(73.0–79.5)	53.1	(49.3–56.8)	46.2	(42.5–50.0)	83.1	(79.9–85.9)
Sex															
Men	27,163	83.2	(82.3–84.0)	91.0	(90.3–91.7)	67.7	(66.7–68.7)	82.3	(81.4–83.1)	57.3	(56.3–58.4)	41.1	(40.1–42.1)	83.7	(82.9–84.5)
Women	44,831	89.5	(88.9–90.0)	94.1	(93.7–94.5)	69.8	(69.0–70.5)	84.3	(83.7–84.9)	63.2	(62.4–64.0)	38.0	(37.2–38.8)	87.9	(87.4–88.4)
Education															
Less than high school diploma	8,744	71.1	(68.9–73.1)	83.2	(81.4–84.9)	52.6	(50.5–54.8)	69.1	(67.0–71.2)	50.6	(48.5–52.8)	43.7	(41.6–45.9)	82.7	(81.0–84.3)
High school diploma	23,728	83.6	(82.6–84.6)	91.3	(90.5–92.1)	62.9	(61.7–64.0)	80.4	(79.4–81.3)	55.6	(54.4–56.8)	43.9	(42.7–45.1)	85.1	(84.2–86.0)
Some college	18,505	90.0	(89.1–90.8)	94.8	(94.1–95.4)	72.7	(71.5–73.8)	86.5	(85.6–87.4)	62.6	(61.4–63.8)	39.9	(38.7–41.2)	86.5	(85.6–87.3)
College degree or more	20,839	92.2	(91.5–92.9)	95.9	(95.4–96.5)	77.9	(76.9–78.9)	89.3	(88.5–90.1)	67.3	(66.1–68.4)	33.5	(32.4–34.6)	87.4	(86.6–88.2)
Area															
Alabama	3,197	87.6	(85.7–89.3)	95.3	(94.4–96.0)	70.0	(67.8–72.1)	81.8	(80.0–83.5)	60.8	(58.5–63.0)	35.8	(33.6–38.1)	86.2	(84.4–87.9)
DC	3,743	82.0	(80.0–83.8)	90.0	(88.5–91.3)	62.8	(60.7–64.9)	79.1	(77.1–81.9)	51.8	(49.6–53.9)	39.9	(37.7–42.1)	86.4	(84.8–87.9)
Florida	8,190	84.0	(82.6–85.3)	91.1	(89.9–92.1)	67.6	(66.0–69.2)	82.0	(80.6–83.3)	60.3	(58.6–61.9)	40.8	(39.2–42.5)	87.0	(85.7–88.2)
Iowa	5,051	90.3	(89.1–91.3)	94.6	(93.7–95.3)	71.1	(69.5–72.7)	88.7	(87.5–89.4)	61.7	(60.0–63.4)	38.0	(36.4–39.7)	86.9	(85.6–88.0)
Louisiana	2,936	79.0	(77.0–80.8)	87.2	(85.7–88.6)	62.9	(60.7–65.0)	77.1	(75.2–79.0)	60.0	(57.8–62.1)	44.6	(42.4–46.8)	80.4	(78.5–82.1)
Maine	3,960	87.8	(86.3–89.2)	93.2	(91.9–94.2)	67.9	(66.0–69.8)	84.6	(83.2–86.0)	54.6	(52.6–56.6)	36.3	(34.4–38.3)	88.2	(86.8–89.5)
Minnesota	2,829	91.7	(90.2–92.9)	96.4	(95.5–97.1)	76.5	(74.5–78.4)	91.4	(90.2–92.6)	68.8	(66.6–70.8)	37.0	(34.8–39.2)	89.0	(87.6–90.3)
Mississippi	4,439	87.1	(85.8–88.3)	93.0	(92.0–93.9)	65.2	(63.3–67.0)	80.3	(78.8–81.8)	59.9	(58.0–61.8)	38.1	(36.2–40.0)	77.7	(76.0–79.3)
Missouri	5,164	86.8	(85.1–88.4)	93.6	(91.7–95.2)	66.1	(64.0–68.2)	83.1	(81.4–84.8)	53.6	(51.4–55.8)	33.9	(31.8–36.1)	85.9	(84.4–87.2)
Montana	4,983	89.0	(87.5–90.3)	94.7	(93.6–95.6)	70.7	(68.8–72.5)	87.6	(86.2–88.9)	57.8	(55.8–59.8)	34.6	(32.7–36.6)	83.8	(82.1–85.3)
Oklahoma	13,707	83.7	(82.4–85.0)	90.2	(89.1–91.3)	62.0	(60.5–63.4)	79.4	(78.1–80.7)	50.9	(49.3–52.4)	34.7	(33.3–36.1)	80.6	(79.4–81.8)
Tennessee	4,749	86.1	(84.4–87.5)	90.6	(89.2–91.9)	72.3	(70.4–74.1)	80.8	(79.0–82.5)	64.5	(62.4–66.6)	49.3	(47.2–51.5)	87.1	(85.5–88.4)
Virginia	5,493	88.4	(87.0–89.6)	94.2	(93.1–95.0)	69.3	(67.5–71.1)	84.8	(83.4–86.1)	60.7	(58.8–62.6)	36.9	(35.0–38.8)	87.8	(86.5–89.0)
West Virginia	3,553	92.9	(91.7–93.9)	95.6	(94.7–96.3)	75.1	(73.4–76.7)	89.4	(88.2–90.5)	67.6	(65.7–69.5)	46.5	(44.5–48.5)	85.4	(84.0–86.7)

* Sudden chest pain or discomfort, which is a symptom for heart attack but not for stroke.
† Confidence interval.

were aware of all five stroke warning symptoms, knew that sudden chest pain is not a stroke warning symptom, and would call 9-1-1 if they thought that someone was having a heart attack or stroke (Table 2). Awareness of all five stroke warning symptoms and calling 9-1-1 was higher among whites (41.3%), women (41.5%), and persons at higher education levels (47.6% for persons with a college degree or more) than among blacks and Hispanics (29.5% and 26.8%, respectively), men (34.5%), and persons at lower education levels (22.5% for those who had not received a high school diploma). Among states, the same measure ranged from 27.9% (Oklahoma) to 49.7% (Minnesota).

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Editorial Note: Immediate emergency transportation to a hospital to receive timely urgent care can reduce disability and even death associated with stroke. The American Stroke Association and National Stroke Association are working with state and local health departments to increase public recognition of stroke warning symptoms and 9-1-1 calls that prioritize these symptoms as "possible stroke." In

TABLE 2. Age-adjusted percentage of respondents who recognized five correct stroke warning symptoms, identified one incorrect symptom,* and said they would first call 9-1-1 if someone appeared to be having a stroke or heart attack, by selected characteristics and area — Behavioral Risk Factor Surveillance System, 13 states and the District of Columbia (DC), 2005

Characteristic/ Area	No. of Respondents	All five correct symptoms†		All five correct symptoms and one incorrect symptom¶		All five correct symptoms and would call 9-1-1		All five correct symptoms, one incorrect symptom, and would first call 9-1-1	
		%	(95% CI§)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Total	**71,994**	**43.6**	**(42.9–44.2)**	**18.6**	**(18.1–19.1)**	**38.1**	**(37.5–38.7)**	**16.4**	**(16.0–16.9)**
Race/Ethnicity									
White	57,761	46.9	(46.2–47.6)	21.1	(20.6–21.7)	41.3	(40.7–42.0)	18.7	(18.2–19.3)
Black	7,673	33.9	(32.2–35.7)	10.2	(9.1–11.4)	29.5	(27.8–31.2)	8.8	(7.8–9.9)
Hispanic	2,548	30.1	(27.4–34.9)	10.7	(9.1–12.6)	26.8	(24.2–29.6)	9.5	(8.0–11.3)
Other	3,351	34.8	(31.4–38.4)	12.0	(9.9–14.4)	28.7	(25.6–32.0)	10.2	(8.3–12.6)
Sex									
Men	27,163	40.2	(39.2–41.2)	17.3	(16.6–18.1)	34.5	(33.5–35.4)	15.0	(14.3–15.7)
Women	44,831	46.4	(45.7–47.2)	19.7	(19.1–20.3)	41.5	(40.7–42.2)	17.7	(17.1–18.3)
Education									
Less than high school diploma	8,744	26.0	(24.3–27.8)	7.7	(6.7–8.9)	22.5	(20.9–24.3)	6.9	(6.0–8.1)
High school diploma	23,728	36.4	(35.3–37.5)	12.6	(12.6–13.3)	31.8	(30.7–32.8)	11.1	(10.5–11.8)
Some college	18,505	47.7	(46.5–48.9)	20.1	(19.2–21.1)	41.8	(40.6–43.0)	17.9	(17.0–18.8)
College degree or more	20,839	54.0	(52.9–55.1)	27.4	(26.4–28.4)	47.6	(46.5–48.8)	24.1	(23.2–25.1)
Area									
Alabama	3,197	42.0	(39.9–42.2)	19.5	(17.9–21.3)	37.1	(35.0–39.2)	17.0	(15.5–18.7)
DC	3,743	34.8	(32.9–36.7)	15.9	(14.6–17.4)	30.5	(28.7–32.4)	13.7	(12.5–15.1)
Florida	8,190	41.8	(40.2–43.3)	18.7	(17.5–19.9)	37.4	(35.9–38.9)	16.9	(15.8–18.0)
Iowa	5,051	47.2	(45.5–48.8)	20.7	(19.4–22.1)	41.3	(39.6–42.9)	18.6	(17.4–19.9)
Louisiana	2,936	39.1	(37.0–41.2)	13.7	(12.4–15.3)	32.1	(30.1–34.1)	11.5	(10.2–12.9)
Maine	3,960	40.2	(38.3–42.1)	18.2	(16.8–19.7)	36.2	(34.4–38.1)	16.6	(15.2–18.1)
Minnesota	2,829	55.7	(53.7–57.9)	25.5	(23.6–27.4)	49.7	(47.5–52.0)	22.9	(21.1–24.8)
Mississippi	4,439	40.4	(38.6–42.3)	15.5	(14.2–16.8)	31.6	(29.9–33.3)	12.2	(11.1–13.5)
Missouri	5,164	39.1	(37.1–41.1)	18.2	(16.7–19.8)	34.1	(32.1–36.1)	15.8	(14.4–17.3)
Montana	4,983	43.1	(41.2–44.9)	21.1	(19.6–22.7)	36.6	(34.8–38.4)	18.4	(17.0–19.9)
Oklahoma	13,707	34.4	(33.1–35.8)	14.3	(13.3–15.4)	27.9	(26.6–29.1)	11.8	(10.9–12.8)
Tennessee	4,749	48.4	(46.4–50.5)	15.4	(14.0–16.9)	43.6	(41.6–45.7)	13.9	(12.6–15.3)
Virginia	5,493	43.5	(41.6–45.4)	20.5	(19.0–22.0)	38.9	(37.0–40.7)	18.2	(16.8–19.7)
West Virginia	3,553	53.3	(51.3–55.3)	16.7	(15.3–18.2)	45.4	(43.4–47.4)	14.4	(13.1–15.8)

* Sudden chest pain or discomfort, which is a symptom for heart attack but not for stroke.
† Sudden confusion or trouble speaking; sudden numbness or weakness of face, arm, or leg, especially on one side; sudden trouble seeing in one or both eyes; sudden trouble walking, dizziness, or loss of balance; and a severe headache with no known cause.
§ Confidence interval.
¶ Aware of all five warning symptoms and knew that chest pain was not a warning symptom of stroke.

addition, some states with heart disease and stroke prevention programs are conducting activities to increase public awareness of the symptoms of heart attack and stroke and the importance of calling 9-1-1 (*8*).

The 2005 results in this report indicate no improvement in awareness of stroke warning symptoms from the 2001 survey (*9*), although direct comparisons cannot be made because the areas participating in the optional heart attack and stroke module differed in 2005 (13 states and DC) from 2001 (17 states and the U.S. Virgin Islands). In both surveys, few respondents (17.2% in 2001 and 16.4% in 2005) recognized all five stroke warning symptoms, knew that sudden chest pain is not a stroke symptom, and said they would call 9-1-1 immediately if they thought someone was having a stroke or heart attack. Urgent public health efforts are needed to increase the percentage of respondents who meet these measures and should focus on those symptoms with the least awareness (i.e., severe headache with no known cause and sudden trouble seeing in one or both eyes).

Disparities in awareness of stroke warning symptoms and knowing the importance of telephoning 9-1-1 suggest that public health efforts should be targeted to blacks, Hispanics, men, and persons with less education. A 2006 study determined that Hispanics who only spoke Spanish were less likely than Hispanics who also spoke English to be aware of stroke warning symptoms and what action to take if they thought someone was having a stroke or heart attack (*10*). In areas in which awareness of stroke warning symptoms is lower, state and local health departments should consider working together to implement general public awareness campaigns.

The findings in this report are subject to at least four limitations. First, BRFSS excludes households without landline telephones, including those households with only cellular telephones. Second, only 13 states and DC participated in the heart attack and stroke module in 2005; therefore, the results might not be generalizable to the entire population of the United States. Third, the finding in this report regarding the percentage of respondents who identified all five stroke warning symptoms (43.6%) differed substantially from the previously reported estimate of 78% from the 2001 National Health Interview Survey (NHIS), which was used as the initial baseline for objective 12-8 in *Healthy People 2010* (*7*). However, the two results are not directly comparable. NHIS results are representative of the U.S. population, whereas the 2005 BRFSS respondents represented a population with landline telephones in 13 states and DC. Questioning in the two surveys also was structured differently. The NHIS questions did not cover the need to call 9-1-1 and also did not include an incorrect symptom as a check against persons who might answer "yes" to all the stroke symptom awareness questions without actually considering them. Finally, the data collected did not enable determination of whether participants who misidentified the incorrect stroke symptom did not know the correct answer or did not consider the question.

Receiving treatment quickly after a stroke is critical to lowering the risk for disability and even death. Rapid treatment requires that persons 1) recognize the warning symptoms of stroke and 2) call 9-1-1 immediately. These findings indicate a need to increase awareness of stroke warning symptoms in the entire population, and particularly among blacks, Hispanics, men, and persons at lower education levels. In addition, increased education efforts in multiple languages might help improve awareness among non-English-speaking Hispanics and others.

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Arthritis as a Potential Barrier to Physical Activity Among Adults with Diabetes — United States, 2005 and 2007

The American Diabetes Association and the American College of Sports Medicine agree that increasing physical activity among persons with diabetes is an important public health goal to 1) reduce blood glucose and risk factors for complications (e.g., obesity and hypertension) in persons with diabetes and 2) improve cardiovascular disease outcomes (*1,2*). Among adults with diabetes, co-occurring arthritis might present an underrecognized barrier to increasing physical activity, but to date this has not been directly studied. To estimate the prevalence of 1) diagnosed arthritis among adults with diabetes and 2) physical inactivity among adults with diabetes by arthritis status, CDC analyzed combined 2005 and 2007 data from the Behavioral Risk Factor Surveillance System (BRFSS). This report describes the results of that analysis, which indicated that 1) arthritis prevalence was 52.0% among adults with diagnosed diabetes and 2) the prevalence of physical inactivity was higher among adults with diabetes and arthritis (29.8%) compared with adults with diabetes alone (21.0%), an association that was independent of age, sex, or body mass index (BMI). The higher prevalence of physical inactivity among adults who have both diabetes and arthritis suggests that arthritis might be an additional barrier to increasing physical activity. Health-care providers and public health agencies should consider addressing this barrier with arthritis-specific or general evidence-based self-management and exercise programs.

The BRFSS survey is a state-based, random-digit–dialed telephone survey of the civilian, noninstitutionalized U.S. adult population aged ≥18 years and is conducted in all 50 states, the District of Columbia (DC), Guam, Puerto Rico, and the U.S. Virgin Islands. Diabetes was defined as a "yes" response to the question, "Have you ever been told by a doctor that you have diabetes?" Doctor-diagnosed arthritis was defined as a "yes" response to the question, "Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?" This question is included in the BRFSS core questionnaire in odd-numbered years only. Physical activity level of respondents was determined from six questions* that asked about frequency and duration of participation in nonoccupational activities (i.e., lifestyle activities) of moderate and vigorous intensity; those reporting no participation in such activities were classified as inactive (i.e., engaged in no nonoccupational physical activity), and all others as active. BMI was calculated from self-reported height and weight.

To obtain adequate sample sizes for greater statistical power, CDC combined data for the 50 states and DC from 2005 and 2007, calculated estimates, and applied an annual average weighting; 95% confidence intervals (CIs) were calculated using sample design factors to account for the multistage probability sample. To assess factors potentially confounding an association between doctor-diagnosed arthritis and physical inactivity among those with diabetes, data were combined across states/areas in unadjusted and adjusted (by age, sex, and BMI) logistic regression models. Age groups were 18–44 years, 45–64 years, and ≥65 years. BMI groups were underweight/normal weight (BMI <25.0), overweight (BMI 25.0 to <30.0), and obese (BMI ≥30). Statistical significance was determined by nonoverlapping CIs. State-level estimates then were calculated for the 50 states and DC (reported medians were based on these areas) and for Guam, Puerto Rico, and the U.S. Virgin Islands. Council of American Survey Organizations (CASRO) response rates among the 50 states, DC, and the three territories for 2005 ranged from 34.6% (New Jersey) to 67.4% (Alaska) (median: 51.1%), and cooperation rates ranged from 58.7% (California) to 85.3% (Minnesota) (median: 75.1%).† CASRO response rates for 2007 ranged from 26.9% (New Jersey) to 65.4% (Nebraska) (median: 50.6%), and cooperation rates ranged from 49.6% (New Jersey) to 84.6% (Minnesota) (median: 72.1%).§

During 2005 and 2007, the prevalence of arthritis among adults with diabetes was 52.0% (CI = 51.3%–52.7%), compared with 26.9% (CI = 26.7%–27.1%) for all adults aged ≥18 years. The prevalence of arthritis among persons with diabetes was higher than in the general population for both sexes: males (45.9% [CI = 44.8%–47.1%] versus 22.6 [CI = 22.3%–22.9%]); females (58.0% [CI = 57.1%–59.0%] versus 30.9% [CI = 30.7%–31.2%]), respectively. In addition, arthritis prevalence among persons with diabetes was higher than in the general population for all age groups (i.e., 18–44 years, 45–64 years, and ≥65 years): 27.6% (CI = 25.7%–29.7%) versus 11.0% (CI = 10.8%–11.2%), 51.8% (CI = 50.8%–52.9%) versus 36.4% (CI = 36.1%–

*Available at http://www.cdc.gov/brfss/questionnaires/pdf-ques/2005brfss.pdf and http://www.cdc.gov/brfss/questionnaires/pdf-ques/2007brfss.pdf.

†2005 BRFSS data quality report available at http://www.cdc.gov/brfss/technical_infodata/pdf/2005summarydataqualityreport.pdf.

§2007 BRFSS data quality report available at http://www.cdc.gov/brfss/technical_infodata/pdf/2007summarydataqualityreport.pdf.

36.8%), and 62.4% (CI = 61.3%–63.5%) versus 56.2% (CI = 55.8%–56.6%), respectively. Prevalence of physical inactivity was lowest among adults without arthritis or diabetes (10.9% [CI = 10.7%–11.1%]), higher among adults with arthritis alone (17.3% [CI = 17.0%–17.6%]) and diabetes alone (21.0% [CI = 20.0%–22.1%]), and highest among adults with both conditions (29.8% [CI = 29.0%–30.7%]) (Figure). In logistic regression analyses, the unadjusted odds ratio (OR) for the association between doctor-diagnosed arthritis and physical inactivity among adults with doctor-diagnosed diabetes was 1.6 (CI = 1.3–1.7); adjusted for age and sex, the OR was 1.4 (CI = 1.3–1.5); and adjusted for age, sex, and BMI, the OR was 1.3 (CI = 1.2–1.4). In state-specific analyses, the state median prevalence estimate of physical inactivity among adults with diabetes and arthritis was 28.9% (range: 20.2% in California to 46.4% in Tennessee). The state median prevalence estimate of physical inactivity among adults who had diabetes and no arthritis was 19.5% (range: 9.0% in Alaska to 30.2% in West Virginia) (Table).

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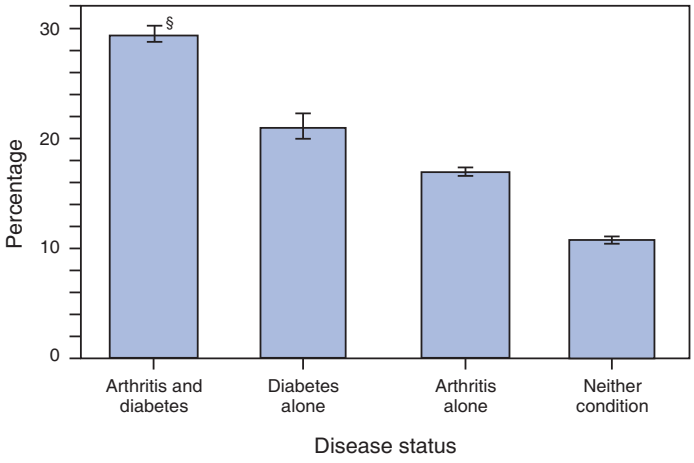
Editorial Note: In the United States, approximately 20.6 million adults were reported to have diabetes in 2005 (*3*), with nearly seven in 10 having diabetes diagnosed by a health professional. In addition, during 2003–2005, approximately 46.4 million adults had arthritis (*4*). Because physical activity is a recommended self-management strategy for both conditions, examining the effect of co-existing arthritis and diabetes on physical activity levels is warranted.

The results of this analysis indicated that, during 2005 and 2007, doctor-diagnosed arthritis affected approximately half of adults with doctor-diagnosed diabetes. The prevalence of self-reported physical inactivity was significantly higher among those with arthritis and diabetes than among those with diabetes alone. This association remained significant after adjustment for age, sex, and BMI, factors that might have otherwise explained the association. State-specific estimates were consistent with the overall findings, with state-to-state differences likely attributable to differences in the distribution of factors associated with both arthritis and physical inactivity in the state population. Because BRFSS data are cross-sectional, they can only demonstrate an association; the temporal sequence of condition onset is unknown.

The associations between arthritis and physical inactivity among adults with diabetes found in this analysis suggest that arthritis might be a barrier to being physically active in this population. Being more physically active (e.g., through aerobic exercise or strength training) can benefit persons with either arthritis or diabetes and those with both conditions (*1*). Persons with diabetes who are inactive and become more active benefit from improved physical function and glucose tolerance (*5*), but they face the same common barriers to being more physically active as most adults, such as lack of time, competing responsibilities, lack of motivation, and difficulty finding an enjoyable activity (*6*). Those who also have arthritis face additional disease-specific barriers, such as concerns about aggravating arthritis pain (*6*) and causing further joint damage, and they might be unsure about which types and amounts of activity are safe for their joints. Health-care providers interested in improving diabetes management might want to especially consider arthritis-related barriers among persons with diabetes who are physically inactive.

Specially tailored self-management education interventions, such as the Chronic Disease Self Management Program (*7*) and the arthritis-specific Arthritis Foundation Self-Help Program, help adults learn to manage arthritis pain and discuss how to safely increase physical activity (*8*). In addition, several exercise programs, including EnhanceFitness (*2*), the Arthritis Foundation Exercise Program, and the Arthritis Foundation Aquatics Program (*8*),

FIGURE. Prevalence of physical inactivity* among adults aged ≥18 years, by disease status — Behavioral Risk Factor Surveillance System, United States,† 2005 and 2007



* Includes all respondents reporting no activity when asked six questions about frequency and duration of participation in nonoccupational activities of moderate and vigorous intensity (i.e., lifestyle activities). All other respondents were classified as active. Questions available at http://www.cdc.gov/brfss/questionnaires/pdf-ques/2005brfss.pdf and http://www.cdc.gov/brfss/questionnaires/pdf-ques/2007brfss.pdf.
† Includes all 50 states and the District of Columbia.
§ 95% confidence interval.

TABLE. Prevalence of arthritis among adults aged ≥18 years with diabetes and prevalence of physical inactivity* among adults with diabetes with and without arthritis, by state/area — Behavioral Risk Factor Surveillance System, United States,† 2005 and 2007

State/Area	Arthritis among adults with diabetes: No. of respondents	Weighted no. (in 1,000s)§	%	(95% CI¶)	Physical inactivity among adults with diabetes: Without arthritis %	(95% CI)	With arthritis %	(95% CI)
Alabama	10,447	201	58.7	(55.0–62.2)	26.0	(21.1–31.7)	35.6	(31.2–40.2)
Alaska	5,365	13	53.8	(45.4–62.1)	9.0	(5.1–15.4)	30.1	(20.1–42.3)
Arizona	9,443	156	45.9	(40.0–51.9)	15.4	(10.0–23.1)	28.3	(21.8–35.7)
Arkansas	11,013	100	55.4	(51.9–58.8)	24.4	(19.4–30.3)	30.8	(26.9–35.1)
California	11,825	810	43.6	(39.5–47.8)	22.5	(17.1–29.0)	20.2	(15.7–25.6)
Colorado	17,887	79	46.3	(42.7–49.8)	14.9	(11.5–19.0)	24.6	(20.6–29.1)
Connecticut	12,777	82	44.8	(41.0–48.6)	16.8	(13.1–21.2)	27.4	(23.0–32.4)
Delaware	8,183	30	54.1	(49.5–58.6)	18.1	(13.3–24.2)	27.9	(23.0–33.3)
District of Columbia	7,700	16	48.2	(43.5–52.9)	22.8	(17.1–29.6)	29.2	(23.6–35.4)
Florida	47,739	580	49.2	(46.1–52.3)	24.6	(20.9–28.6)	34.0	(30.1–38.0)
Georgia	13,767	340	55.6	(52.0–59.1)	15.8	(12.7–19.6)	29.2	(25.4–33.3)
Hawaii	13,019	31	42.6	(38.6–46.8)	19.5	(15.3–24.5)	24.5	(19.6–30.1)
Idaho	11,049	41	53.7	(49.9–57.4)	15.3	(11.7–19.7)	24.7	(20.5–29.5)
Illinois	10,313	398	50.2	(46.1–54.2)	21.8	(16.8–27.9)	29.5	(24.9–34.5)
Indiana	11,626	220	57.0	(53.5–60.4)	22.0	(17.5–27.3)	29.6	(25.4–34.1)
Iowa	10,479	82	54.2	(50.5–58.0)	15.4	(11.8–19.9)	34.5	(29.8–39.5)
Kansas	17,121	75	51.5	(48.6–54.5)	19.0	(16.0–22.5)	33.3	(29.9–37.0)
Kentucky	13,536	153	53.9	(50.2–57.6)	32.8	(27.6–38.4)	44.8	(40.3–49.4)
Louisiana	9,620	157	54.1	(50.4–57.7)	28.7	(24.1–33.9)	42.8	(37.9–47.8)
Maine	10,790	44	56.6	(52.7–60.5)	13.0	(9.4–17.8)	27.5	(23.3–32.2)
Maryland	17,461	177	55.1	(51.9–58.3)	18.8	(15.4–22.7)	28.9	(25.1–32.9)
Massachusetts	30,413	161	48.5	(45.6–51.4)	21.4	(18.1–25.2)	31.0	(27.4–34.8)
Michigan	19,641	365	57.5	(54.8–60.2)	18.3	(15.2–21.9)	29.1	(26.0–32.3)
Minnesota	7,603	106	47.8	(42.8–52.8)	16.0	(11.4–21.9)	20.3	(15.2–26.7)
Mississippi	12,257	130	58.4	(55.4–61.4)	24.0	(20.2–28.3)	38.7	(35.0–42.6)
Missouri	10,427	214	62.2	(57.9–66.3)	20.8	(14.6–28.7)	30.4	(25.9–35.2)
Montana	10,978	23	52.9	(48.7–57.1)	16.7	(12.4–22.2)	23.4	(18.7–28.9)
Nebraska	19,276	50	54.0	(50.3–57.6)	20.0	(16.1–24.6)	27.3	(23.1–31.9)
Nevada	7,286	70	51.8	(46.1–57.4)	23.9	(17.2–32.1)	23.3	(17.5–30.3)
New Hampshire	12,028	36	53.0	(49.3–56.6)	17.2	(13.6–21.6)	29.9	(25.6–34.5)
New Jersey	20,899	273	50.2	(47.1–53.4)	24.6	(20.8–28.9)	32.6	(28.5–36.9)
New Mexico	12,191	50	47.4	(43.6–51.2)	17.4	(13.7–21.8)	27.2	(23.0–31.8)
New York	14,321	600	51.6	(48.0–55.1)	21.7	(17.4–26.6)	26.7	(22.7–31.2)
North Carolina	32,038	320	56.1	(53.9–58.2)	21.1	(18.5–23.8)	32.4	(29.9–35.1)
North Dakota	8,761	16	49.8	(45.4–54.3)	18.8	(14.0–24.7)	26.6	(21.6–32.3)
Ohio	18,727	431	58.9	(55.7–61.9)	21.9	(17.8–26.7)	28.3	(24.8–31.9)
Oklahoma	21,170	142	55.5	(52.5–58.4)	20.9	(17.3–25.1)	34.1	(30.7–37.7)
Oregon	16,966	95	50.4	(47.1–53.7)	14.9	(11.7–18.7)	23.9	(20.5–27.7)
Pennsylvania	26,609	455	57.0	(53.8–60.3)	19.9	(16.5–23.8)	28.0	(24.5–31.7)
Rhode Island	8,475	31	56.7	(52.3–61.0)	20.4	(15.4–26.5)	32.5	(27.3–38.2)
South Carolina	18,835	176	56.0	(53.4–58.6)	20.2	(16.6–24.3)	29.0	(26.1–32.1)
South Dakota	13,786	19	50.9	(47.4–54.5)	16.2	(12.8–20.2)	27.2	(23.4–31.3)
Tennessee	9,781	266	57.4	(52.9–61.8)	32.9	(26.8–39.7)	46.4	(41.3–51.6)
Texas	23,760	691	46.3	(43.7–49.0)	20.0	(17.3–23.0)	32.3	(28.8–36.0)
Utah	10,216	47	49.8	(45.3–54.3)	14.1	(10.0–19.6)	24.5	(19.2–30.8)
Vermont	13,699	17	53.0	(49.1–57.0)	13.9	(10.3–18.5)	25.1	(21.0–29.8)
Virginia	11,696	234	55.5	(51.7–59.2)	14.8	(11.4–19.0)	26.3	(22.2–30.8)
Washington	49,183	162	50.8	(48.8–52.8)	14.9	(12.9–17.1)	23.9	(21.6–26.3)
West Virginia	7,998	90	58.8	(55.3–62.3)	30.2	(25.1–36.0)	39.0	(34.8–43.4)
Wisconsin	12,335	153	56.9	(52.8–60.9)	11.1	(8.1–15.2)	23.5	(19.3–28.4)
Wyoming	11,169	14	52.6	(48.8–56.3)	14.7	(11.2–18.9)	27.7	(23.3–32.7)
*Median***	—	—	*53.7*	*(51.5–55.1)*	*19.5*	*(17.2–20.9)*	*28.9*	*(27.4–29.9)*
Guam	657	2	37.4	(25.4–51.2)	—	—	—	—
Puerto Rico	7,723	163	46.3	(43.1–49.6)	45.7	(40.9–50.7)	55.4	(50.9–59.8)
U.S. Virgin Islands	4,960	2	31.8	(27.1–36.9)	20.8	(15.7–27.1)	32.0	(24.1–41.1)

* Includes all respondents reporting no activity when asked six questions about frequency and duration of participation in nonoccupational activities of moderate and vigorous intensity (i.e., lifestyle activities). All other respondents were classified as active. Questions available at http://www.cdc.gov/brfss/questionnaires/pdf-ques/2005brfss.pdf and http://www.cdc.gov/brfss/questionnaires/pdf-ques/2007brfss.pdf.

† Includes all 50 states, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands.

§ Weighted annual average number of adults with diabetes who also have arthritis.

¶ Confidence interval.

** Does not include Guam, Puerto Rico, or the U.S. Virgin Islands.

are available in many communities and are appropriate for adults with diabetes and arthritis. Self-directed physical activities, including joint-friendly activities such as walking, swimming, and biking, also are appropriate for adults with both conditions.[¶]

The findings in this report are subject to at least five limitations. First, doctor-diagnosed arthritis, doctor-diagnosed diabetes, and activity level are self-reported in BRFSS and have not been confirmed by a health-care provider or objective monitoring; however, such self-reports have been shown to be valid for surveillance purposes (*9,10*). Second, BRFSS is a telephone survey and does not include persons without landline telephones, persons in the military, or those residing in institutions. Third, comparisons of tabular data between states should be made with caution because the prevalence estimates are not adjusted for population characteristics (e.g., age) that might explain differences. Unadjusted data are presented in this report to provide actual estimates for state-level program planning. Fourth, BRFSS response rates were low for both survey years. BRFSS weighting procedures partially correct for nonresponse. The effect of low response rates is uncertain. Finally, the findings in this report do not account for persons with undiagnosed diabetes.

In 2007, CDC released a reference guide for planning physical activity interventions for older adults, including those with diabetes (*2*). This guide suggests different programs sensitive to the medical needs of persons with diabetes and those with chronic disease complications or physical limitations, and promotes active aging among persons not yet limited by complications or limitations of diabetes or arthritis. Because arthritis appears to be an additional barrier to increasing physical activity, state-level diabetes programs whose aim is to increase physical activity among adults with diabetes might meet their own goals more readily by integrating their efforts with arthritis programs.

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Progress Toward Interruption of Wild Poliovirus Transmission — Worldwide, January 2007–April 2008

In 1988, the World Health Assembly resolved to eradicate poliomyelitis. Subsequently, the Global Polio Eradication Initiative reduced the global incidence of polio associated with wild polioviruses (WPVs) from an estimated 350,000 cases in 1988 to 1,997 reported cases in 2006 and reduced the number of countries that have never succeeded in interrupting WPV transmission from 125 to four (Afghanistan, India, Nigeria, and Pakistan) (*1–4*). Type 2 WPV (WPV2) circulation was last observed in October 1999 (*5*). In February 2007, the World Health Organization (WHO) convened a stakeholders meeting to agree on an accelerated polio-eradication effort to be used during 2007–2008 and establish milestones to monitor progress. Programmatic strategies implemented in 2007 included expanded use of type 1 monovalent oral poliovirus vaccine (OPV) (mOPV1) to eliminate type 1 WPV (WPV1) transmission before type 3 WPV (WPV3)* (*6*) and targeted use of type 3 monovalent OPV (mOPV3) in selected areas (*1–4*). This report summarizes these strategies and overall progress toward reaching the milestones, including a decline in the overall number of WPV cases to 1,310 in 2007 and substantial progress toward interruption of WPV1 circulation in India in 2008.

[¶] Additional information available at http://www.cdc.gov/arthritis/campaigns/physical_activity/index.htm.

* WPV1 is more likely to cause paralytic disease and have a wide geographic spread than WPV3.

Routine OPV Vaccination

Routine vaccination remains an integral component of the polio eradication initiative. Global routine vaccination coverage for infants with 3 doses of trivalent OPV (tOPV) was estimated at 80% in 2006[†] (*7*), an increase from 73% in 2001. Estimated coverage varied among WHO regions: 65% in the South-East Asian, 75% in the African, 86% in the Eastern Mediterranean, and >93% in the Western Pacific, European, and Americas regions. In the four polio-endemic countries, 3-dose tOPV coverage was estimated at 77% in Afghanistan, 58% in India, 61% in Nigeria, and 83% in Pakistan; however, substantially lower coverage (<40%) has been reported in subnational areas with ongoing polio transmission (i.e., northern Nigeria and the northern Indian states of Uttar Pradesh and Bihar) (*2,3*).

Supplementary Immunization Activities (SIAs)[§] in 2007

In 2007, 164 SIAs were conducted in 27 countries (60 national immunization days, 86 subnational immunization days, and 18 mop-up rounds with OPV), using a total of 2.32 billion OPV doses delivered to 400 million children aged <5 years. Use of mOPV1 increased from 22% of all administered SIA doses in 2005 to 46% in 2006 and to 52% in 2007, reflecting the programmatic emphasis on interrupting WPV1 transmission (*6*). A total of 76 (46%) of the 164 SIAs were conducted in the four polio-endemic countries: 25 in India, 19 in Pakistan, and 16 each in Afghanistan and Nigeria. Of the remaining 88 SIAs, 56 (34% of all SIAs) were conducted in eight countries where WPV was reintroduced through importation,[¶] and 32 (20% of all SIAs) were conducted in 15 countries with no WPV-confirmed cases in 2007 in response to earlier outbreaks or as a precaution against poliovirus importations.

To improve SIA quality, strategies that were introduced in 2006 in the four polio-endemic countries were continued in 2007. Nigeria continued "immunization-plus days" that offered other vaccines (e.g., measles, hepatitis B, and diphtheria and tetanus toxoids and pertussis vaccines) and health interventions (e.g., bednets and deworming medication) in addition to OPV during SIAs (*2*). Despite repeated SIAs and because of lower routine vaccination coverage in high-risk areas, the proportion of "zero-dose children"[**] in 2007 was substantially higher in polio-affected (18%) areas in Nigeria than in polio-free areas (2%). In India, the government maintained intensive large-scale SIAs in districts of Bihar and western Uttar Pradesh with the highest polio risk, primarily using mOPV1 and concentrating on improving coverage among children aged <2 years. The proportion of zero-dose children in India was <1% in both polio-affected areas and polio-free areas. Afghanistan and Pakistan implemented an approach that included improved cross-border synchronization of polio campaigns. In addition, access during SIAs in insecure areas of Afghanistan that previously were inaccessible by vaccinators improved beginning September 2007, after obtaining the support of antigovernment groups; nonetheless, the proportion of zero-dose children overall for 2007 was 9% in those areas. Otherwise, the proportion of zero-dose children was essentially the same in both countries in polio-affected areas (≤1%) and polio-free areas (<1%).

Acute Flaccid Paralysis (AFP) Surveillance

The quality of AFP surveillance is monitored by two performance indicators: 1) the rate of AFP cases not caused by WPV (i.e., the nonpolio AFP rate; target for certification: more than one case per 100,000 persons aged <15 years), and 2) the proportion of AFP cases with adequate stool specimens[††] (target for certification: >80%). In 2007, each WHO region maintained sensitivity of AFP surveillance to detect paralytic polio cases at certification-standard levels (Table). Globally, AFP case reporting increased 13%, from 68,519 cases in 2006 to 77,433 cases in 2007, primarily as a result of increased reporting from India. Since 2005, a target reporting rate for all polio-endemic countries and countries at high risk for WPV importation has been more than two nonpolio AFP cases per 100,000 persons aged <15 years (*8*). In 2007, all four polio-endemic countries and the eight countries with cases reported in 2007 (because of reintroduced WPV) reached this target rate.

Global Polio Laboratory Network

In 2007, WHO accredited 98% of the 145 global poliovirus network laboratories, which together analyzed approximately 157,000 stool specimens from persons with AFP. In addition, the laboratory network finalized implementa-

[†] Most recent year for which data are available; WHO/UNICEF estimates.

[§] Mass campaigns conducted during a brief period (days to weeks) in which 1 dose of OPV is administered to all children aged <5 years, regardless of vaccination history.

[¶] Angola, Chad, Democratic Republic of the Congo, Burma (Myanmar), Nepal, Niger, Somalia, and Sudan.

[**] Children aged 6–35 months with nonpolio acute flaccid paralysis who had never been vaccinated with OPV, according to vaccination histories provided by their mothers.

[††] Two specimens collected ≥24 hours apart, both within 14 days of paralysis onset, and shipped on ice or frozen ice packs to a WHO-accredited laboratory, arriving at the laboratory in good condition.

tion of a testing approach in countries of WHO regions with WPV circulation that reduces poliovirus confirmation time by 50% (to 21 days), compared with previous methods.[§§] The percentage of stool specimens tested from polio-endemic regions in laboratories with capacity for both virus isolation in cell culture and differentiation of wild or vaccine-like viruses increased from 57% in 2006 to 69% in 2007.

WPV Incidence

As of April 30, 2008, a total of 1,310 polio cases with onset of paralysis in 2007 had been reported worldwide (Table), a decrease of 34% from the 1,997 cases reported in 2006. With the strategic emphasis on WPV1 elimination, WPV1 cases decreased 81% from 1,666 in 2006 to 321 cases in 2007; however, WPV3 cases tripled from 331 in 2006 to 989 in 2007 (Figure 1). The reported number of polio-affected districts in all countries decreased 26% from 463 in 2006 to 342 in 2007. A total of 106 (8%) cases in 2007 were in countries where WPV was reintroduced through importation, compared with 1,301 (40%) of 3,234 cases during 2004–2005 (*9*). As of April 30, a total of 134 WPV1 cases and 220 WPV3 cases with onset of paralysis in 2008 had been reported (Figure 2), compared with 64 WPV1 cases and 66 WPV3 cases reported during the same period in 2007.

India. Reported WPV1 cases declined 87% in India, from 646 in 2006 to 83 in 2007, associated with expanded use of mOPV1 (*3*). Western Uttar Pradesh, which had been the primary reservoir of WPV1 circulation in recent years, reported five WPV1 cases in 2007. The number of WPV1-affected districts declined 61%, from 114 in 2006 to 45 in 2007. However, a WPV3 outbreak involving Uttar Pradesh and spreading to Bihar resulted in an increase in WPV3 cases from 28 in 2006 to 787 in 2007; the number of WPV3-affected districts increased from seven in 2006 to 77 in 2007. Primary use of mOPV1 in SIAs during 2006–2008 has accelerated the decline in WPV1 cases; as of April 30, 2008, only four cases had been reported in 2008 (in New Delhi, Orissa, Bihar, and West Bengal), compared with 26 cases during the same period in 2007.

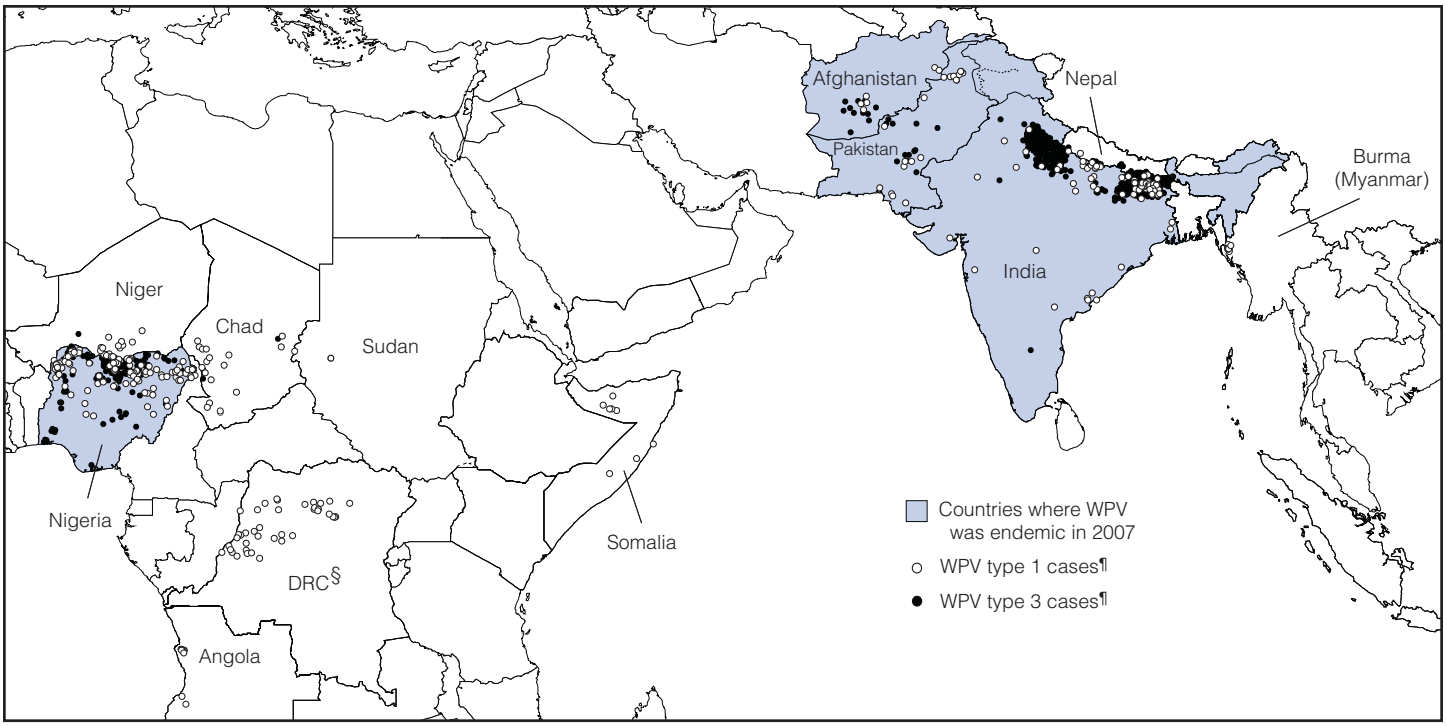
[§§] Additional information available at http://www.who.int/immunization_monitoring/Supplement_polio_lab_manual.pdf.

TABLE. Number and rate of acute flaccid paralysis (AFP) cases in 2007 and number of wild poliovirus (WPV)-confirmed cases of poliomyelitis in 2007, January–April 2007, and January–April 2008, by World Health Organization (WHO) region and country*

Region/Country	No. of reported AFP cases 2007	Nonpolio AFP rate† 2007	% AFP cases with adequate specimens 2007§	No. of WPV-confirmed cases (no. of WPV type 1 cases)					
				2007		January–April 2007		January–April 2008	
African	12,077	4.0	90	366	(193)	76	(28)	137	(120)
Angola	281	3.0	91	8	(8)	0	(0)	3	(1)
Chad	163	2.9	88	21	(18)	0	(0)	2	(0)
Democratic Republic of the Congo	2,040	5.6	85	41	(41)	12	(12)	1	(1)
Niger	231	3.3	92	11	(10)	3	(1)	5	(5)
Nigeria¶	4,277	5.9	94	285	(116)	61	(15)	126	(113)
Eastern Mediterranean	9,396	4.2	91	58	(34)	14	(9)	10	(9)
Afghanistan¶	1,116	6.8	92	17	(6)	0	(0)	5	(4)
Pakistan¶	4,425	5.7	91	32	(19)	7	(2)	4	(4)
Somalia	184	4.0	91	8	(8)	7	(7)	0	(0)
Sudan	493	3.1	91	1	(1)	0	(0)	1**	(1)
South-East Asian	46,133	7.4	84	886	(94)	40	(27)	206	(4)
India¶	41,531	9.3	84	870	(83)	39	(26)	203	(4)
Burma (Myanmar)	413	2.0	91	11	(11)	1	(1)	0	(0)
Nepal	343	3.2	83	5	(0)	0	(0)	3	(0)
American	2,151	1.3	78	—	—	—	—	—	—
European	1,445	1.0	82	—	—	—	—	—	—
Western Pacific	6,231	1.6	90	—	—	—	—	—	—
Total	**77,433**	**4.2**	**86**	**1,310**	**(321)**	**130**	**(64)**	**354**	**(134)**

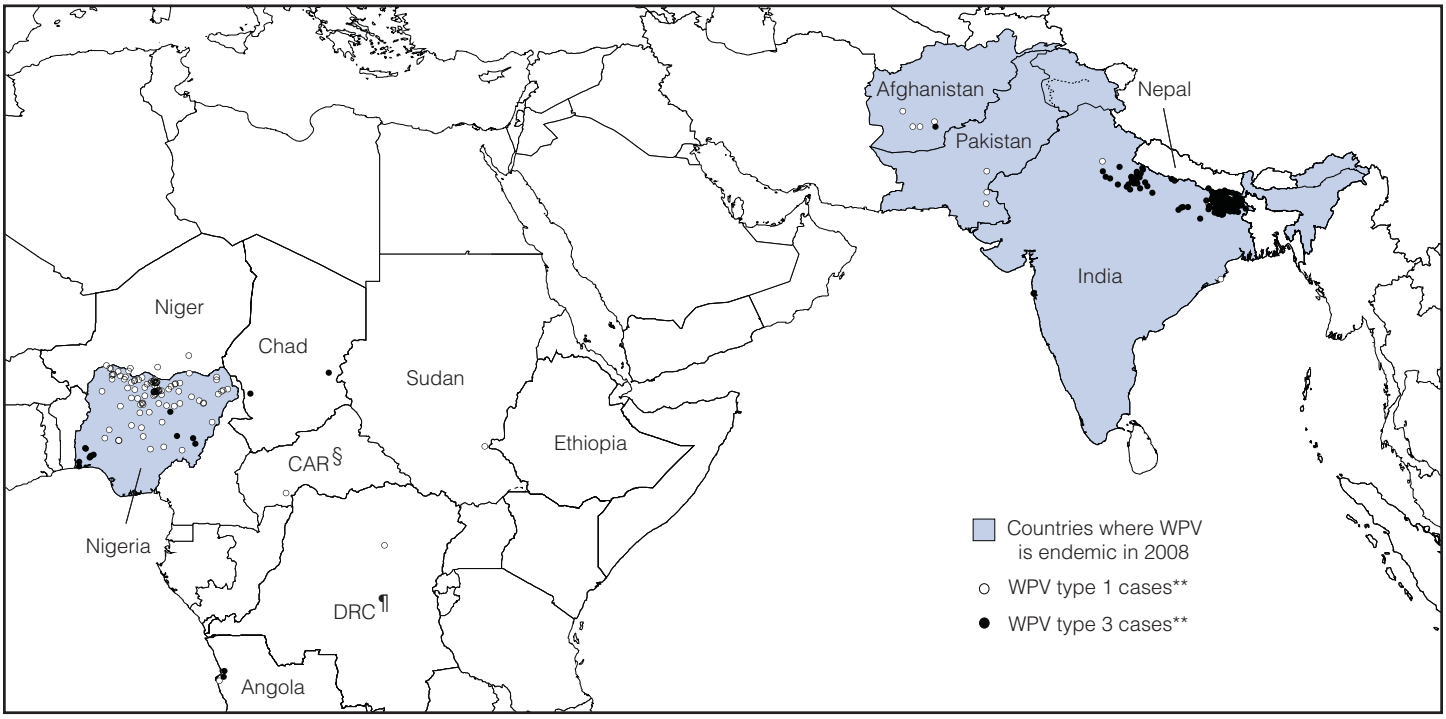
* Data reported to WHO as of April 30, 2008. Only countries with WPV in 2007 are included. Central African Republic has reported a WPV1 case in 2008. When averaging global, regional, or national surveillance indicators, suboptimal performance-quality indicators in smaller areas might be masked.
† Per 100,000 persons aged <15 years.
§ Two stool specimens collected at an interval of ≥24 hours within 14 days of paralysis onset and adequately shipped to a WHO-accredited laboratory.
¶ Countries where WPV transmission has never been interrupted.
** Pending final allocation of case.

FIGURE 1. Number of wild poliovirus (WPV) cases* — worldwide, 2007†



* Data reported for 2007 to the World Health Organization as of April 30, 2008 (N = 1,310).
† Excludes polioviruses detected by environmental surveillance and vaccine-derived polioviruses.
§ Democratic Republic of the Congo.
¶ By place of patient residence.

FIGURE 2. Number of wild poliovirus (WPV) cases* — worldwide, 2008†



* Data reported for 2008 to the World Health Organization as of April 30, 2008 (N = 354).
† Excludes polioviruses detected by environmental surveillance and vaccine-derived polioviruses.
§ Central African Republic.
¶ Democratic Republic of the Congo.
** By place of patient residence.

Monthly reported WPV3 cases decreased from a peak of 216 cases in December 2007 to 32 cases in March 2008; nonetheless, 199 cases of WPV3 had been reported in 2008, primarily in Bihar, compared with 13 during the same period in 2007.

Nigeria. Reported WPV1 cases declined 86% in Nigeria, from 843 in 2006 to 116 in 2007, and reported WPV3 cases declined 39%, from 277 in 2006 to 169 in 2007. The number of WPV1-affected districts declined 62%, from 203 in 2006 to 78 in 2007. The number of WPV3-affected districts declined 14%, from 125 in 2006 to 108 in 2007; however, WPV3 outbreaks and isolated cases occurred in districts in certain previously polio-free southern states. As of April 30, 2008, a total of 113 WPV1 cases and 13 WPV3 cases with onset in 2008 had been reported, compared with 15 WPV1 cases and 46 WPV3 cases reported for the same period in 2007.

Pakistan and Afghanistan. WPV circulates between Pakistan and Afghanistan. WPV1 cases decreased in Pakistan, from 20 in 2006 to 19 in 2007, whereas WPV3 cases decreased 35%, from 20 in 2006 to 13 in 2007. Twelve districts were affected with WPV1 in both 2006 and 2007, whereas the number of WPV3-affected districts declined 36%, from 14 in 2006 to nine in 2007. Transmission has remained confined to two known virus reservoirs along the Pakistan-Afghanistan border, with the southern reservoir extending well into nonborder districts in southern Pakistan provinces (*4*). By April 30, 2008, four WPV1 cases with onset in 2008 had been reported in Pakistan, compared with two WPV1 and five WPV3 cases during the same period in 2007.

Although access during SIAs in Afghanistan did not improve until late in 2007 in the areas with security problems, the number of WPV1 cases decreased 79%, from 29 cases in 2006 to six in 2007; however, the number of WPV3 cases increased from two cases in 2006 to 11 in 2007 (*4*). WPV1 and WPV3 transmission continued in the Southern Region, and two cases of WPV1 were reported in the Eastern Region in areas bordering Pakistan. The number of WPV1-affected districts decreased 65%, from 17 in 2006 to six in 2007, whereas the number of WPV3-affected districts increased from two in 2006 to nine in 2007 (*4*). As of April 30, 2008, four WPV1 cases and one WPV3 case with onset in 2008 had been reported in Afghanistan, compared with no WPV cases during the same period in 2007.

Other countries. Thirteen countries, once polio-free, reported WPV cases in 2006 following WPV importation[¶¶]; six of these countries reported polio cases in 2007 (Angola, Chad, Democratic Republic of the Congo [DRC], Nepal, Niger, and Somalia).[***] In Angola and DRC, transmission in 2007 (with eight and 41 cases, respectively) followed importation of WPV1 originating in India; as of April 30, 2008, Angola and DRC each had reported one WPV1 case in 2008, compared with no cases and 12 cases, respectively, during the same period in 2007. In addition, two WPV3 cases were identified in Angola in 2008, both with onset in March, also genetically indicating origin in India. In Chad, circulation of WPV1 (18 cases) and WPV3 (three cases) in 2007 continued after introduction from Nigeria in past years and 2007. In Niger, with a total of 10 WPV1 cases and one WPV3 case, certain importations from neighboring Nigeria resulted in clusters of cases from internal transmission. As of April 30, 2008, two WPV3 cases had been reported in 2008 from Chad and five WPV1 cases from Niger.[†††] Nepal, bordering India, had five sporadic WPV3 importations in 2007; as of April 30, 2008, three WPV3 cases had been reported in Nepal in 2008. Somalia reported eight WPV1 cases in 2007 but has had >1 year without detection of cases after an outbreak during July 2005–March 2007.

After several years without polio, Burma (Myanmar) had an outbreak of 11 WPV1 cases in 2007, with the last reported case occurring in May. Sudan, which had no reported polio cases in 2006, reported a single confirmed case of WPV1 circulating in Chad. However, as of April 30, 2008, a case with onset in February 2008 occurred on the Sudan-Ethiopia border; the exact location is under investigation. Genomic sequencing analysis indicates years of undetected WPV1 chains of transmission within Sudan, western Ethiopia, or both; the closest genetic relationship is with WPV1 isolated from a patient in Sudan in 2004.

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Editorial Note: In 2007, substantial progress was made toward limiting the geographic extent and number of cases of WPV1 transmission in India as a result of intensive SIAs with increased use of mOPV1 in affected areas. However, WPV3 transmission increased in Uttar Pradesh and Bihar because of the intended focus on elimination of WPV1, limited mOPV3 supply in India, restricted tOPV use in

[¶¶] Angola, Bangladesh, Chad, Democratic Republic of the Congo, Ethiopia, Indonesia, Kenya, Namibia, Nepal, Niger, Somalia, Sudan, and Yemen.

[***] As determined by genetic lineage, 33 of 35 separate importations have been stopped (defined as lack of detection of related WPV cases since September 30, 2007) in 11 of the 13 countries; transmission of imported poliovirus lineages circulating in 2006 continues in Chad and Democratic Republic of the Congo.

[†††] Additionally, Central African Republic, last reporting WPV1 in 2004 (*9*), has identified a WPV1 case in the capital, Bangui, with onset in April 2008.

SIAs in 2007, and underlying insufficient routine vaccination coverage (*3*). Combined use of mOPV1, mOPV3, and tOPV is expected to lead to interruption of WPV1 transmission and a substantial decrease in WPV3 transmission in India by the end of 2008.

WPV1 cases and affected districts also decreased substantially in Nigeria during 2007, compared with 2006. However, this decrease has not been sustained; more WPV1 cases have occurred in 2008 than during the same period in 2007. The proportion of children entirely missed during SIAs and routine vaccinations remains high (>10%) in certain states in Nigeria. Major efforts to strengthen routine vaccination services and the quality of SIA implementation are continuing (*2*).

The number of confirmed WPV1 cases decreased nearly 80% in Afghanistan but has not substantially decreased in Pakistan; security and access problems in border areas of Afghanistan and Pakistan are continuing, but improved access (compared with early 2007) in Afghanistan and continuing coordinated cross-border vaccination efforts might produce better results in 2008. Operational problems in vaccinating children in secure areas of Pakistan also are being addressed (*4*).

The WHO stakeholders meeting in February 2007 established three milestones for the end of 2007 (*6*). The first milestone was to reduce the number of affected districts in the four polio-endemic countries by >50% compared with 2006. A 59% reduction in WPV1-affected districts has occurred, but WPV3-affected districts have increased 37% (for a net 24% reduction in WPV-affected districts).

The second milestone, reducing the proportion of zero-dose children in polio-affected areas to less than that in polio-free areas, has been met in India and major portions of affected areas in Afghanistan and Pakistan. However, this milestone has not been achieved in the high-risk areas of Nigeria and Afghanistan.

The third milestone involves interrupting transmission in all 13 countries with polio cases resulting from imported WPV in 2006. WPV transmission continued in Chad and DRC through 2007 and into 2008. New cases and transmission were reported in Angola and Niger during 2007, and Nepal experienced repeated WPV3 importations in 2007. However, Sudan or western Ethiopia, or both, have had longstanding WPV1 circulation since importation of WPV of Nigerian origin into Sudan in 2004 (*9*) without detection during 2006–2007, which indicates that surveillance quality should be monitored within each country by subnational area and strengthened where needed. Ongoing WPV transmission in Angola, Chad, DRC, and Sudan and/or Ethiopia requires continuing efforts to overcome the operational impediments limiting the vaccination of children.

The technical feasibility of polio eradication has been demonstrated repeatedly by the ability to interrupt WPV transmission in some of the most difficult to access and insecure areas in the world, including areas that have limited health infrastructure, such as Somalia. In 2007, the feasibility of polio eradication was highlighted by the substantial progress toward WPV1 interruption in India. The concerted effort to interrupt WPV1 transmission worldwide continues in 2008, with a focus on administering mOPV1 in SIAs, combined with periodic use of mOPV3 and tOPV. Sustained commitment by governments and international partners with ongoing program evaluation and adaptation to changing circumstances is crucial for progress to continue.

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Measles — United States, January 1–April 25, 2008

On May 1, this report was posted as an MMWR Early Release *on the* MMWR *website* (http://www.cdc.gov/mmwr).

Measles, a highly contagious acute viral disease, can result in serious complications and death. As a result of a successful U.S. vaccination program, measles elimination (i.e., interruption of endemic measles transmission) was declared in the United States in 2000 (*1*). The number of reported measles cases has declined from 763,094 in 1958

to fewer than 150 cases reported per year since 1997 (*1*). During 2000–2007,* a total of 29–116 measles cases (mean: 62, median: 56) were reported annually. However, during January 1–April 25, 2008, a total of 64 confirmed measles cases were preliminarily reported to CDC, the most reported by this date for any year since 2001. Of the 64 cases, 54 were associated with importation of measles from other countries into the United States, and 63 of the 64 patients were unvaccinated or had unknown or undocumented vaccination status. This report describes the 64 cases and provides guidance for preventing measles transmission and controlling outbreaks through vaccination, infection control, and rapid public health response. Because these cases resulted from importations and occurred almost exclusively in unvaccinated persons, the findings underscore the ongoing risk for measles among unvaccinated persons and the importance of maintaining high levels of vaccination.

Measles cases in the United States are reported by state health departments preliminarily to CDC, and confirmed cases are reported officially via the National Notifiable Disease Surveillance System, using standard case definitions† and case classifications. Cases are considered importation associated if they are 1) acquired outside the United States (i.e., international importation) or 2) acquired inside the United States and either epidemiologically linked via a chain of transmission to an importation or accompanied by virologic evidence of importation (i.e., a chain of transmission from which a measles virus is identified that is not endemic in the United States). Other cases in the United States are classified as having an unknown source.

During January 1–April 25, 2008, a total of 64 preliminary confirmed measles cases were reported from the following areas: New York City (22 cases), Arizona (15), California (12), Michigan and Wisconsin (four each), Hawaii (three), and Illinois, New York state, Pennsylvania, and Virginia (one each) (Figure). Patients ranged in age from 5 months to 71 years; 14 patients were aged <12 months, 18 were aged 1–4 years, 11 were aged 5–19 years, 18 were aged 20–49 years, and three were aged ≥50 years, including one U.S. resident born before 1957.§

Fourteen (22%) patients were hospitalized; no deaths were reported. Transmission occurred in both health-care and community settings. One of the 44 patients for whom transmission setting was known was an unvaccinated health-care worker who was infected in a hospital. Seventeen (39%) were infected while visiting a health-care facility, including a child aged 12 months who was exposed in a physician's office when receiving a routine dose of measles, mumps, and rubella (MMR) vaccine.

Fifty-four (84%) of the 64 measles cases were importation associated: 10 (16%) of the 64 were importations (five in visitors to the United States and five in U.S. residents traveling abroad) from Switzerland (three), Israel (three), Belgium (two), and India and Italy (one each); 29 (45%) cases were epidemiologically linked to importations; and 15 (23%) cases had virologic evidence of importation. The remaining 10 (16%) cases were from unknown sources; however, all occurred in communities with importation-associated cases. Specimens from 14 patients were genotyped at CDC, and four different genotypes were identified: three from Arizona (genotype D5), three from California (D5), five from New York City (one in a case epidemiologically linked to an imported case from Belgium and four in cases in communities where importations from Israel had occurred; all D4), two from Wisconsin (H1), and one from Michigan (D5).

Fifty-six of the 64 measles cases reported in 2008 have occurred in five outbreaks (defined as three or more cases linked in time or place). In New York City, an outbreak of 22 cases has been reported, including four importations and 18 other cases (10 importation associated). In Arizona, 15 cases have been reported; the index patient was an unvaccinated adult visitor from Switzerland. In San Diego, California, 11 cases have been reported, and an additional case spread to Hawaii; the index patient in the San Diego outbreak was an unvaccinated child who had traveled to Switzerland. In Michigan, four cases have been reported; the index patient was an unvaccinated youth aged 13 years with an unknown source of infection. In Wisconsin, four cases have been reported; the index patient was a person aged 37 years with unknown vaccination status who likely was exposed to a Chinese visitor with measles-compatible illness.

Sixty-three of the 64 patients were unvaccinated or had unknown or undocumented¶ vaccination status, and one patient had documentation of receiving 2 doses of MMR vaccine. None of the five patients who were visitors to the

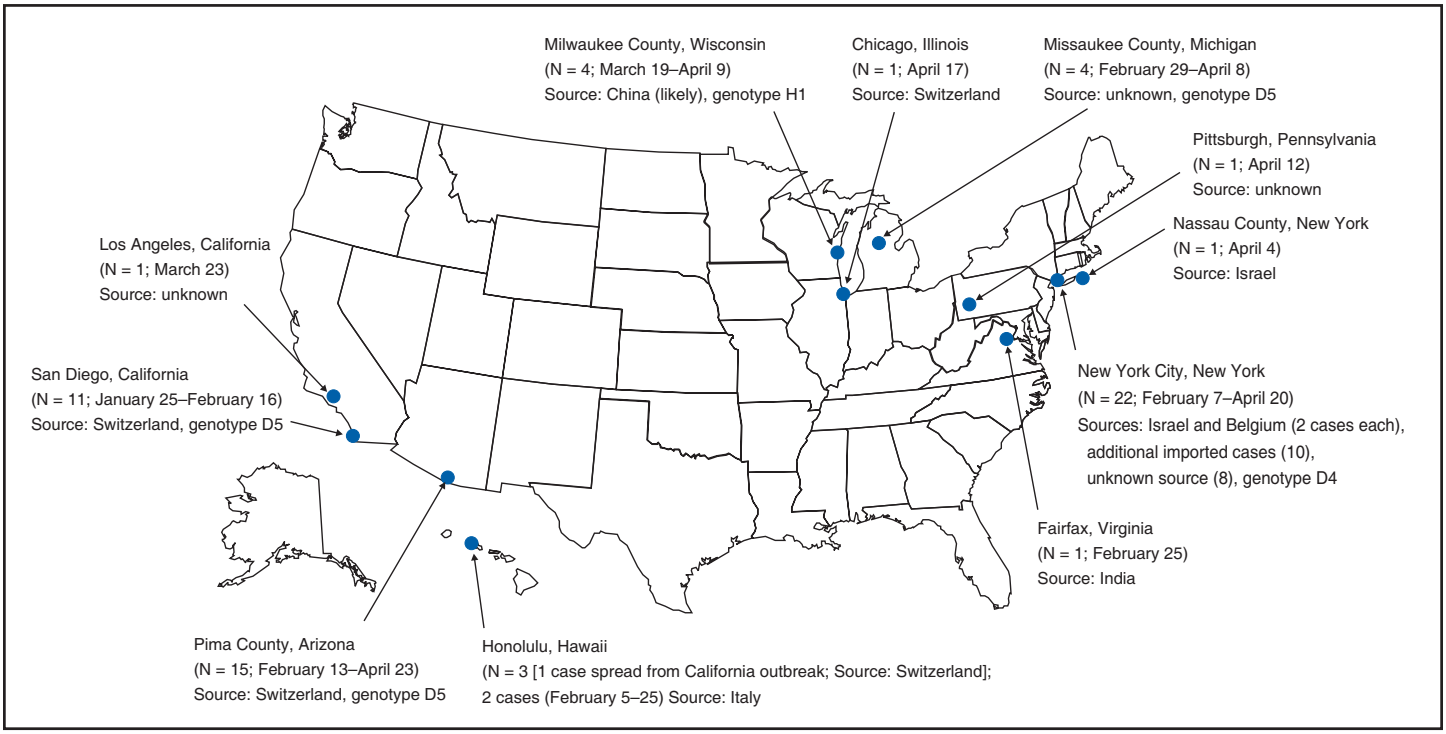
* Based on *MMWR* surveillance summaries (2000–2006) and CDC unpublished provisional data as of December 31, 2007.

† Measles clinical case definition: an illness characterized by a generalized maculopapular rash, a temperature of ≥101°F (≥38.3°C) and cough, coryza, or conjunctivitis. A case is considered confirmed if it is laboratory confirmed (using serologic or virologic methods) or if it meets the clinical case definition and is epidemiologically linked to a confirmed case.

§ The other two cases in persons aged ≥50 years occurred in a U.S. resident aged 50 years and a visitor from Switzerland aged 71 years.

¶ Two adults in the Arizona outbreak reported receipt of 1 and 2 vaccine doses, respectively, but lacked documentation.

FIGURE. Number of reported measles cases* (N = 64) — United States, January 1–April 25, 2008



* Number of preliminary confirmed cases reported to CDC as of April 25, 2008.

United States had been vaccinated. Among the 59 patients who were U.S. residents, 13 were aged <12 months and too young to be vaccinated routinely, seven were children aged 12–15 months and had not yet received vaccination, 21 were children aged 16 months–19 years, including 14 (67%) who claimed exemptions because of religious or personal beliefs (Table). Among the 18 patients aged ≥20 years, 14 had unknown or undocumented vaccination status, two had claimed exemptions and acquired measles in Europe, one had evidence of immunity because of birth before 1957, and one had documentation of receiving 2 doses of MMR vaccine.

Of the five U.S. residents with measles who were vaccine eligible and had traveled abroad, all were unvaccinated. One was a child aged 15 months who was not vaccinated before travel, and two were adults who were unvaccinated because of personal belief exemptions. For two adults, the reason for not being vaccinated was unknown.

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Editorial Note: Although ongoing measles transmission was declared eliminated in the United States in 2000 (*1*) and in the World Health Organization (WHO) Region of the Americas in 2002 (*2*), approximately 20 million cases of measles occur each year worldwide. The 2008 upsurge in measles cases serves as a reminder that measles is still imported into the United States and can result in outbreaks unless population immunity remains high through vaccination. Among the 64 confirmed measles cases, prior vaccination could be documented for only one person.

Before introduction of measles vaccination in 1963, approximately 3 to 4 million persons had measles annually in the United States; approximately 400–500 died, 48,000 were hospitalized, and 1,000 developed chronic disability from measles encephalitis (*1*). Even after elimination of endemic transmission in 2000, imported measles has continued to create a substantial U.S. public health burden; of the 501 measles cases reported during 2000–2007, one in four patients was hospitalized, and one in 250 died (*1*).

Thus far in 2008, five U.S. residents and five visitors have been documented as acquiring measles abroad. Of these 10 persons, nine acquired measles in the WHO European Region. These importations likely are related to an increase in 2008 in measles activity in Europe. In Switzerland, approximately 2,250 measles cases have been reported since November 2006. The Swiss measles outbreak started in Lucerne, where the measles vaccination coverage level in children is 78%, and spread across the country, predomi-

TABLE. Number and percentage of reported measles cases among U.S. residents (N = 59), by age group and vaccination status — United States, January 1–April 25, 2008

	Vaccination status													
	Unvaccinated													
	Too young		Born before 1957		Nonmedical exemption*		Reason unknown		Missed opportunity		Vaccinated with 2 doses		Unknown		Total	
Age group	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<12 mos	13	(22.0)†	—		—		—		—		—		—		**13**	**(22.0)**
12–15 mos	—		—		0		6	(10.2)§	—		—		1	(1.7)	**7**	**(11.9)**
16 mos–4 yrs	—		—		4	(6.8)	2	(3.4)	5	(8.5)¶	—		0		**11**	**(18.7)**
5–19 yrs	—		—		10	(16.9)	0		0		0		0		**10**	**(16.9)**
20–49 yrs	—		—		2	(3.4)	1	(1.7)	0		1	(1.7)	12	(20.3)**††	**16**	**(27.1)**
≥50 yrs	—		1	(1.7)	0		0		0		0		1	(1.7)	**2**	**(3.4)**
Total	**13**	**(22.0)**	**1**	**(1.7)**	**16**	**(27.1)**	**9**	**(15.3)**	**5**	**(8.5)**	**1**	**(1.7)**	**14**	**(23.7)**	**59**	**(100.0)**

* Persons who claimed exemption from vaccination because of religious or personal beliefs.
† One infant aged 7 months received a dose of measles, mumps, and rubella (MMR) vaccine (because of an accelerated vaccine schedule) the day before exposure.
§ One child aged 12 months received a routine MMR vaccine dose on the day of exposure in a physician's office.
¶ One child aged 2 years, who was unvaccinated on the day of exposure, received a dose of MMR vaccine 6 days later; the delay was attributed to a parental request for single-antigen measles vaccine because of vaccine safety concerns.
** Includes two self-reports of receipt of 1 or more doses of measles vaccine.
†† Two adults received postexposure MMR vaccine (one on the day of exposure and one on the day after exposure).

nantly affecting children aged 5–15 years who were unvaccinated because of parental opposition to vaccination.** In Israel (which is included in the WHO European Region), a measles outbreak with approximately 1,000 cases is ongoing (Ministry of Health, Israel, unpublished data, 2008), and measles transmission is occurring in other European countries, predominantly among populations opposed to vaccination. This situation prompted travel advisories to be issued in the United States and Europe.†† Health-care providers should advise patients who travel abroad of the importance of measles vaccination and should consider the diagnosis of measles in persons with clinically compatible illness who have traveled abroad recently or have had contact with travelers.

The limited size of recent measles outbreaks in the United States has resulted from highly effective measles and MMR vaccines, preexisting high vaccination coverage levels in preschool and school-aged children, and a rapid and effective public health response. All children should receive 2 doses of MMR vaccine, with the first dose recommended at age 12–15 months and the second dose at age 4–6 years. Unless they have other documented evidence of measles immunity,§§ all adults should receive at least 1 dose. Two doses are recommended for international travelers aged ≥12 months, health-care personnel, and students at secondary and postsecondary educational facilities. Infants aged 6–11 months should receive 1 dose before travel abroad (*3*). During a measles outbreak, the vaccination response should be guided by the epidemiology of the outbreak and the outbreak setting and might include offering 1 dose of measles or MMR vaccine to infants aged 6–11 months, offering the second dose to preschool-aged children provided that 28 days have elapsed since the first dose, and recommending 1 dose to health-care workers born before 1957 unless they show other evidence of immunity.

Patients with measles frequently seek medical care, and emergency departments are common sites of measles transmission (*4*). To prevent transmission of measles in health-care settings, patients should be asked to wear a surgical mask (if tolerated) for source containment, airborne infection-control precautions (*5*) should be followed stringently, and patients should be placed in a negative air-pressure room as soon as possible. If a negative air-pressure room is not available, the patient should be placed in a room with the door closed. Measles cases should be investigated, patients isolated promptly, and specimens obtained for laboratory confirmation and viral genoptying. Case contacts without documented evidence of measles immunity should be vaccinated, offered immune globulin, or asked to quarantine themselves at home from the fifth day after their first exposure to the twenty-first day after their last exposure. Contacts with measles-compatible symptoms should be managed in a manner that will prevent further spread (*3,5*).

** World Health Organization. Measles and rubella surveillance bulletin. Geneva, Switzerland: World Health Organization; 2008. Available at http://www.euro.who.int/vaccine/publications/20080401_1.
†† U.S. travel advisories available at http://wwwn.cdc.gov/travel/contentmeasles.aspx. European travel advisories available at http://ecdc.europa.eu/health_topics/measles/080423_travel_advice.html.
§§ Laboratory evidence of immunity, documentation of physician-diagnosed measles, or birth before 1957.

Health-care personnel place themselves and their patients at risk if they are not protected against measles. In accordance with current recommendations, health-care personnel should have documented evidence of measles immunity[¶] readily available at their work location (*3*). If this documentation is not available when measles is introduced, major costs and disruptions to health-care operations can result from the need to exclude potentially infected staff members and rapidly ensure immunity for others (*6*).

Many of the measles cases in children in 2008 have occurred among children whose parents claimed exemption from vaccination because of religious or personal beliefs and in infants too young to be vaccinated. Forty-eight states currently allow religious exemptions to school vaccination requirements, and 21 states allow exemptions based on personal beliefs.[***] During 2002 and 2003, nonmedical exemption rates were higher in states that easily granted exemptions than states with medium or difficult exemption processes (*7*); in such states, the process of claiming a nonmedical exemption might require less effort than fulfilling vaccination requirements (*8*).

Although national vaccination levels are high,[†††] unvaccinated children tend to be clustered geographically or socially, increasing their risk for outbreaks (*6,9*). An upward trend in the mean proportion of school children who were not vaccinated because of personal belief exemptions was observed from 1991 to 2004 (*7*). Increases in the proportion of persons declining vaccination for themselves or their children might lead to large-scale outbreaks in the United States, such as those that have occurred in other countries (e.g., United Kingdom and Netherlands) (*10*).

Ongoing measles virus transmission has been eliminated in the United States, but the risk for imported disease and outbreaks remains. High vaccination coverage in the United States has limited the spread of imported measles in 2008. Nevertheless, the measles outbreaks in 2008 illustrate the risk created by importation of disease into clusters of persons with low vaccination rates, both for the unvaccinated and those who come into contact with them.

[¶] Documented receipt of 2 doses of live measles virus vaccine, laboratory evidence of immunity, documentation of physician-diagnosed measles, or birth before 1957.

[***] Institute for Vaccine Safety. Vaccine exemptions. Baltimore, MD: Johns Hopkins Bloomberg School Public Health; 2007. Available at http://www.vaccinesafety.edu/cc-exem.htm.

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Notice to Readers

Arthritis Awareness Month — May 2008

May is Arthritis Awareness Month, an observance intended to focus attention on the substantial and growing problem of arthritis in the United States. Arthritis, the most common cause of disability in the United States, affects one in five adults and nearly 300,000 children (*1–3*). By the year 2030, approximately 67 million U.S. adults will be affected by arthritis (*4*), compared with an estimated 46 million during 2003–2005 (*3*).

The emphasis of this year's observance is on encouraging persons with arthritis to stay physically active. The U.S. Surgeon General has stated that regular physical activity is necessary for everyone to maintain normal muscle strength, joint structure, and joint function (*5*). Moderate physical activity is recommended for all children and adults with arthritis, and walking might be one of the most accessible ways to become physically active. Walking is low impact, can be done almost anywhere and anytime, and requires only a good pair of shoes. For persons with arthritis, walking might be counterintuitive when joints hurt; however, it is a safe, effective, and

underused intervention that helps reduce joint pain, strengthen joints, and improve joint function.

The CDC Arthritis Program helps fund state arthritis programs designed to increase the quality of life among persons affected by arthritis by implementing recommendations in the *National Arthritis Action Plan: A Public Health Strategy* (*6*). The program also promotes progress toward achieving the arthritis-related objectives in *Healthy People 2010* (*7*). 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 (800-568-4045).

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Notice to Readers

Annual Conference on Assessment Initiative — August 18–20, 2008

The Annual Conference on Assessment Initiative, sponsored by CDC, will be held August 18–20, 2008, in Atlanta, Georgia. This meeting will focus on sharing information on innovative systems and methods that improve the way data are used for public health programs, services, and policies at the local and state levels. Sessions will address data dissemination, health assessment research, applied data analysis, presentation techniques, and community health-assessment processes and outcomes.

Participants will include staff members from local and state health departments, federal agencies, and community organizations interested in the collection, analysis, and dissemination of data for community health assessments. Conference attendees can register online at http://www.ppleventreg.com/events/hhs/index.php?id=19; the deadline for online registration is August 4, and no registration fee is charged. The deadline for making reservations with the Sheraton Atlanta Hotel is July 14 (at the conference website or by telephone, 800-833-8624 or 404-659-6500).

Abstracts for the poster session are due by July 18 and should be e-mailed to Nelson Adekoya at nba7@cdc.gov. Abstracts should be a maximum of 250 words and clearly state the purpose of the poster. Topics of interest include approaches to assessment, impact and outcome of community health assessment, systems and approaches used for data dissemination, community partnerships, and statistical methods used in assessment. A maximum of 40 abstracts will be accepted, and applicants will be notified of acceptance by August 1. Additional information regarding the Assessment Initiative is available at http://www.cdc.gov/ncphi/od/ai.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending May 3, 2008 (18th Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years 2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Anthrax	—	—	—	1	1	—	—	—	
Botulism:									
foodborne	—	1	0	29	20	19	16	20	
infant	—	20	1	87	97	85	87	76	
other (wound & unspecified)	1	4	0	26	48	31	30	33	AZ (1)
Brucellosis	1	18	3	129	121	120	114	104	CA (1)
Chancroid	—	17	1	24	33	17	30	54	
Cholera	—	—	0	7	9	8	6	2	
Cyclosporiasis§	1	26	14	91	137	543	160	75	MN (1)
Diphtheria	—	—	—	—	—	—	—	1	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	0	44	67	80	112	108	
eastern equine	—	—	—	4	8	21	6	14	
Powassan	—	—	—	1	1	1	1	—	
St. Louis	—	—	0	7	10	13	12	41	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
Ehrlichia chaffeensis	—	18	4	765	578	506	338	321	
Ehrlichia ewingii	—	—	—	—	—	—	—	—	
Anaplasma phagocytophilum	—	5	4	727	646	786	537	362	
undetermined	—	—	2	134	231	112	59	44	
Haemophilus influenzae,†† invasive disease (age <5 yrs):									
serotype b	—	11	0	22	29	9	19	32	
nonserotype b	3	54	3	177	175	135	135	117	OK (1), WA (2)
unknown serotype	1	76	4	186	179	217	177	227	GA (1)
Hansen disease§	—	27	2	96	66	87	105	95	
Hantavirus pulmonary syndrome§	—	3	1	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	1	27	3	278	288	221	200	178	OR (1)
Hepatitis C viral, acute	1	225	15	854	766	652	720	1,102	WA (1)
HIV infection, pediatric (age <13 yrs)§§	—	—	3	—	—	380	436	504	
Influenza-associated pediatric mortality§,¶¶	1	69	2	76	43	45	—	N	NYC (1)
Listeriosis	5	151	10	789	884	896	753	696	NY (2), PA (1), NC (1), WA (1)
Measles***	—	32	1	42	55	66	37	56	
Meningococcal disease, invasive†††:									
A, C, Y, & W-135	—	109	6	308	318	297	—	—	
serogroup B	—	58	2	152	193	156	—	—	
other serogroup	—	15	1	31	32	27	—	—	
unknown serogroup	4	255	15	574	651	765	—	—	PA (3), OH (1)
Mumps	3	200	122	775	6,584	314	258	231	MI (1), WA (1), CA (1)
Novel influenza A virus infections	—	—	—	1	N	N	N	N	
Plague	—	1	0	7	17	8	3	1	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Poliovirus infection, nonparalytic§	—	—	—	—	N	N	N	N	
Psittacosis§	—	1	0	10	21	16	12	12	
Q fever§,§§§ total:	—	15	2	174	169	136	70	71	
acute	—	11	—	—	—	—	—	—	
chronic	—	4	—	—	—	—	—	—	
Rabies, human	—	—	—	—	3	2	7	2	
Rubella¶¶¶	—	3	0	10	11	11	10	7	
Rubella, congenital syndrome	—	—	—	—	1	1	—	1	
SARS-CoV§,****	—	—	—	—	—	—	—	8	

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

* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 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 in 2007 and 2008 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. Sixty-nine cases occurring during the 2007–08 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.

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

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

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending May 3, 2008 (18th Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years 2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	48	4	118	125	129	132	161	
Syphilis, congenital (age <1 yr)	—	40	7	328	349	329	353	413	
Tetanus	—	2	1	24	41	27	34	20	
Toxic-shock syndrome (staphylococcal)§	1	19	2	87	101	90	95	133	CA (1)
Trichinellosis	—	2	0	6	15	16	5	6	
Tularemia	—	5	1	122	95	154	134	129	
Typhoid fever	3	111	6	418	353	324	322	356	MA (1), FL (1), CA (1)
Vancomycin-intermediate *Staphylococcus aureus*§	—	3	0	28	6	2	—	N	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	2	1	3	1	N	
Vibriosis (noncholera *Vibrio* species infections)§	2	44	2	381	N	N	N	N	FL (2)
Yellow fever	—	—	—	—	—	—	—	—	

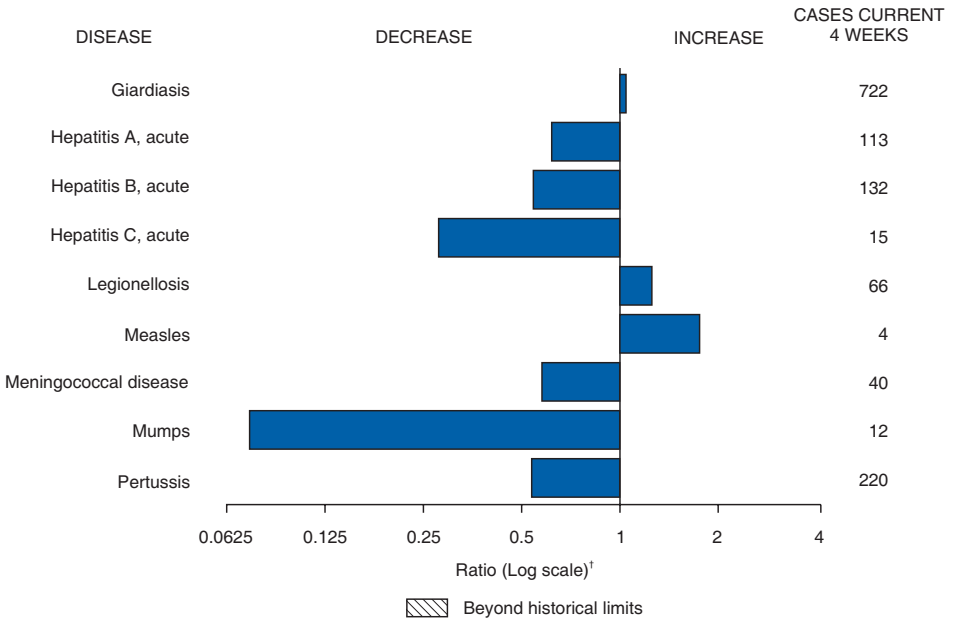
—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 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 in 2007 and 2008 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.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals May 3, 2008, 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 May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	12,011	21,043	24,727	339,318	369,159	134	131	308	2,307	2,581	41	85	974	1,072	988
New England	657	684	1,517	11,827	11,174	—	0	1	1	1	2	5	16	67	97
Connecticut	334	214	1,093	3,086	2,697	N	0	0	N	N	—	0	5	5	42
Maine§	51	50	67	896	876	N	0	0	N	N	—	1	5	5	9
Massachusetts	269	313	661	6,197	5,471	N	0	0	N	N	2	2	11	30	21
New Hampshire	3	39	73	617	665	—	0	1	1	1	—	1	5	11	14
Rhode Island§	—	62	98	1,025	1,169	—	0	0	—	—	—	0	3	3	4
Vermont§	—	10	32	6	296	N	0	0	N	N	—	1	4	13	7
Mid. Atlantic	2,298	2,781	4,886	49,835	48,398	—	0	0	—	—	9	12	120	145	118
New Jersey	143	404	520	6,311	7,521	N	0	0	N	N	—	0	8	3	9
New York (Upstate)	524	557	2,044	9,051	8,398	N	0	0	N	N	6	4	20	43	30
New York City	1,085	975	3,203	20,151	17,881	N	0	0	N	N	—	2	10	24	29
Pennsylvania	546	796	1,754	14,322	14,598	N	0	0	N	N	3	6	103	75	50
E.N. Central	1,202	3,375	4,395	54,548	63,127	—	1	3	14	11	8	20	134	245	229
Illinois	12	1,004	1,711	13,187	17,639	N	0	0	N	N	—	3	13	21	30
Indiana	—	386	651	6,480	7,484	N	0	0	N	N	—	2	41	34	14
Michigan	906	741	1,184	15,828	13,452	—	0	2	10	9	2	4	11	59	52
Ohio	117	872	1,824	12,231	17,693	—	0	1	4	2	3	5	60	72	64
Wisconsin	167	377	611	6,822	6,859	N	0	0	N	N	3	7	59	59	69
W.N. Central	325	1,218	1,693	20,431	21,757	—	0	77	—	3	9	16	125	198	130
Iowa	123	166	251	2,950	3,022	N	0	0	N	N	—	3	61	43	22
Kansas	89	158	529	3,078	2,741	N	0	0	N	N	1	2	16	19	18
Minnesota	2	258	333	4,164	4,706	—	0	77	—	—	7	4	34	53	31
Missouri	—	464	551	7,270	8,016	—	0	1	—	3	1	3	14	44	24
Nebraska§	55	89	183	1,489	1,801	N	0	0	N	N	—	2	24	22	7
North Dakota	—	31	65	506	624	N	0	0	N	N	—	0	6	1	1
South Dakota	56	52	81	974	847	N	0	0	N	N	—	2	16	16	27
S. Atlantic	3,514	3,697	7,484	62,474	67,796	—	0	1	2	2	11	20	65	222	220
Delaware	70	65	144	1,300	1,229	—	0	0	—	—	1	0	4	6	2
District of Columbia	156	114	200	2,047	1,958	—	0	0	—	—	—	0	3	5	3
Florida	1,023	1,280	1,556	22,998	16,882	N	0	0	N	N	6	9	35	108	102
Georgia	1	260	1,502	507	14,141	N	0	0	N	N	4	4	15	64	50
Maryland§	379	466	675	7,546	5,948	—	0	1	2	2	—	0	3	3	11
North Carolina	271	206	4,656	7,645	10,438	N	0	0	N	N	—	1	18	9	13
South Carolina§	780	445	3,345	9,444	7,364	N	0	0	N	N	—	1	15	11	15
Virginia§	823	485	1,061	9,923	8,750	N	0	0	N	N	—	1	6	11	22
West Virginia	11	62	96	1,064	1,086	N	0	0	N	N	—	0	5	5	2
E.S. Central	551	1,496	2,393	25,804	29,619	—	0	0	—	—	—	4	65	33	46
Alabama§	21	480	605	7,136	8,808	N	0	0	N	N	—	1	14	15	17
Kentucky	—	199	302	3,326	2,617	N	0	0	N	N	—	1	40	5	15
Mississippi	—	290	1,048	5,731	8,128	N	0	0	N	N	—	0	11	3	8
Tennessee§	530	503	717	9,611	10,066	N	0	0	N	N	—	1	18	10	6
W.S. Central	823	2,621	3,768	46,559	40,547	—	0	1	1	—	1	6	28	57	51
Arkansas§	225	217	455	4,917	3,157	N	0	0	N	N	—	0	8	7	4
Louisiana	285	304	851	4,125	6,717	—	0	1	1	—	—	1	4	3	16
Oklahoma	313	243	418	4,339	4,448	N	0	0	N	N	1	1	11	14	11
Texas§	—	1,778	3,382	33,178	26,225	N	0	0	N	N	—	3	16	33	20
Mountain	812	1,360	1,841	12,432	25,653	75	88	170	1,562	1,727	1	9	567	86	72
Arizona	138	421	681	1,039	8,272	74	84	168	1,532	1,678	—	1	4	12	15
Colorado	19	293	488	1,759	6,240	N	0	0	N	N	1	2	26	17	19
Idaho§	130	56	233	1,302	1,428	N	0	0	N	N	—	2	72	20	4
Montana§	—	48	363	953	969	N	0	0	N	N	—	1	7	10	4
Nevada§	399	183	340	3,323	3,278	1	1	6	17	17	—	0	6	3	3
New Mexico§	—	158	562	2,016	3,282	—	0	3	10	11	—	2	9	9	19
Utah	126	124	216	2,029	1,751	—	0	7	3	21	—	1	484	9	1
Wyoming§	—	18	34	11	433	—	0	1	—	—	—	0	8	6	7
Pacific	1,829	3,330	4,055	55,408	61,088	59	34	217	727	837	—	2	20	19	25
Alaska	106	91	137	1,418	1,704	N	0	0	N	N	—	0	2	1	—
California	1,530	2,811	3,464	48,477	47,874	59	34	217	727	837	—	0	0	—	—
Hawaii	—	110	143	1,716	1,986	N	0	0	N	N	—	0	4	1	—
Oregon§	193	191	403	3,684	3,250	N	0	0	N	N	—	2	16	17	25
Washington	—	117	613	113	6,274	N	0	0	N	N	—	0	0	—	—
American Samoa	6	0	32	62	41	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	6	34	46	276	—	0	0	—	—	—	0	0	—	—
Puerto Rico	210	112	612	2,327	2,732	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	4	27	192	71	—	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 years 2007 and 2008 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). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	241	287	1,564	4,356	4,878	3,120	6,519	7,889	95,935	118,935	18	44	152	963	965
New England	3	24	54	368	385	125	100	227	1,669	1,801	—	3	9	54	67
Connecticut	—	6	18	95	101	82	42	199	662	605	—	0	8	2	17
Maine§	—	3	10	35	48	—	2	8	32	31	—	0	3	5	6
Massachusetts	3	9	29	155	171	39	50	127	823	920	—	1	6	35	36
New Hampshire	—	1	4	21	5	4	2	6	42	53	—	0	2	5	7
Rhode Island§	—	1	15	24	21	—	6	13	110	174	—	0	2	4	1
Vermont§	—	3	8	38	39	—	0	5	—	18	—	0	1	3	—
Mid. Atlantic	32	59	120	763	883	504	661	1,004	10,769	12,333	5	9	29	187	204
New Jersey	—	6	15	22	118	32	116	175	1,934	2,114	—	1	7	29	31
New York (Upstate)	21	24	100	321	282	149	129	518	2,062	2,010	2	2	20	50	55
New York City	4	15	29	204	291	176	182	528	3,057	3,840	1	1	6	33	41
Pennsylvania	7	14	30	216	192	147	232	550	3,716	4,369	2	3	9	75	77
E.N. Central	30	44	90	647	795	420	1,315	1,765	19,436	25,432	3	6	24	147	132
Illinois	—	13	33	140	236	3	381	589	4,005	6,156	—	2	7	40	48
Indiana	N	0	0	N	N	—	158	308	2,651	3,004	—	1	20	35	17
Michigan	3	10	22	136	223	323	299	646	6,153	5,628	—	0	3	6	12
Ohio	23	16	36	278	224	30	352	914	4,543	8,252	3	2	6	60	48
Wisconsin	4	7	21	93	112	64	122	214	2,084	2,392	—	0	4	6	7
W.N. Central	66	23	582	526	306	72	358	446	5,166	6,926	—	3	24	70	48
Iowa	1	5	23	80	66	17	31	56	465	711	—	0	1	1	1
Kansas	5	3	11	46	39	29	42	130	767	782	—	0	2	6	4
Minnesota	56	0	575	191	6	1	63	91	988	1,216	—	0	21	13	18
Missouri	4	9	23	136	133	—	181	235	2,367	3,629	—	1	6	35	19
Nebraska§	—	4	8	45	35	22	26	57	460	453	—	0	3	11	5
North Dakota	—	0	3	10	6	—	2	6	31	35	—	0	2	4	1
South Dakota	—	1	6	18	21	3	5	10	88	100	—	0	0	—	—
S. Atlantic	34	53	101	678	880	1,042	1,487	2,578	21,621	26,855	5	11	30	252	254
Delaware	—	1	6	12	10	13	24	44	423	489	—	0	1	2	5
District of Columbia	—	0	6	22	23	47	45	71	750	804	—	0	2	6	2
Florida	31	22	47	357	379	311	478	619	7,929	7,140	1	3	10	69	72
Georgia	3	12	24	120	193	2	113	621	207	5,768	3	2	9	65	55
Maryland§	—	4	18	53	82	94	129	235	2,053	1,924	—	2	5	45	45
North Carolina	N	0	0	N	N	100	166	1,825	3,418	5,227	1	0	9	26	27
South Carolina§	—	2	7	33	24	280	185	841	3,442	3,165	—	1	3	18	24
Virginia§	—	9	39	64	159	191	129	485	3,140	2,053	—	1	23	14	17
West Virginia	—	0	8	17	10	4	17	38	259	285	—	0	3	7	7
E.S. Central	—	10	23	123	155	195	566	940	9,339	10,971	—	2	8	50	49
Alabama§	—	5	11	63	81	6	206	282	2,897	3,754	—	0	3	6	11
Kentucky	N	0	0	N	N	—	80	161	1,263	906	—	0	1	1	2
Mississippi	N	0	0	N	N	—	128	401	2,205	2,891	—	0	2	8	3
Tennessee§	—	4	16	60	74	189	174	261	2,974	3,420	—	2	6	35	33
W.S. Central	2	6	21	67	100	276	1,007	1,347	15,775	16,779	2	2	15	46	39
Arkansas§	1	2	9	33	42	70	78	138	1,587	1,474	—	0	2	2	2
Louisiana	—	1	14	11	32	103	173	384	2,103	3,925	—	0	2	3	5
Oklahoma	1	3	9	23	26	103	90	172	1,610	1,808	2	1	8	40	29
Texas§	N	0	0	N	N	—	643	949	10,475	9,572	—	0	3	1	3
Mountain	11	31	67	309	457	169	254	337	2,429	4,614	—	5	13	116	114
Arizona	2	3	11	33	62	17	93	130	271	1,701	—	2	11	64	51
Colorado	9	10	26	95	149	17	58	91	598	1,173	—	1	4	9	23
Idaho§	—	3	19	37	38	4	4	19	56	95	—	0	1	1	4
Montana§	—	2	8	22	28	—	1	48	35	34	—	0	1	1	—
Nevada§	—	2	8	32	38	125	45	92	897	781	—	0	1	7	5
New Mexico§	—	2	5	18	44	—	29	105	376	547	—	1	4	13	17
Utah	—	7	32	61	86	6	14	39	196	262	—	1	6	21	13
Wyoming§	—	1	3	11	12	—	1	5	—	21	—	0	1	—	1
Pacific	63	53	681	875	917	317	646	800	9,731	13,224	3	2	10	41	58
Alaska	1	2	5	25	20	8	10	24	143	175	—	0	4	7	4
California	40	42	84	623	724	283	579	693	8,924	11,186	—	0	5	2	15
Hawaii	—	1	4	8	27	—	11	23	169	237	—	0	1	6	3
Oregon§	2	9	19	140	143	26	24	63	478	381	1	1	4	24	36
Washington	20	0	590	79	3	—	12	130	17	1,245	2	0	6	2	—
American Samoa	—	0	0	—	—	—	0	1	2	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	1	—	1	13	18	39	—	0	1	—	—
Puerto Rico	—	5	31	7	88	3	4	23	80	119	—	0	1	—	1
U.S. Virgin Islands	—	0	0	—	—	—	1	4	31	18	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 years 2007 and 2008 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). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Hepatitis (viral, acute), by type† A: Current week	A: Previous 52 weeks Med	A: Previous 52 weeks Max	A: Cum 2008	A: Cum 2007	B: Current week	B: Previous 52 weeks Med	B: Previous 52 weeks Max	B: Cum 2008	B: Cum 2007	Legionellosis: Current week	Legionellosis: Previous 52 weeks Med	Legionellosis: Previous 52 weeks Max	Legionellosis: Cum 2008	Legionellosis: Cum 2007
United States	31	52	199	793	909	27	80	291	1,031	1,425	16	48	118	557	504
New England	1	3	6	41	26	1	1	5	16	28	1	2	14	26	28
Connecticut	1	0	3	10	5	1	0	5	7	16	1	1	4	7	3
Maine§	—	0	1	2	—	—	0	2	3	1	—	0	2	1	—
Massachusetts	—	1	5	18	12	—	0	1	3	2	—	0	2	1	13
New Hampshire	—	0	3	2	5	—	0	1	1	4	—	0	2	3	—
Rhode Island§	—	0	2	9	4	—	0	3	1	4	—	0	5	10	11
Vermont§	—	0	1	—	—	—	0	1	1	1	—	0	2	4	1
Mid. Atlantic	3	9	21	95	140	7	10	17	134	207	7	14	37	119	128
New Jersey	—	2	6	16	48	—	2	7	36	69	—	2	12	12	20
New York (Upstate)	2	1	6	24	29	1	2	7	23	26	2	4	15	32	36
New York City	—	3	9	26	45	—	2	7	17	49	—	2	11	14	24
Pennsylvania	1	2	6	29	18	6	3	8	58	63	5	5	21	61	48
E.N. Central	3	6	13	98	105	1	8	15	113	182	1	11	30	133	121
Illinois	—	2	6	24	48	—	1	5	19	57	—	2	12	18	27
Indiana	—	0	4	5	4	—	0	8	9	13	—	1	7	7	7
Michigan	1	2	7	52	23	1	2	6	42	45	—	3	11	39	35
Ohio	2	1	3	12	23	—	2	6	40	54	1	4	17	65	44
Wisconsin	—	0	2	5	7	—	0	1	3	13	—	0	1	4	8
W.N. Central	2	3	24	104	50	1	2	7	28	40	—	2	9	27	15
Iowa	—	1	5	38	11	—	0	2	7	12	—	0	2	6	2
Kansas	—	0	3	8	1	—	0	2	4	4	—	0	1	1	—
Minnesota	1	0	23	10	24	1	0	5	1	4	—	0	6	3	2
Missouri	1	0	3	17	5	—	1	4	14	13	—	1	3	9	8
Nebraska§	—	1	4	30	5	—	0	1	2	4	—	0	2	7	2
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	1	1	4	—	0	1	—	3	—	0	1	1	1
S. Atlantic	5	9	22	103	169	4	17	58	261	361	2	8	28	109	115
Delaware	—	0	1	2	1	—	0	2	1	5	—	0	2	2	1
District of Columbia	—	0	1	—	14	—	0	0	—	1	—	0	3	7	1
Florida	5	2	8	51	56	4	6	12	119	119	2	3	10	51	51
Georgia	—	1	5	13	27	—	2	6	34	49	—	1	3	7	14
Maryland§	—	1	4	12	27	—	2	7	23	36	—	1	5	17	23
North Carolina	—	0	9	9	7	—	0	16	25	52	—	0	7	7	9
South Carolina§	—	0	4	3	4	—	1	6	22	27	—	0	2	2	5
Virginia§	—	1	5	11	31	—	2	16	26	53	—	1	6	12	8
West Virginia	—	0	2	2	2	—	0	30	11	19	—	0	3	4	3
E.S. Central	—	2	5	14	29	—	7	15	102	108	2	2	6	26	25
Alabama§	—	0	4	3	7	—	2	6	27	38	—	0	1	2	2
Kentucky	—	0	2	5	5	—	2	7	30	12	2	1	3	15	11
Mississippi	—	0	1	—	4	—	0	3	11	11	—	0	0	—	—
Tennessee§	—	1	3	6	13	—	2	8	34	47	—	1	4	9	12
W.S. Central	1	5	46	64	72	4	18	112	209	258	—	2	12	12	22
Arkansas§	—	0	1	1	4	—	1	3	10	25	—	0	3	1	1
Louisiana	—	0	3	4	12	—	1	6	14	29	—	0	2	—	1
Oklahoma	1	0	8	4	3	4	1	38	25	10	—	0	2	—	—
Texas§	—	4	45	55	53	—	12	94	160	194	—	2	12	11	20
Mountain	1	4	9	55	87	1	3	7	49	83	—	2	6	24	24
Arizona	—	2	7	25	69	—	1	4	13	40	—	1	5	8	6
Colorado	1	0	3	6	7	—	0	3	6	13	—	0	2	1	5
Idaho§	—	0	3	11	1	—	0	2	4	4	—	0	1	1	1
Montana§	—	0	2	—	1	—	0	1	—	—	—	0	1	2	1
Nevada§	—	0	1	2	5	1	1	3	14	19	—	0	2	3	3
New Mexico§	—	0	2	7	1	—	0	2	4	4	—	0	1	2	2
Utah	—	0	2	2	2	—	0	2	7	3	—	0	3	7	4
Wyoming§	—	0	1	2	1	—	0	1	1	—	—	0	1	—	2
Pacific	15	11	95	219	231	8	8	84	119	158	3	3	37	81	26
Alaska	—	0	1	2	1	1	0	2	6	3	1	0	0	1	—
California	10	9	34	177	221	5	6	19	82	132	2	2	13	69	23
Hawaii	—	0	2	3	2	—	0	2	3	—	—	0	1	2	1
Oregon§	—	1	3	14	7	—	1	3	13	22	—	0	2	4	1
Washington	5	0	59	23	—	2	0	64	15	1	—	0	23	5	1
American Samoa	—	0	0	—	—	—	0	0	—	14	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	1	—	0	0	—	—
Puerto Rico	—	0	4	2	32	—	1	5	5	23	—	0	1	—	3
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Data for acute hepatitis C, viral are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	64	328	1,326	1,607	2,695	9	24	147	217	328	4	17	71	437	437
New England	—	44	301	100	235	—	1	29	3	13	—	1	3	14	20
Connecticut	—	12	214	—	41	—	0	22	—	—	—	0	1	1	3
Maine§	—	6	61	33	19	—	0	2	—	3	—	0	1	1	3
Massachusetts	—	0	31	25	78	—	0	3	2	9	—	0	3	12	10
New Hampshire	—	8	88	34	89	—	0	4	1	1	—	0	0	—	1
Rhode Island§	—	0	79	—	—	—	0	7	—	—	—	0	1	—	1
Vermont§	—	1	13	8	8	—	0	2	—	—	—	0	1	—	2
Mid. Atlantic	47	174	692	867	1,365	2	7	18	48	89	3	2	6	49	52
New Jersey	1	42	220	170	499	—	1	7	—	21	—	0	1	1	8
New York (Upstate)	30	54	224	159	220	1	1	8	7	14	—	1	3	16	13
New York City	—	5	27	4	55	—	4	9	32	47	—	0	4	7	13
Pennsylvania	16	54	326	534	591	1	1	4	9	7	3	1	5	25	18
E.N. Central	—	7	169	28	144	—	2	7	37	50	1	3	9	76	75
Illinois	—	0	16	2	7	—	0	6	16	26	—	1	3	24	26
Indiana	—	0	7	2	2	—	0	2	1	1	—	0	4	12	13
Michigan	—	0	5	6	4	—	0	2	6	7	—	0	2	13	12
Ohio	—	0	4	5	3	—	0	3	12	9	1	1	4	21	17
Wisconsin	—	6	149	13	128	—	0	1	2	7	—	0	2	6	7
W.N. Central	6	3	728	59	48	3	0	8	20	18	—	2	8	45	28
Iowa	—	1	11	5	13	—	0	1	2	2	—	0	3	11	7
Kansas	—	0	2	1	3	1	0	1	2	—	—	0	1	1	2
Minnesota	6	0	728	50	32	2	0	8	6	11	—	0	7	15	8
Missouri	—	0	4	3	—	—	0	4	6	2	—	0	3	11	8
Nebraska§	—	0	1	—	—	—	0	2	4	2	—	0	2	5	1
North Dakota	—	0	2	—	—	—	0	1	—	—	—	0	1	1	1
South Dakota	—	0	0	—	—	—	0	0	—	1	—	0	1	1	1
S. Atlantic	9	61	215	467	837	—	5	15	51	63	—	3	7	59	62
Delaware	9	12	34	150	164	—	0	1	1	2	—	0	1	—	—
District of Columbia	—	0	8	39	5	—	0	1	—	3	—	0	0	—	—
Florida	—	0	4	7	2	—	1	7	16	14	—	1	5	21	23
Georgia	—	0	3	—	—	—	1	3	10	6	—	0	3	8	7
Maryland§	—	31	133	235	544	—	1	5	20	18	—	0	2	4	14
North Carolina	—	0	8	2	6	—	0	4	2	5	—	0	4	3	4
South Carolina§	—	0	4	2	4	—	0	1	1	1	—	0	3	9	6
Virginia§	—	17	64	29	108	—	0	7	1	13	—	0	3	12	8
West Virginia	—	0	9	3	4	—	0	1	—	1	—	0	1	2	—
E.S. Central	—	0	5	1	10	—	0	3	3	10	—	1	3	23	23
Alabama§	—	0	3	1	1	—	0	1	2	1	—	0	1	1	6
Kentucky	—	0	2	—	—	—	0	1	1	1	—	0	2	5	2
Mississippi	—	0	1	—	—	—	0	1	—	1	—	0	2	7	4
Tennessee§	—	0	4	—	9	—	0	2	—	7	—	0	2	10	11
W.S. Central	—	1	8	8	19	—	1	56	8	24	—	2	11	39	46
Arkansas§	—	0	1	—	—	—	0	1	—	—	—	0	2	4	5
Louisiana	—	0	0	—	2	—	0	1	—	11	—	0	3	12	14
Oklahoma	—	0	0	—	—	—	0	2	1	1	—	0	4	8	10
Texas§	—	1	8	8	17	—	1	55	7	12	—	1	6	15	17
Mountain	—	1	3	4	7	—	1	5	9	18	—	1	3	22	35
Arizona	—	0	1	2	—	—	0	1	3	4	—	0	1	2	8
Colorado	—	0	1	2	—	—	0	2	2	9	—	0	2	4	12
Idaho§	—	0	2	—	1	—	0	2	—	—	—	0	2	2	2
Montana§	—	0	2	—	1	—	0	1	—	1	—	0	1	3	1
Nevada§	—	0	2	—	5	—	0	3	4	1	—	0	2	5	3
New Mexico§	—	0	2	—	—	—	0	1	—	1	—	0	1	3	1
Utah	—	0	1	—	—	—	0	3	—	2	—	0	2	2	6
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	2
Pacific	2	3	21	73	30	4	2	36	38	43	—	4	40	110	96
Alaska	—	0	2	—	2	—	0	0	—	2	—	0	1	1	1
California	2	3	9	72	28	4	2	8	31	30	—	3	17	84	80
Hawaii	N	0	0	N	N	—	0	1	1	2	—	0	2	—	3
Oregon§	—	0	1	1	—	—	0	2	3	9	—	1	3	14	12
Washington	—	0	12	—	—	—	0	30	3	—	—	0	28	11	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	—	1	—	0	1	—	4
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 years 2007 and 2008 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, & 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). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	38	157	965	1,966	3,147	83	100	172	1,242	1,844	4	32	147	71	239
New England	3	20	43	258	493	1	9	22	92	168	—	0	1	—	2
Connecticut	—	0	5	—	20	—	4	10	53	72	—	0	0	—	—
Maine†	—	1	5	14	32	—	1	5	12	27	N	0	0	N	N
Massachusetts	3	16	33	222	395	N	0	0	N	N	—	0	1	—	2
New Hampshire	—	1	5	7	29	1	1	4	11	13	—	0	1	—	—
Rhode Island†	—	0	7	10	1	N	0	0	N	N	—	0	0	—	—
Vermont†	—	0	6	5	16	—	2	13	16	56	—	0	0	—	—
Mid. Atlantic	9	22	44	252	461	18	19	31	319	300	2	1	5	10	21
New Jersey	—	3	9	3	77	—	0	0	—	—	—	0	3	2	3
New York (Upstate)	7	7	24	87	224	12	9	20	125	129	2	0	1	2	—
New York City	—	2	7	26	51	—	0	2	5	24	—	0	2	3	11
Pennsylvania	2	7	23	136	109	6	9	23	189	147	—	0	2	3	7
E.N. Central	7	22	186	503	602	2	3	39	10	8	—	1	4	1	12
Illinois	—	2	8	27	72	N	0	0	N	N	—	0	3	1	8
Indiana	—	0	12	15	11	—	0	1	1	1	—	0	2	—	1
Michigan	—	4	16	50	108	1	1	28	6	4	—	0	1	—	1
Ohio	7	11	176	411	273	1	1	11	3	3	—	0	2	—	2
Wisconsin	—	0	14	—	138	N	0	0	N	N	—	0	0	—	—
W.N. Central	2	12	136	167	241	5	4	13	32	68	—	4	33	5	30
Iowa	—	2	8	26	64	1	0	3	3	7	—	0	4	—	1
Kansas	—	2	5	21	60	—	0	7	—	41	—	0	2	—	5
Minnesota	—	0	131	5	45	3	0	6	17	4	—	0	4	—	—
Missouri	2	2	18	93	25	1	0	3	2	4	—	3	25	5	23
Nebraska†	—	1	12	19	9	—	0	0	—	—	—	0	2	—	—
North Dakota	—	0	4	—	4	—	0	5	8	6	—	0	0	—	—
South Dakota	—	0	7	3	34	—	0	2	2	6	—	0	1	—	1
S. Atlantic	4	14	50	194	344	46	40	62	660	783	—	14	111	31	109
Delaware	—	0	2	2	2	—	0	0	—	—	—	0	2	1	5
District of Columbia	—	0	2	4	2	—	0	0	—	—	—	0	1	1	1
Florida	4	3	9	56	94	—	0	23	42	124	—	0	3	2	2
Georgia	—	0	3	—	15	17	6	15	110	76	—	0	6	—	11
Maryland†	—	2	5	23	49	—	9	18	120	133	—	1	6	8	13
North Carolina	—	3	38	59	109	7	9	19	154	156	—	2	96	11	58
South Carolina†	—	1	22	20	30	—	0	11	—	35	—	0	7	2	8
Virginia†	—	2	11	29	37	20	12	27	202	235	—	2	11	5	10
West Virginia	—	0	12	1	6	2	0	11	32	24	—	0	3	1	1
E.S. Central	—	6	35	67	95	—	3	7	34	50	—	4	16	9	52
Alabama†	—	1	6	16	27	—	0	0	—	—	—	1	10	4	13
Kentucky	—	0	4	7	9	—	0	3	8	7	—	0	2	—	1
Mississippi	—	3	32	29	16	—	0	1	1	—	—	0	3	1	2
Tennessee†	—	1	4	15	43	—	2	6	25	43	—	1	10	4	36
W.S. Central	2	19	144	61	229	9	14	36	35	395	1	2	30	11	7
Arkansas†	—	1	17	20	37	7	1	3	22	9	—	0	15	1	—
Louisiana	—	0	2	2	9	—	0	0	—	—	—	0	2	2	1
Oklahoma	2	0	26	4	1	2	0	22	13	18	1	0	20	3	—
Texas†	—	15	134	35	182	—	13	34	—	368	—	1	7	5	6
Mountain	—	19	37	239	445	—	2	8	15	3	1	0	4	3	5
Arizona	—	2	8	37	124	N	0	0	N	N	1	0	1	2	1
Colorado	—	5	13	31	108	—	0	0	—	—	—	0	2	—	—
Idaho†	—	0	4	9	16	—	0	4	—	—	—	0	1	—	1
Montana†	—	1	11	56	21	—	0	3	—	—	—	0	1	—	—
Nevada†	—	0	7	12	14	—	0	2	—	—	—	0	0	—	—
New Mexico†	—	1	7	3	19	—	0	2	11	1	—	0	1	1	1
Utah	—	5	27	89	128	—	0	2	—	1	—	0	0	—	—
Wyoming†	—	0	2	2	15	—	0	4	4	1	—	0	2	—	2
Pacific	11	12	516	225	237	2	4	10	45	69	—	0	2	1	1
Alaska	3	1	6	26	11	—	0	3	9	27	N	0	0	N	N
California	—	8	32	75	182	2	3	8	35	42	—	0	2	1	1
Hawaii	—	0	2	3	9	—	0	0	—	—	N	0	0	N	N
Oregon†	—	2	14	39	35	—	0	3	1	—	—	0	1	—	—
Washington	8	0	482	82	—	—	0	0	—	—	N	0	0	N	N
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	0	—	—	3	1	5	21	18	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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* Incidence data for reporting years 2007 and 2008 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007
United States	375	857	2,568	8,332	10,756	22	73	239	882	816	170	359	1,242	4,534	4,012
New England	4	31	137	416	849	—	3	11	45	123	—	3	12	52	110
Connecticut	—	0	109	109	431	—	0	7	7	71	—	0	11	11	44
Maine§	—	2	14	35	32	—	0	4	3	12	—	0	2	1	8
Massachusetts	3	19	58	220	307	—	2	10	24	28	—	2	8	33	52
New Hampshire	1	2	10	20	39	—	0	4	7	8	—	0	1	1	4
Rhode Island§	—	1	14	20	23	—	0	2	2	1	—	0	9	5	1
Vermont§	—	1	5	12	17	—	0	3	2	3	—	0	1	1	1
Mid. Atlantic	42	109	190	950	1,514	3	9	196	287	107	10	21	79	497	188
New Jersey	1	19	48	82	309	—	1	7	2	26	—	4	14	66	29
New York (Upstate)	23	24	63	275	374	2	3	192	260	32	8	4	37	166	33
New York City	3	24	52	271	368	—	0	5	8	13	—	7	35	228	100
Pennsylvania	15	34	69	322	463	1	2	11	17	36	2	2	66	37	26
E.N. Central	35	104	255	926	1,582	3	9	35	69	103	34	60	134	838	386
Illinois	—	29	188	227	573	—	1	13	7	16	—	15	29	230	190
Indiana	—	10	34	92	144	—	1	12	7	9	—	7	83	257	21
Michigan	5	19	43	214	244	2	2	8	20	18	2	1	7	17	14
Ohio	29	24	64	299	315	1	2	9	26	37	17	22	104	256	87
Wisconsin	1	10	50	94	306	—	2	11	9	23	15	4	13	78	74
W.N. Central	36	50	103	644	704	4	12	38	100	98	18	25	78	296	728
Iowa	2	9	18	93	115	1	2	13	23	19	—	2	6	23	21
Kansas	6	7	20	72	106	—	1	4	8	7	—	0	3	6	12
Minnesota	13	13	39	188	179	3	3	15	19	37	5	4	11	67	90
Missouri	15	14	29	183	200	—	3	12	35	18	12	15	72	119	578
Nebraska§	—	6	13	71	47	—	1	6	9	16	—	0	3	—	8
North Dakota	—	0	9	12	9	—	0	1	1	—	1	0	5	22	6
South Dakota	—	3	11	25	48	—	0	5	5	1	—	1	30	59	13
S. Atlantic	114	229	447	2,260	2,669	1	12	40	150	164	48	80	152	969	1,306
Delaware	4	3	8	35	35	—	0	2	3	6	—	0	2	3	4
District of Columbia	—	0	4	19	12	—	0	2	4	—	—	0	4	11	4
Florida	69	87	181	1,152	1,104	1	3	18	55	42	34	32	75	341	804
Georgia	21	32	86	298	410	—	1	6	8	20	13	29	85	365	390
Maryland§	—	15	44	132	196	—	1	5	21	23	—	2	7	19	28
North Carolina	20	23	228	259	397	—	1	24	17	25	1	1	12	35	19
South Carolina§	—	18	52	192	228	—	0	3	11	4	—	7	21	167	25
Virginia§	—	22	50	131	251	—	3	9	26	43	—	3	14	25	31
West Virginia	—	4	25	42	36	—	0	3	5	1	—	0	61	3	1
E.S. Central	5	60	144	503	659	—	5	26	58	33	16	49	177	574	319
Alabama§	—	16	50	143	196	—	1	19	25	8	—	14	43	136	127
Kentucky	4	9	23	94	137	—	1	12	9	10	14	9	35	96	32
Mississippi	1	13	57	108	110	—	0	1	2	1	2	18	111	164	91
Tennessee§	—	17	34	158	216	—	2	12	22	14	—	8	32	178	69
W.S. Central	13	97	833	627	771	1	4	13	44	51	8	48	665	762	427
Arkansas§	2	13	50	90	98	1	0	3	13	10	4	2	13	80	34
Louisiana	—	16	44	58	156	—	0	0	—	3	—	7	22	58	133
Oklahoma	11	9	43	102	93	—	0	3	3	8	4	3	8	35	18
Texas§	—	51	790	377	424	—	3	11	28	30	—	34	645	589	242
Mountain	27	51	83	740	745	2	9	42	79	82	10	18	40	192	232
Arizona	8	17	39	228	248	2	1	8	20	27	5	10	30	90	108
Colorado	13	10	47	226	191	—	1	17	8	16	3	2	6	16	36
Idaho§	—	3	10	35	37	—	2	16	19	5	—	0	2	3	4
Montana§	—	1	10	21	31	—	0	3	12	—	—	0	2	—	9
Nevada§	6	5	12	72	70	—	0	3	4	7	2	2	10	66	11
New Mexico§	—	5	13	67	68	—	0	3	8	17	—	1	6	10	40
Utah	—	5	17	73	74	—	1	9	6	10	—	0	5	4	6
Wyoming§	—	1	5	18	26	—	0	1	2	—	—	0	5	3	18
Pacific	99	102	988	1,266	1,263	8	7	158	50	55	26	26	207	354	316
Alaska	1	1	5	8	27	—	0	1	1	—	—	0	1	—	6
California	68	85	230	981	1,070	2	5	33	28	41	25	23	61	303	282
Hawaii	—	5	14	55	79	—	0	4	2	4	—	0	3	13	13
Oregon§	3	6	16	88	84	1	1	11	5	10	—	2	6	18	15
Washington	27	0	749	134	3	5	0	140	14	—	1	0	159	20	—
American Samoa	—	0	1	1	—	—	0	0	—	—	—	0	1	1	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	4	4	—	0	0	—	—	—	0	3	5	5
Puerto Rico	2	13	55	50	261	—	0	1	1	—	—	0	2	—	13
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 years 2007 and 2008 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). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Streptococcal disease, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max		
United States	55	94	219	2,213	2,243	26	34	154	624	641
New England	3	5	24	133	181	—	1	5	39	53
Connecticut	—	0	22	13	36	—	0	4	—	9
Maine§	—	0	3	11	9	—	0	1	1	1
Massachusetts	3	3	7	82	101	—	1	4	30	40
New Hampshire	—	0	2	16	22	—	0	1	7	—
Rhode Island§	—	0	4	5	2	—	0	1	—	2
Vermont§	—	0	2	6	11	—	0	1	1	1
Mid. Atlantic	18	17	41	456	472	3	5	38	73	109
New Jersey	—	3	7	58	101	—	1	6	16	27
New York (Upstate)	14	6	20	161	134	3	2	14	38	45
New York City	—	4	10	81	114	—	1	35	19	37
Pennsylvania	4	5	16	156	123	N	0	0	N	N
E.N. Central	12	16	59	470	423	10	5	22	140	110
Illinois	—	4	15	118	140	—	2	6	32	26
Indiana	—	2	11	63	47	—	0	14	19	7
Michigan	4	3	10	72	99	—	1	5	33	40
Ohio	7	5	15	138	114	4	1	5	26	31
Wisconsin	1	0	38	79	23	6	0	9	30	6
W.N. Central	—	5	39	192	160	3	2	23	51	39
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	6	31	21	2	0	2	10	1
Minnesota	—	0	35	83	76	—	0	21	15	21
Missouri	—	2	10	45	41	1	1	2	18	13
Nebraska§	—	0	3	16	8	—	0	3	3	3
North Dakota	—	0	3	7	10	—	0	1	1	1
South Dakota	—	0	2	10	4	—	0	1	4	—
S. Atlantic	11	22	51	436	485	1	5	10	87	94
Delaware	—	0	2	6	2	—	0	0	—	—
District of Columbia	—	0	6	18	7	—	0	2	3	—
Florida	6	6	16	108	105	1	1	4	26	27
Georgia	2	4	10	84	106	—	0	0	—	—
Maryland§	—	4	9	77	87	—	1	5	30	33
North Carolina	3	2	22	57	50	N	0	0	N	N
South Carolina§	—	1	6	24	49	—	1	4	18	10
Virginia§	—	2	12	50	70	—	0	4	7	22
West Virginia	—	0	3	12	9	—	0	1	3	2
E.S. Central	1	4	13	69	83	—	2	11	37	36
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	1	1	3	16	22	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	3	12	2
Tennessee§	—	3	13	53	61	—	2	9	25	34
W.S. Central	1	7	70	177	133	3	4	60	97	101
Arkansas§	—	0	1	3	12	—	0	2	4	6
Louisiana	—	0	1	3	13	—	0	2	1	23
Oklahoma	1	1	9	56	38	3	1	4	38	19
Texas§	—	5	61	115	70	—	3	56	54	53
Mountain	9	10	25	238	258	6	4	12	99	95
Arizona	4	3	9	87	89	2	2	8	59	50
Colorado	5	2	9	55	69	4	1	4	23	22
Idaho§	—	0	2	8	6	—	0	1	2	2
Montana§	N	0	0	N	N	—	0	1	—	—
Nevada§	—	0	2	5	2	N	0	0	N	N
New Mexico§	—	2	8	47	45	—	0	3	9	17
Utah	—	1	5	34	43	—	0	4	6	4
Wyoming§	—	0	1	2	4	—	0	0	—	—
Pacific	—	3	7	42	48	—	0	1	1	4
Alaska	—	0	3	12	7	N	0	0	N	N
California	—	0	0	—	—	N	0	0	N	N
Hawaii	—	2	5	30	41	—	0	1	1	4
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	12	16	4	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 years 2007 and 2008 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). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	22	46	216	1,113	1,174	6	9	27	184	237	131	220	295	3,485	3,439
New England	—	1	20	19	72	—	0	4	3	9	10	6	14	97	71
Connecticut	—	0	16	—	46	—	0	3	—	4	—	0	6	6	8
Maine§	—	0	2	8	5	—	0	1	1	1	—	0	2	2	1
Massachusetts	—	0	0	—	—	—	0	0	—	—	10	3	10	83	44
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	3	4	7
Rhode Island§	—	0	3	5	10	—	0	1	1	2	—	0	3	2	10
Vermont§	—	0	2	6	11	—	0	1	1	2	—	0	5	—	1
Mid. Atlantic	4	2	6	65	73	—	0	2	12	19	36	32	45	610	548
New Jersey	—	0	0	—	—	—	0	0	—	—	2	4	10	77	67
New York (Upstate)	1	1	4	20	25	—	0	1	4	8	2	3	10	45	41
New York City	—	0	0	—	—	—	0	0	—	—	26	18	30	383	345
Pennsylvania	3	1	5	45	48	—	0	2	8	11	6	5	12	105	95
E.N. Central	4	13	46	325	317	4	2	14	53	52	17	16	31	289	294
Illinois	—	3	13	51	58	—	0	6	11	21	—	7	19	28	143
Indiana	—	3	28	99	64	—	0	11	13	7	—	1	6	47	14
Michigan	—	0	1	4	—	—	0	1	1	—	12	2	17	77	41
Ohio	4	7	15	171	195	4	1	4	28	24	5	4	14	120	72
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	3	17	24
W.N. Central	1	3	91	89	88	—	1	2	6	12	1	8	15	129	95
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	5	5
Kansas	—	1	5	37	49	—	0	1	2	2	1	0	5	12	7
Minnesota	—	0	90	—	—	—	0	2	—	8	—	1	4	30	22
Missouri	1	1	8	52	32	—	0	1	1	—	—	5	10	79	61
Nebraska§	—	0	0	—	2	—	0	0	—	—	—	0	1	3	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	5	—	0	1	3	2	—	0	3	—	—
S. Atlantic	11	19	43	458	495	1	3	9	79	120	42	49	152	714	708
Delaware	—	0	1	2	4	—	0	1	—	1	—	0	3	1	3
District of Columbia	—	0	5	19	5	—	0	0	—	—	1	2	10	30	58
Florida	6	11	26	253	266	1	2	6	47	63	13	18	35	298	218
Georgia	5	6	18	148	193	—	1	6	27	50	—	7	131	14	93
Maryland§	—	0	2	3	1	—	0	1	1	—	9	7	14	130	110
North Carolina	N	0	0	N	N	N	0	0	N	N	7	6	18	114	121
South Carolina§	—	0	0	—	—	—	0	0	—	—	2	1	10	31	30
Virginia§	N	0	0	N	N	N	0	0	N	N	10	4	17	96	71
West Virginia	—	1	7	33	26	—	0	2	4	6	—	0	1	—	4
E.S. Central	—	4	12	124	66	1	1	4	20	13	7	20	32	333	256
Alabama§	N	0	0	N	N	N	0	0	N	N	3	8	17	146	88
Kentucky	—	0	3	31	14	1	0	2	7	1	—	1	6	20	28
Mississippi	—	0	0	—	—	—	0	0	—	—	—	2	15	37	46
Tennessee§	—	3	12	93	52	—	1	3	13	12	4	8	14	130	94
W.S. Central	2	1	5	23	42	—	0	2	7	5	14	39	57	638	516
Arkansas§	2	0	1	6	1	—	0	1	3	—	5	2	10	35	40
Louisiana	—	1	4	17	41	—	0	2	4	5	9	11	22	122	129
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	5	20	24
Texas§	—	0	0	—	—	—	0	0	—	—	—	25	46	461	323
Mountain	—	1	6	10	21	—	0	2	3	7	1	9	28	69	149
Arizona	—	0	0	—	—	—	0	0	—	—	1	4	20	3	71
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	7	30	18
Idaho§	N	0	0	N	N	N	0	0	N	N	—	0	1	1	1
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	3	—	1
Nevada§	N	0	0	N	N	N	0	0	N	N	—	2	6	25	34
New Mexico§	—	0	1	—	—	—	0	0	—	—	—	1	3	10	19
Utah	—	0	6	10	14	—	0	2	3	6	—	0	2	—	4
Wyoming§	—	0	2	—	7	—	0	1	—	1	—	0	1	—	1
Pacific	—	0	0	—	—	—	0	1	1	—	3	42	65	606	802
Alaska	N	0	0	N	N	N	0	0	N	N	—	0	1	—	3
California	N	0	0	N	N	N	0	0	N	N	3	38	58	541	749
Hawaii	—	0	0	—	—	—	0	1	1	—	—	0	2	8	3
Oregon§	N	0	0	N	N	N	0	0	N	N	—	0	2	6	5
Washington	N	0	0	N	N	N	0	0	N	N	—	3	13	51	42
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	4
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	6	2	10	51	46
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 years 2007 and 2008 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). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 3, 2008, and May 5, 2007 (18th Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	400	614	1,416	11,171	17,677	—	1	141	—	5	—	2	299	—	2
New England	1	12	31	190	320	—	0	2	—	—	—	0	2	—	—
Connecticut	—	0	1	—	1	—	0	2	—	—	—	0	1	—	—
Maine¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
New Hampshire	1	6	18	95	139	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Vermont¶	—	5	21	95	180	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	61	58	145	940	2,301	—	0	3	—	—	—	0	3	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York City	N	0	0	N	N	—	0	3	—	—	—	0	3	—	—
Pennsylvania	61	58	145	940	2,301	—	0	1	—	—	—	0	1	—	—
E.N. Central	198	158	358	2,687	5,096	—	0	18	—	—	—	0	12	—	1
Illinois	25	4	49	325	74	—	0	13	—	—	—	0	8	—	—
Indiana	—	0	222	—	—	—	0	4	—	—	—	0	2	—	—
Michigan	63	64	154	1,125	1,990	—	0	5	—	—	—	0	0	—	—
Ohio	108	61	208	1,194	2,490	—	0	4	—	—	—	0	3	—	1
Wisconsin	2	5	80	43	542	—	0	2	—	—	—	0	2	—	—
W.N. Central	50	22	69	590	928	—	0	41	—	—	—	1	117	—	1
Iowa	N	0	0	N	N	—	0	4	—	—	—	0	3	—	1
Kansas	3	5	36	223	367	—	0	3	—	—	—	0	7	—	—
Minnesota	—	0	0	—	—	—	0	9	—	—	—	0	12	—	—
Missouri	47	12	53	308	433	—	0	9	—	—	—	0	3	—	—
Nebraska¶	N	0	0	N	N	—	0	5	—	—	—	0	15	—	—
North Dakota	—	0	39	43	84	—	0	11	—	—	—	0	49	—	—
South Dakota	—	1	9	16	44	—	0	9	—	—	—	0	32	—	—
S. Atlantic	54	101	180	1,900	2,280	—	0	12	—	—	—	0	6	—	—
Delaware	—	1	4	9	16	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	8	14	8	—	0	0	—	—	—	0	0	—	—
Florida	41	28	87	797	514	—	0	1	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	8	—	—	—	0	5	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
South Carolina¶	—	13	52	276	579	—	0	2	—	—	—	0	1	—	—
Virginia¶	—	23	82	497	622	—	0	1	—	—	—	0	1	—	—
West Virginia	13	16	66	307	541	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	14	82	428	207	—	0	11	—	4	—	0	14	—	—
Alabama¶	—	14	82	421	205	—	0	2	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	7	2	—	0	7	—	3	—	0	12	—	—
Tennessee¶	N	0	0	N	N	—	0	1	—	1	—	0	2	—	—
W.S. Central	1	161	842	3,610	5,132	—	0	34	—	1	—	0	18	—	—
Arkansas¶	1	11	42	237	294	—	0	5	—	—	—	0	2	—	—
Louisiana	—	1	8	27	65	—	0	5	—	—	—	0	3	—	—
Oklahoma	N	0	0	N	N	—	0	11	—	—	—	0	7	—	—
Texas¶	—	154	825	3,346	4,773	—	0	18	—	1	—	0	10	—	—
Mountain	33	38	120	812	1,393	—	0	36	—	—	—	1	143	—	—
Arizona	—	0	0	—	—	—	0	8	—	—	—	0	10	—	—
Colorado	33	13	40	294	546	—	0	17	—	—	—	0	65	—	—
Idaho¶	N	0	0	N	N	—	0	3	—	—	—	0	22	—	—
Montana¶	—	6	40	141	176	—	0	10	—	—	—	0	30	—	—
Nevada¶	N	0	0	N	N	—	0	1	—	—	—	0	3	—	—
New Mexico¶	—	4	20	94	233	—	0	8	—	—	—	0	6	—	—
Utah	—	8	72	282	423	—	0	8	—	—	—	0	8	—	—
Wyoming¶	—	0	9	1	15	—	0	4	—	—	—	0	33	—	—
Pacific	2	0	4	14	20	—	0	18	—	—	—	0	23	—	—
Alaska	2	0	4	14	20	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	17	—	—	—	0	21	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	3	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	2	7	22	143	—	0	0	—	—	—	0	0	—	—
Puerto Rico	13	10	37	102	296	—	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 years 2007 and 2008 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 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). Due to technical difficulty no data from the NEDSS system was included in week 18.

TABLE III. Deaths in 122 U.S. cities,* week ending May 3, 2008 (18th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
New England	497	356	94	22	14	11	44
Boston, MA	156	107	31	6	5	7	14
Bridgeport, CT	31	22	8	1	—	—	4
Cambridge, MA	11	9	2	—	—	—	1
Fall River, MA	30	24	5	1	—	—	3
Hartford, CT	41	27	5	4	4	1	5
Lowell, MA	17	16	—	1	—	—	1
Lynn, MA	7	7	—	—	—	—	—
New Bedford, MA	24	20	3	1	—	—	7
New Haven, CT	U	U	U	U	U	U	U
Providence, RI	61	42	15	2	2	—	2
Somerville, MA	4	3	1	—	—	—	—
Springfield, MA	36	23	9	2	—	2	4
Waterbury, CT	24	16	5	—	3	—	1
Worcester, MA	55	40	10	4	—	1	2
Mid. Atlantic	1,889	1,301	406	127	34	19	116
Albany, NY	40	28	6	2	2	2	—
Allentown, PA	26	18	5	1	2	—	3
Buffalo, NY	78	53	17	7	—	1	4
Camden, NJ	27	15	5	4	3	—	3
Elizabeth, NJ	13	10	2	1	—	—	2
Erie, PA	37	24	10	2	1	—	3
Jersey City, NJ	21	13	5	1	—	2	4
New York City, NY	1,034	717	230	69	12	5	57
Newark, NJ	42	25	13	—	2	2	2
Paterson, NJ	15	6	5	2	1	1	2
Philadelphia, PA	167	101	44	10	6	5	9
Pittsburgh, PA§	23	17	5	—	1	—	2
Reading, PA	43	29	5	9	—	—	2
Rochester, NY	139	110	20	8	1	—	12
Schenectady, NY	24	21	2	1	—	—	—
Scranton, PA	40	33	6	1	—	—	3
Syracuse, NY	64	40	14	6	3	1	7
Trenton, NJ	28	20	5	3	—	—	—
Utica, NY	12	9	3	—	—	—	—
Yonkers, NY	16	12	4	—	—	—	1
E.N. Central	2,087	1,366	490	156	37	38	155
Akron, OH	46	35	6	4	1	—	—
Canton, OH	43	27	9	4	1	2	6
Chicago, IL	336	189	89	39	12	7	32
Cincinnati, OH	107	76	24	5	—	2	15
Cleveland, OH	232	178	45	8	—	1	13
Columbus, OH	206	123	52	22	6	3	9
Dayton, OH	119	75	33	7	2	2	9
Detroit, MI	171	89	56	21	2	3	8
Evansville, IN	48	39	7	1	—	1	5
Fort Wayne, IN	68	39	21	5	3	—	5
Gary, IN	19	6	8	1	4	—	—
Grand Rapids, MI	57	44	10	—	—	3	4
Indianapolis, IN	193	128	39	18	2	6	19
Lansing, MI	47	34	10	1	—	2	3
Milwaukee, WI	93	65	20	8	—	—	4
Peoria, IL	41	26	8	2	3	2	2
Rockford, IL	55	40	12	2	—	1	3
South Bend, IN	47	35	9	1	1	1	5
Toledo, OH	103	75	20	6	—	2	10
Youngstown, OH	56	43	12	1	—	—	3
W.N. Central	630	407	148	42	19	13	48
Des Moines, IA	U	U	U	U	U	U	U
Duluth, MN	28	23	5	—	—	—	4
Kansas City, KS	43	23	14	5	1	—	6
Kansas City, MO	96	52	31	6	5	2	7
Lincoln, NE	47	38	5	1	2	1	4
Minneapolis, MN	76	47	14	9	4	2	7
Omaha, NE	88	63	20	4	—	1	7
St. Louis, MO	111	58	32	10	4	6	7
St. Paul, MN	59	46	9	2	2	—	2
Wichita, KS	82	57	18	5	1	1	4
S. Atlantic	1,157	700	307	92	32	26	65
Atlanta, GA	129	72	37	13	2	5	—
Baltimore, MD	147	97	36	8	2	4	16
Charlotte, NC	100	59	30	7	3	1	7
Jacksonville, FL	153	85	50	14	4	—	6
Miami, FL	80	52	18	7	2	1	11
Norfolk, VA	59	32	13	7	2	5	1
Richmond, VA	57	30	19	5	2	1	2
Savannah, GA	56	35	12	3	1	5	6
St. Petersburg, FL	59	40	11	2	3	3	4
Tampa, FL	203	126	56	14	6	1	4
Washington, D.C.	94	58	20	11	5	—	4
Wilmington, DE	20	14	5	1	—	—	4
E.S. Central	891	572	228	47	23	21	57
Birmingham, AL	218	140	47	9	12	10	16
Chattanooga, TN	81	55	19	3	2	2	8
Knoxville, TN	123	81	33	6	1	2	8
Lexington, KY	54	44	6	1	3	—	3
Memphis, TN	144	88	42	10	2	2	9
Mobile, AL	88	52	28	6	2	—	1
Montgomery, AL	37	22	10	3	—	2	2
Nashville, TN	146	90	43	9	1	3	10
W.S. Central	1,627	1,049	388	110	36	43	93
Austin, TX	87	59	20	7	1	—	5
Baton Rouge, LA	37	13	10	5	9	—	—
Corpus Christi, TX	62	38	14	8	—	2	11
Dallas, TX	228	132	61	17	7	11	9
El Paso, TX	134	105	18	7	—	4	2
Fort Worth, TX	118	81	26	6	1	4	13
Houston, TX	361	221	96	25	10	8	19
Little Rock, AR	86	65	17	4	—	—	3
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	299	192	72	25	4	6	24
Shreveport, LA	49	26	15	—	2	6	1
Tulsa, OK	166	117	39	6	2	2	6
Mountain	1,132	730	266	78	26	31	84
Albuquerque, NM	120	85	27	3	2	3	8
Boise, ID	56	36	15	2	1	2	5
Colorado Springs, CO	75	51	15	8	—	1	2
Denver, CO	50	30	14	2	—	4	3
Las Vegas, NV	266	167	65	26	4	4	19
Ogden, UT	29	22	4	2	—	1	3
Phoenix, AZ	194	112	52	15	6	8	19
Pueblo, CO	35	21	12	1	1	—	1
Salt Lake City, UT	122	85	24	5	5	3	12
Tucson, AZ	185	121	38	14	7	5	12
Pacific	1,689	1,206	339	82	35	27	153
Berkeley, CA	17	12	3	1	1	—	2
Fresno, CA	120	89	22	4	2	3	11
Glendale, CA	22	17	5	—	—	—	4
Honolulu, HI	60	46	11	2	1	—	10
Long Beach, CA	67	39	19	6	2	1	6
Los Angeles, CA	238	170	45	15	4	4	32
Pasadena, CA	12	10	2	—	—	—	1
Portland, OR	163	109	33	14	3	4	14
Sacramento, CA	184	129	43	4	5	3	14
San Diego, CA	154	107	38	5	3	1	13
San Francisco, CA	113	81	20	8	1	3	9
San Jose, CA	207	157	36	8	5	1	13
Santa Cruz, CA	31	23	8	—	—	—	2
Seattle, WA	109	64	27	9	4	5	6
Spokane, WA	58	45	10	1	1	1	10
Tacoma, WA	134	108	17	5	3	1	6
Total	11,599**	7,687	2,666	756	256	229	815

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.

¶ Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

** Total includes unknown ages.

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