



MMWR™

Morbidity and Mortality Weekly Report

www.cdc.gov/mmwr

Weekly

January 25, 2008 / Vol. 57 / No. 3

Influenza-Testing and Antiviral-Agent Prescribing Practices — Connecticut, Minnesota, New Mexico, and New York, 2006–07 Influenza Season

Influenza is a major cause of morbidity and mortality in the United States, with an average of 36,000 deaths attributed to the disease annually (1). Patients with influenza-like illness (ILI) often are evaluated by their primary-care physicians (PCPs). Antiviral therapy initiated within 48 hours of ILI symptom onset can shorten the course of influenza illness; antiviral therapy also is used as chemoprophylaxis for influenza, particularly in institutions and communities (2). Early laboratory diagnosis and knowing when influenza is circulating in the community can guide effective clinical management. To assess influenza-testing and antiviral-agent prescribing practices during the 2006–07 influenza season, personnel at four of 10 Emerging Infections Program (EIP) sites with influenza hospitalization surveillance surveyed PCPs. This report describes the results of that survey, which indicated that 69.0% of the PCPs administered influenza tests to patients who had ILI during the influenza season and 53.8% prescribed antiviral agents, including two (i.e., amantadine and rimantadine) no longer recommended by CDC. Health agencies, medical societies, and continuing medical education organizations should advance programs for physicians that increase awareness of recommendations regarding appropriate influenza testing and use of antiviral agents.

EIP is a network of state health departments, academic institutions, and local collaborators funded by CDC to assess the effect of emerging infections and evaluate methods for their prevention and control.* EIP personnel identified PCPs (defined as physicians in family practice, internal medicine, obstetrics/gynecology, or pediatrics) via

state licensure databases. Random sampling was used to select a representative sample for each PCP type[†] from the following EIP sites: Connecticut (New Haven County); Minnesota (seven counties in the Minneapolis/St. Paul metropolitan area); New Mexico (four counties including the Albuquerque and Las Cruces metropolitan areas); and New York (15 counties in the Albany and Rochester metropolitan areas). A self-administered survey was mailed to PCPs in March–April 2007, with a second mailing to nonresponders in May–June, and a repeat mailing or fax in July–August. Participants were asked whether, since October 2006, they had evaluated patients with ILI (defined as a temperature of $\geq 100.0^{\circ}\text{F}$ [$\geq 37.8^{\circ}\text{C}$] with a cough or sore throat) and whether they provided direct patient care ≥ 8 hours per week. Participants were asked to indicate whether they tested patients for influenza and, if so, which test types were used (i.e., viral culture, serology, or rapid antigen) and which types of rapid antigen

[†] Sampling was conducted among physicians licensed in family practice, internal medicine, obstetrics/gynecology, or pediatrics, regardless of whether they also were licensed in other specialties. However, to better focus data analysis on practices among front-line, primary-care physicians, any physicians who reported other specialties or subspecialties in addition to or instead of any of the four designated PCP groups were excluded from the final analysis.

INSIDE

- 65 Knowledge and Practices of Obstetricians and Gynecologists Regarding Cytomegalovirus Infection During Pregnancy — United States, 2007
- 69 Multistate Outbreak of Human *Salmonella* Infections Associated with Exposure to Turtles — United States, 2007–2008
- 72 Notices to Readers
- 74 QuickStats

* Additional information is available at <http://www.cdc.gov/ncidod/osr/site/eip/index.htm>.

The *MMWR* series of publications is published by the Coordinating Center for Health Information and Service, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

Suggested Citation: Centers for Disease Control and Prevention. [Article title]. *MMWR* 2008;57:[inclusive page numbers].

Centers for Disease Control and Prevention

Julie L. Gerberding, MD, MPH
Director

Tanja Popovic, MD, PhD
Chief Science Officer

James W. Stephens, PhD
Associate Director for Science

Steven L. Solomon, MD
Director, Coordinating Center for Health Information and Service

Jay M. Bernhardt, PhD, MPH
Director, National Center for Health Marketing

Katherine L. Daniel, PhD
Deputy Director, National Center for Health Marketing

Editorial and Production Staff

Frederic E. Shaw, MD, JD
Editor, MMWR Series

Suzanne M. Hewitt, MPA
Managing Editor, MMWR Series

Douglas W. Weatherwax
Lead Technical Writer-Editor

Catherine H. Bricker, MS
Jude C. Rutledge
Writers-Editors

Beverly J. Holland
Lead Visual Information Specialist

Lynda G. Cupell
Malbea A. LaPete
Visual Information Specialists

Quang M. Doan, MBA
Erica R. Shaver
Information Technology Specialists

Editorial Board

William L. Roper, MD, MPH, Chapel Hill, NC, Chairman

Virginia A. Caine, MD, Indianapolis, IN

David W. Fleming, MD, Seattle, WA

William E. Halperin, MD, DrPH, MPH, Newark, NJ

Margaret A. Hamburg, MD, Washington, DC

King K. Holmes, MD, PhD, Seattle, WA

Deborah Holtzman, PhD, Atlanta, GA

John K. Iglehart, Bethesda, MD

Dennis G. Maki, MD, Madison, WI

Sue Mallonee, MPH, Oklahoma City, OK

Stanley A. Plotkin, MD, Doylestown, PA

Patricia Quinlisk, MD, MPH, Des Moines, IA

Patrick L. Remington, MD, MPH, Madison, WI

Barbara K. Rimer, DrPH, Chapel Hill, NC

John V. Rullan, MD, MPH, San Juan, PR

Anne Schuchat, MD, Atlanta, GA

Dixie E. Snider, MD, MPH, Atlanta, GA

John W. Ward, MD, Atlanta, GA

tests were used (i.e., point-of-care testing or off-site testing[§]). Participants also were asked whether they had prescribed antiviral agents since October 2006 and, if so, which types of antiviral agents they prescribed. In addition, PCPs were asked their reason for testing patients for influenza. Finally, physicians who were not involved in direct patient care ≥ 8 hours per week, had not evaluated patients with ILI, reported any subspecialty, or reported a specialty other than family practice, internal medicine, obstetrics/gynecology, or pediatrics were excluded from the analysis. Chi-square tests were used to compare percentages by PCP type, practice setting (i.e., outpatient versus hospital based), years in practice, and state.

Of 2,679 physicians surveyed, 1,262 (47.1%) responded; of these, 730 (57.8%) met the inclusion criteria: 268 (36.7%) in family practice, 213 (29.2%) in internal medicine, 204 (27.9%) in pediatrics, and 45 (6.2%) in obstetrics/gynecology (Table 1). Overall, 504 (69.0%) PCPs ordered an influenza test during the 2006–07 influenza season; 444 (88.0%) ordered rapid antigen testing; 95 (18.8%) ordered viral culture; and 32 (6.3%) ordered serology. The most commonly cited reasons for ordering an influenza test were to determine etiology of the illness (56.5%) and to determine appropriateness for antiviral treatment (30.8%) (Table 1). The proportion of participants who ordered influenza testing varied by PCP type: pediatrics, 75.5%; internal medicine, 73.2%; and family practice, 69.8%. The number of participants in obstetrics/gynecology who ordered influenza testing was too small for a reliable estimate (Table 1). The proportion of participants who ordered influenza testing also varied by state: Minnesota, 87.1%; New York, 59.9%; Connecticut, 59.0%; and New Mexico, 55.0% (Table 2). PCPs in practice >10 years were less likely (66.4%) to order an influenza test than PCPs in practice ≤ 10 years (76.0%) ($p < 0.05$).

Among PCPs who ordered influenza testing, use of rapid antigen testing was highest in Minnesota, followed by New York, Connecticut, and New Mexico (93.4%, 86.4%, 84.7%, and 70.4%, respectively) (Table 2). Of the 504 PCPs who ordered influenza testing, 275 (54.5%) ordered off-site rapid antigen testing, and 250 (49.6%) ordered point-of-care rapid antigen testing (Table 1). Use of off-site rapid antigen testing was highest in New York (76.2%) and New Mexico (56.8%), followed by Minnesota (41.0%), and Connecticut (32.6%) (Table 2). For point-of-care rapid antigen testing, use was highest in Minnesota (75.9%) and

[§] Point-of-care testing occurs when a sample is collected and analysis is performed in a physician's office or clinic setting. Off-site testing occurs when a sample is collected in a physician's office or clinic setting but sent to a laboratory for analysis.

TABLE 1. Influenza-testing and antiviral-agent prescribing practices, by primary-care physician (PCP)* type — Emerging Infections Program survey, Connecticut, Minnesota, New Mexico, and New York, 2006–07 influenza season

Characteristic	Family practice			Internal medicine			Obstetrics/Gynecology			Pediatrics			Total		
	No.	(%)	(95% CI) [†]	No.	(%)	(95% CI)	No.	(%)	(95% CI)	No.	(%)	(95% CI)	No.	(%)	(95% CI)
Total[§]	268	(100.0)	NA^{††}	213	(100.0)	NA	45	(100.0)	NA	204	(100.0)	NA	730	(100.0)	NA
Practice setting															
Outpatient based [§]	181	(67.5)	(61.9–73.4)	123	(57.7)	(51.1–64.4)	30	(66.7)	(52.9–80.4)	146	(71.6)	(65.4–77.8)	480	(65.7)	(62.3–69.2)
Hospital based	47	(17.5)	(13.0–22.1)	28	(13.1)	(8.6–17.7)	7	— ^{**}	—	39	(19.1)	(13.7–24.5)	121	(16.5)	(13.9–19.3)
Other/Unknown [§]	40	(14.9)	(10.7–19.2)	62	(29.1)	(23.0–35.2)	8	—	—	19	(9.3)	(5.3–13.3)	129	(17.6)	(14.9–20.4)
Test patients for influenza[§]	187	(69.8)	(64.3–75.3)	156	(73.2)	(67.3–79.2)	7	—	—	154	(75.5)	(69.6–81.4)	504	(69.0)	(65.7–72.4)
Reason for testing patients for influenza															
Decide on antiviral treatment [§]	66	(35.3)	(28.4–42.1)	56	(35.9)	(28.4–43.4)	2	—	—	31	(20.1)	(13.8–26.5)	155	(30.8)	(26.7–34.8)
Desire to know etiology [§]	100	(53.5)	(46.3–60.6)	79	(50.6)	(42.8–58.5)	3	—	—	103	(66.9)	(59.5–74.3)	285	(56.5)	(52.2–60.9)
Decide whether to admit to hospital	0	NA	NA	1	—	—	0	NA	NA	0	NA	NA	1	—	—
Other/Unknown	21	(11.2)	(6.7–15.8)	20	(12.8)	(7.6–18.1)	2	—	—	20	(13.0)	(7.7–18.3)	63	(12.5)	(9.6–15.4)
Influenza test types (among those who tested)^{††}															
Viral culture [§]	31	(16.5)	(11.3–21.9)	38	(24.3)	(17.6–31.1)	2	—	—	24	(15.5)	(9.9–21.3)	95	(18.8)	(15.4–22.3)
Serology	13	(6.9)	(3.3–10.6)	14	(8.9)	(4.5–13.5)	2	—	—	3	—	—	32	(6.3)	(4.2–8.5)
Rapid antigen ^{§§}	164	(87.7)	(83.0–92.4)	134	(85.8)	(80.4–91.4)	6	(85.7)	(59.8–100.0)	140	(90.9)	(86.4–95.5)	444	(88.0)	(85.3–90.9)
Off-site testing	104	(55.6)	(48.5–62.7)	90	(57.6)	(49.9–65.4)	5	(71.4)	(38.0–100.0)	76	(49.3)	(41.5–57.3)	275	(54.5)	(50.2–58.9)
Point-of-care testing	91	(48.6)	(41.5–55.8)	76	(48.7)	(40.9–56.6)	3	—	—	80	(51.9)	(44.1–59.8)	250	(49.6)	(45.2–54.0)
Prescribe antiviral agent[§]	178	(66.4)	(60.8–72.1)	125	(58.7)	(52.1–65.3)	5	—	—	85	(41.7)	(34.9–48.4)	393	(53.8)	(50.2–57.5)
Type of agent^{††}															
Amantadine	34	(19.1)	(13.3–24.9)	22	(17.6)	(10.9–24.3)	2	—	—	12	(14.1)	(6.7–21.5)	70	(17.8)	(14.0–21.6)
Rimantadine	19	(10.7)	(6.1–15.2)	9	—	—	0	NA	NA	6	—	—	34	(8.7)	(5.9–11.4)
Oseltamivir	161	(90.4)	(86.1–94.8)	109	(87.2)	(81.3–93.1)	2	—	—	70	(82.4)	(74.3–90.5)	342	(87.0)	(83.7–90.3)
Zanamivir	8	—	—	8	—	—	1	—	—	4	—	—	21	(5.3)	(3.1–7.6)

* PCPs were defined as those who were involved in direct patient care ≥8 hours per week, who evaluated patients with influenza-like illness, and who did not report a specialty or subspecialty other than family practice, internal medicine, obstetrics/gynecology, or pediatrics.

† Confidence interval.

§ Significant differences among PCP types by chi-square test; p<0.05.

†† Not applicable.

** Relative standard error is >30%; point estimate is not reliable.

†† Respondents were asked to identify all that apply.

§§ Respondents were asked about each type separately.

Connecticut (56.5%), followed by New York (29.5%), and New Mexico (20.0%) (Table 2).

Among all 730 eligible PCPs, 393 (53.8%) prescribed antiviral agents to at least some patients with ILI. Differences were observed by PCP type: family practice, 66.4%; internal medicine, 58.7%; and pediatrics, 41.7%. The number of participants in obstetrics/gynecology who prescribed antiviral agents was too small for a reliable estimate (Table 1). Differences also were observed by state: Minnesota, 62.0%; New York, 50.2%; Connecticut, 48.7%; New Mexico, 46.3% (Table 2); and practice setting (58% of outpatient-based PCPs versus 30% of hospital-based PCPs (p<0.001).

PCPs were asked to identify all antiviral agents they prescribed; 87.0% prescribed oseltamivir, 17.8% amantadine, 8.7% rimantadine, and 5.3% zanamivir (Table 1). Amantadine use was highest in New Mexico (43.2%), followed by Minnesota (16.6%) and New York (14.2%). Use of oseltamivir was highest in Connecticut (94.7%), followed by Minnesota, New York, and New Mexico (90.2%, 85.8%, and 70.3%, respectively) (Table 2).

Reported by: D Fazio, A Laufer, MPH, J Meek, MPH, J Palumbo, MS, Yale Univ, New Haven, Connecticut. R Lynfield, MD, C Morin, MPH, K Vick, Minnesota Dept of Health. J Baumbach, MD, M Mueller, MPH, New Mexico Dept of Health. R Belflower, C Long, MPH, Univ of Rochester, Rochester, New York. Emerging Infections Program; L Kamimoto, MD, Influenza Div National Center for Immunization and Respiratory Diseases, CDC.

Editorial Note: Influenza testing can aid in timely diagnosis and guide clinical management of patients with ILI by early identification of patients who might benefit from antiviral therapy. Diagnostic tests available for detecting influenza virus include viral culture, polymerase chain reaction, immunofluorescence, and rapid antigen testing. The number of rapid antigen tests for influenza has increased from six tests approved by the Food and Drug Administration in 2003 to 15 tests in 2007 (3,4). This survey determined that the majority of PCPs ordered influenza testing and among those who did, approximately 90% ordered rapid antigen testing.

Many rapid antigen tests for influenza can be performed by nonlaboratorians in office settings (3,4). This might explain why PCPs report such high usage of point-of-care rapid antigen tests. However, the benefit of obtaining results quickly must be weighed against the low sensitivi-

TABLE 2. Influenza-testing and antiviral-agent prescribing practices of primary-care physicians (PCP),* by state — Emerging Infections Program survey, Connecticut, Minnesota, New Mexico, and New York, 2006–07 influenza season

Characteristic	Connecticut			Minnesota			New Mexico			New York			Total		
	No.	(%)	(95% CI) [†]	No.	(%)	(95% CI)	No.	(%)	(95% CI)	No.	(%)	(95% CI)	No.	(%)	(95% CI)
Total[§]	78	(100.0)	NA^{††}	263	(100.0)	NA	80	(100.0)	NA	309	(100.0)	NA	730	(100.0)	NA
Practice setting															
Outpatient based [§]	53	(67.9)	(57.6–78.3)	179	(68.1)	(62.4–73.7)	38	(47.5)	(36.6–58.4)	210	(68.0)	(62.8–73.2)	480	(65.7)	(62.3–69.2)
Hospital based [§]	14	(17.9)	(9.4–26.5)	54	(20.5)	(15.7–25.4)	16	(20.0)	(11.2–28.8)	37	(12.0)	(8.4–15.6)	121	(16.6)	(13.9–19.3)
Other/Unknown [§]	11	(14.1)	(6.4–21.8)	30	(11.4)	(7.6–15.3)	26	(32.5)	(22.2–42.8)	62	(20.1)	(16.6–24.5)	129	(17.6)	(14.9–20.4)
Test patients for influenza[§]	46	(59.0)	(48.1–69.9)	229	(87.1)	(83.0–91.1)	44	(55.0)	(44.1–65.9)	185	(59.9)	(54.4–65.3)	504	(69.0)	(65.7–72.4)
Reason for testing patients for influenza															
Decide on antiviral treatment [§]	11	(23.9)	(11.6–36.2)	84	(36.7)	(30.4–42.9)	14	(31.8)	(18.1–45.6)	46	(24.9)	(18.6–31.1)	155	(30.8)	(26.7–34.8)
Desire to know etiology	31	(67.4)	(53.8–80.9)	121	(52.8)	(46.4–59.3)	24	(54.5)	(39.8–69.3)	109	(58.9)	(51.8–66.0)	285	(56.5)	(52.2–60.9)
Decide whether to admit to hospital	0	NA	NA	0	NA	NA	0	NA	NA	1	—**	—	1	—	—
Other/Unknown	4	—	—	24	(10.5)	(6.5–14.5)	6	—	—	29	(15.7)	(10.4–20.9)	63	(12.5)	(9.6–15.4)
Influenza test types (among those who tested)^{††}															
Viral culture [§]	6	—	—	23	(10.0)	(6.2–13.9)	9	(20.4)	(8.5–32.4)	57	(30.8)	(24.2–37.5)	95	(18.8)	(15.4–22.3)
Serology	6	—	—	14	(6.1)	(3.0–9.2)	4	—	—	8	—	—	32	(6.3)	(4.2–8.5)
Rapid antigen ^{§§}	39	(84.7)	(74.4–95.2)	214	(93.4)	(90.3–96.7)	31	(70.4)	(57.0–83.9)	160	(86.4)	(81.6–91.4)	444	(88.0)	(85.3–90.9)
Off-site testing [§]	15	(32.6)	(19.1–46.2)	94	(41.0)	(34.7–47.2)	25	(56.8)	(42.2–71.5)	141	(76.2)	(70.1–82.4)	275	(54.5)	(50.2–58.9)
Point-of-care testing [§]	26	(56.5)	(42.2–70.9)	174	(75.9)	(70.5–81.5)	13	(29.5)	(16.1–43.0)	37	(20.0)	(14.2–27.8)	250	(49.6)	(45.2–54.0)
Prescribe antiviral agent[§]	38	(48.7)	(37.6–59.8)	163	(62.0)	(56.1–67.9)	37	(46.3)	(35.3–57.2)	155	(50.2)	(44.6–55.7)	393	(53.8)	(50.2–57.5)
Type of agent^{††}															
Amantadine [§]	5	—	—	27	(16.6)	(10.9–22.3)	16	(43.2)	(27.3–59.2)	22	(14.2)	(8.7–19.7)	70	(17.8)	(14.0–21.6)
Rimantadine	1	—	—	10	(6.1)	(2.5–9.8)	4	—	—	19	(12.3)	(7.1–17.4)	34	(8.7)	(5.9–11.4)
Oseltamivir [§]	36	(94.7)	(87.6–100.0)	147	(90.2)	(85.6–94.8)	26	(70.3)	(55.5–85.0)	133	(85.8)	(80.3–91.3)	342	(87.0)	(83.7–90.3)
Zanamivir	2	—	—	7	—	—	2	—	—	10	—	—	21	(5.3)	(3.1–7.6)

* PCPs were defined as those who were involved in direct patient care ≥8 hours per week, who evaluated patients with influenza-like illness, and who did not report a specialty or subspecialty other than family practice, internal medicine, obstetrics/gynecology, or pediatrics.

[†] Confidence interval.

[§] Significant differences among states by chi-square test; *p*<0.05.

^{††} Not applicable.

** Relative standard error is >30%; point estimate is not reliable.

^{†††} Respondents were asked to identify all that apply.

^{§§} Respondents were asked about each type separately.

ties of the tests (70%–75%) (3). Because rapid antigen tests produce incorrect results for 25%–30% of persons with influenza (3), PCPs should use clinical judgment and check reports of weekly influenza activity from CDC and their individual state health departments to guide their clinical decisions.

Antiviral treatment and chemoprophylaxis decrease the economic impact of influenza (2). Among PCPs in this survey, 92.3% listed oseltamivir and zanamivir among the antiviral agents they prescribed. However, 26.4% of PCPs also prescribed amantadine or rimantadine. Since January 2006, these agents have not been recommended because of the high rate of resistance among circulating influenza A strains (5). PCPs also should be aware of the proper usage and possible side effects of oseltamivir and zanamivir. Specifically, pediatric patients receiving oseltamivir should be monitored closely for signs of neuropsychiatric effects (e.g., hallucinations, delirium, or abnormal behavior) throughout their treatment period, and PCPs should not prescribe this agent for patients aged <1 year (6). Zanamivir can be administered to patients aged ≥7 years or as prophylaxis for those aged ≥5 years; however, this agent can cause bron-

chospasm and should not be prescribed to patients with underlying respiratory disease such as asthma or chronic obstructive pulmonary disease (7).

Certain women use obstetricians/gynecologists as their PCPs (8). Seasonal influenza might place pregnant women at increased risk for medical complications (9). However, insufficient data on oseltamivir and zanamivir are available to assess possible risks to the fetus during pregnancy. Use of these antiviral agents for chemoprophylaxis or treatment of pregnant women with influenza must be based on a careful risk assessment, and PCPs who provide care to women who are pregnant should be aware of current recommendations for influenza vaccine (10).

The findings in this report are subject to at least four limitations. First, the survey was conducted primarily among metropolitan-area PCPs, and the results might not represent practice patterns in rural areas. Second, the response rate was only 47.1%. Third, the self-reports of respondents are subject to recall bias and might not reflect the actual services provided. Finally, results do not reflect the health-care practices of primary-care providers who are not physicians (e.g., physician assistants or nurse practitioners).

A majority of the PCPs surveyed used rapid antigen tests to guide treatment decisions for patients with ILI. PCPs who rely on rapid antigen tests should understand the limitations of these tests when interpreting test results. Although the majority of PCPs reported use of recommended antiviral agents, some prescribed antiviral agents that are no longer recommended by CDC. More educational measures are needed to make PCPs aware of the current treatment recommendations. Tailoring educational programs to geographic locales and physician characteristics (e.g., PCP type or practice setting) might better guide PCP testing and antiviral-agent prescribing practices for influenza.

References

1. Thompson WW, Shay DK, Weintraub E, et al. Influenza-associated hospitalizations in the United States. *JAMA* 2004;292:1333–40.
2. Demicheli V, Jefferson T, Rivetti D, Deeks J. Prevention and early treatment of influenza in healthy adults. *Vaccine* 2000;18:957–1030.
3. CDC. Rapid diagnostic testing for influenza: information for clinical laboratory directors. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at <http://www.cdc.gov/flu/professionals/diagnosis/rapidlab.htm>.
4. Uyeki TM. Influenza diagnosis and treatment in children: a review of studies on clinically useful tests and antiviral treatment for influenza. *Pediatr Infect Dis J* 2003;22:164–77.
5. CDC. High levels of adamantane resistance among influenza A (H3N2) viruses and interim guidelines for use of antiviral agents—United States, 2005–06 influenza season. *MMWR* 2006;55:44–6.
6. Tamiflu® [package insert]. Nutley, NJ: Hoffman-LaRoche, Inc.; 2007. Available at <http://rocheusa.com/products/tamiflu/pi.pdf>.
7. Relenza® [package insert]. Research Triangle Park, NC: GlaxoSmithKline; 2007. Available at http://us.gsk.com/products/assets/us_relenza.pdf.
8. Scholle SH, Chang J, Harman J, McNeil M. Characteristics of patients seen in services provided in primary care visits in obstetrics/gynecology: data from NAMCS and NHAMCS. *Am J Obstet Gynecol* 2004;190:1119–27.
9. Irving WL, James DK, Stephenson T, et al. Influenza virus infection in the second and third trimesters of pregnancy: a clinical and seroepidemiological study. *BJOG* 2000;107:1282–9.
10. CDC. Recommended adult immunization schedule—United States, October 2007–September 2008. *MMWR* 2007;56(41):Q1–Q4.

Knowledge and Practices of Obstetricians and Gynecologists Regarding Cytomegalovirus Infection During Pregnancy — United States, 2007

In the United States, congenital cytomegalovirus (CMV) infection occurs in approximately 1 in 150 live births (1), leading to permanent disabilities (e.g., hearing loss, vision loss, and cognitive impairment) in approximately 1 in 750 live-born children (2). A common mode of CMV transmission to a pregnant woman is through close contact with

infected bodily fluids such as urine or saliva, especially from young children (3). Because no vaccine is available and treatment options are limited, renewed attention has been given to prevention of CMV infections among pregnant women through traditional infection-control practices, such as good hand hygiene (3). These practices have been encouraged by organizations such as CDC and the American College of Obstetricians and Gynecologists (ACOG) (4), which recommend that obstetricians and gynecologists (OB/GYNs) counsel women on careful handling of potentially CMV-infected articles, such as diapers, and thorough hand washing after close contact with young children (Box). Despite this increased emphasis on avoiding infection during pregnancy, few women are aware of CMV infection and how it can be prevented (5). During March–May 2007, ACOG surveyed a national sample of OB/GYNs to assess their knowledge and practices regarding CMV infection prevention. This report describes the results of that survey, which indicated that fewer than half (44%) of OB/GYNs surveyed reported counseling their patients about preventing CMV infection. These results emphasize the need for additional training of OB/GYNs regarding CMV infection prevention and for a better understanding of the reasons

BOX. CDC and American College of Obstetricians (ACOG) recommendations for reducing risk for cytomegalovirus (CMV) infection

CDC recommendations for women who are pregnant or might become pregnant*

- Wash hands often with soap and water, especially after contact with saliva of or diapers from young children. Wash well for 15–20 seconds.
- Do not kiss children aged <6 years on the mouth or cheek. Instead, kiss them on the head or give them a hug.
- Do not share food, drinks, or utensils (spoons or forks) with young children.

ACOG recommendations for obstetricians and gynecologists on counseling pregnant women†

- Advise careful handling of potentially infected articles, such as diapers.
- Advise thorough handwashing when around young children or immunocompromised persons.
- Explain that careful attention to hygiene is effective in helping prevent CMV transmission.

*Available at <http://www.cdc.gov/cmV>.

† American College of Obstetricians and Gynecologists. Perinatal viral and parasitic infections. *ACOG Practice Bulletin* 20. 20th ed. Washington, DC: American College of Obstetricians and Gynecologists; 2000.

that physician knowledge regarding CMV transmission might not result in patient counseling.

In March 2007, ACOG mailed surveys to members of the ACOG Collaborative Ambulatory Research Network (CARN), a group of practicing OB/GYNs who were identified via a stratified sampling scheme as representative of ACOG relative to geographic location, age, and sex and who are invited to participate in periodic ACOG surveys.* Two additional mailings (in April and May) were sent to physicians in this group who did not respond. Respondents were excluded if they indicated that they did not treat obstetric patients (n = 85) or practiced outside the United States (n = 6). Physicians were asked about their knowledge and practices related to prevention of several infections, including CMV, during pregnancy.

Of the 606 eligible CARN members, surveys were received from 305 (response rate: 50%). The respondents were statistically different (p<0.05) from the overall group of ACOG members relative to mean age and geographic district (Table 1). Although 90% of OB/GYNs reported knowing that washing hands reduces the risk for CMV infection during pregnancy, a smaller proportion were aware that not sharing utensils (57%) and avoiding children's saliva (55%) reduces infection risk (Table 2).† Sixty percent of OB/GYNs reported that they routinely recommended hand washing to pregnant women; approximately one third reported routinely recommending that pregnant women not share utensils and avoid child saliva (31% and 30%, respectively). Fewer than half (44%) of OB/GYNs reported having counseled their patients about prevention of CMV infection.§

Approximately one fourth (27%) of OB/GYNs reported having diagnosed CMV infection in a pregnant woman since 2003 (Table 2). Among the 86% of OB/GYNs who

TABLE 1. Comparison of American College of Obstetricians and Gynecologists (ACOG) members and ACOG Collaborative Ambulatory Research Network (CARN)* survey respondents, by selected demographic characteristics — United States, 2007

Characteristic	ACOG members (N = 32,441)	CARN survey respondents (N = 305)	p value†
Mean age (yrs)	48.5	46.9	<0.01
Sex (%)			0.11
Female	45.1	49.3	
Male	54.9	50.7	
Geographic district§ (%)			0.03
I	6.6	7.5	
II	7.9	5.2	
III	7.9	6.2	
IV	19.5	17.7	
V	10.1	5.2	
VI	9.0	9.5	
VII	17.7	23.9	
VIII	11.0	13.8	
IX	10.4	10.8	

*ACOG CARN members are a group of practicing obstetrician-gynecologists selected to be representative of ACOG with respect to geographic location, age, and sex who voluntarily participate in periodic ACOG surveys.

† Student's t test for means; chi-square test for categorical data.

§ *District I:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island, and Québec; *district II:* New York, Bermuda; *district III:* Delaware, New Jersey, and Pennsylvania; *district IV:* District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Puerto Rico, and West Indies; *district V:* Indiana, Kentucky, Ohio, Michigan, and Ontario; *district VI:* Illinois, Iowa, Minnesota, Nebraska, North Dakota, South Dakota, Wisconsin, Manitoba, and Saskatchewan; *district VII:* Alabama, Arkansas, Kansas, Louisiana, Mexico, Mississippi, Missouri, Oklahoma, Tennessee, and Texas; *district VIII:* Alaska, Alberta, Arizona, British Columbia, Central America, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, American Samoa, Guam, Northwest Territory, and Yukon Territory; *district IX:* California.

reported ever testing for CMV during pregnancy, most provided CMV testing only if their patients requested a test or because a fetal anomaly was identified, consistent with ACOG recommendations (4) and CDC recommendations that CMV testing during pregnancy be performed under certain circumstances, which include the development of a mononucleosis-like illness during pregnancy.¶

Reported by: B Anderson, J Schulkin, PhD, Dept of Research, American College of Obstetricians and Gynecologists, Washington, DC. DS Ross, PhD, SA Rasmussen, MD, National Center on Birth Defects and Developmental Disabilities; JL Jones, MD, National Center for Zoonotic, Vector-Borne, and Enteric Diseases; MJ Cannon, PhD, National Center for Immunization and Respiratory Diseases, CDC.

Editorial Note: Congenital CMV infection is a major source of childhood disability, including hearing loss, vision loss, and cognitive impairment (2). The estimated 5,000–8,000

*CARN was established in 1990; initially, all ACOG members were invited to participate. Since then, periodic additional invitations to join CARN have been made to a subset of ACOG members who have been chosen via a stratified, random sampling scheme. Certain subgroups are oversampled so that CARN members are representative of ACOG members relative to geographic location, age, and sex.

† Based on responses to the following questions: "Which of the following actions would reduce the risk of infections during pregnancy that could adversely affect the embryo or fetus: hand washing after diaper changing, not sharing utensils with toddlers, not getting children's saliva in eyes or mouth?"

§ Based on responses to the following questions: "I have diagnosed one or more of the following infections in pregnant women in since 2003: congenital cytomegalovirus (CMV)" "Do you counsel your patients about why and how to prevent congenital cytomegalovirus (CMV)?" "Do you routinely recommend the following precautions about: hand washing after diaper changing, not sharing utensils with toddlers, or not getting children's saliva in eyes or mouth? (Verbally, in print, neither, or both)" "Which of the following best describes your practice regarding testing for...congenital cytomegalovirus (CMV): test all patients, test no patients, test after report of significant exposure by patient, test in response to patient request, test if fetal anomaly identified, test if negative history for previous illness?"

¶ Additional information available at <http://www.cdc.gov/cmrv>.

children per year who develop disabilities associated with CMV infection is similar to or higher than the number estimated to be affected by better-known conditions, including Down syndrome and neural tube defects (2,3). Women who experience their first (i.e., primary) infection during pregnancy are at highest risk for transmitting CMV to their fetuses, with approximately 33% of fetuses becoming infected. However, women who have experienced an infection before pregnancy and then have a recurrent infection (i.e., a viral reactivation or reinfection with a different strain) during pregnancy also can transmit CMV to their fetuses, with approximately 1% of fetuses becoming infected (1). Most infections among pregnant women are believed to occur through contact with the urine or saliva of infected children or through sexual activity (6).

Numerous potential interventions exist for preventing congenital CMV infections or disease. Several vaccines are being developed, although progress has been slow (3). The effectiveness of certain interventions is controversial, including antiviral treatment or passive immunization using hyperimmune globulin for pregnant women with primary CMV infection (7) and antiviral treatment for newborns with congenital infection (8). Other types of interventions, such as newborn screening and follow-up to identify developmental disabilities and improve language or educational development, target secondary outcomes.

Good hand hygiene is a simple intervention that has the potential to decrease risk for CMV infection during pregnancy (3,4). CMV frequently is found in the urine and saliva of preschool-age children (typically 5%–25% of young children, although the percentage can be higher in day care centers) (3) and has been found on the hands of child-care providers. Furthermore, hand washing has been shown to prevent infection with various pathogens. Thus, although no definitive studies have documented that particular interventions reduce transmission, evidence suggests that avoiding exposure to urine and saliva, especially through

TABLE 2. Number and percentage of American College of Obstetricians and Gynecologists (ACOG) obstetrician-gynecologists who reported knowledge and practices related to congenital cytomegalovirus (CMV) prevention, by responses to selected questions from the ACOG Collaborative Ambulatory Research Network (CARN)* survey — United States, 2007

Characteristic	No.	(%)	(95% CI) [§]
Knowledge of actions that can reduce risk for CMV infection during pregnancy[†]			
Washing hands after diaper changing (n = 302)			
Yes	273	(90.4)	(86.7–93.3)
No	22	(7.3)	(4.8–10.6)
Don't know	7	(2.3)	(1.0–4.5)
Not sharing utensils with toddlers (n = 296)			
Yes	170	(57.4)	(51.8–63.0)
No	85	(28.7)	(23.8–34.1)
Don't know	41	(13.9)	10.3–18.1)
Not getting children's saliva in eyes or mouth (n = 297)			
Yes	164	(55.2)	(49.5–60.8)
No	85	(28.6)	(23.7–34.0)
Don't know	48	(16.2)	(12.3–20.7)
Practices related to CMV diagnosis and prevention[¶]			
Diagnosed CMV in pregnant women since 2003 (n = 298)			
Yes	80	(26.8)	(22.1–32.1)
No	214	(71.8)	(67.0–77.0)
Don't know	4	(1.3)	(0.5–3.2)
Counsel patients about CMV prevention (n = 294)			
Yes	130	(44.2)	(38.6–49.9)
No	156	(53.1)	(47.4–58.7)
Don't know	8	(2.7)	(1.3–5.1)
Routinely recommend washing hands (n = 299)			
Yes	179	(59.9)	(54.2–65.3)
No	120	(40.1)	(34.7–45.8)
Routinely recommend not sharing utensils (n = 296)			
Yes	92	(31.1)	(26.0–36.5)
No	204	(68.9)	(63.5–74.0)
Routinely recommend avoiding child saliva (n = 297)			
Yes	88	(29.6)	(24.7–35.0)
No	209	(70.4)	(65.0–75.4)
CMV testing (N = 305)			
On all patients	3	(1.0)	(0.3–2.6)
On no patients	44	(14.4)	(10.8–18.7)
After report of an exposure	184	(60.3)	(54.8–65.7)
In response to a patient request	97	(31.8)	(26.8–37.2)
When a fetal anomaly is identified	133	(43.6)	(38.1–49.2)
When patient has a negative history for illness	5	(1.6)	(0.6–3.6)

* ACOG CARN members are a group of practicing obstetrician-gynecologists selected to be representative of ACOG with respect to geographic location, age, and sex who voluntarily participate in periodic ACOG surveys.

[†] Based on responses to the following questions: "Which of the following actions would reduce the risk of infections during pregnancy that could adversely affect the embryo or fetus: hand washing after diaper changing, not sharing utensils with toddlers, not getting children's saliva in eyes or mouth?"

[§] Confidence interval.

[¶] Based on responses to the following questions: "I have diagnosed one or more of the following infections in pregnant women in since 2003: congenital cytomegalovirus (CMV)." "Do you counsel your patients about why and how to prevent congenital cytomegalovirus (CMV)?" "Do you routinely recommend the following precautions about: hand washing after diaper changing, not sharing utensils with toddlers, not getting children's saliva in eyes or mouth? (Verbally, in print, neither, or both)" "Which of the following best describes your practice regarding testing for...congenital cytomegalovirus (CMV): test all patients, test no patients, test after report of significant exposure by patient, test in response to patient request, test if fetal anomaly identified, test if negative history for previous illness?"

good hand hygiene, reduces risk for CMV infection during pregnancy (3). Although such behavioral changes can be difficult to initiate and maintain, evidence indicates that pregnant women will make certain behavior changes that will protect their fetuses (3). Such measures are simple and likely to be cost effective; good hand hygiene is inexpensive, and the cost savings from preventing even one case of congenital CMV disease is high (9).

CMV can be transmitted through sexual contact, which is important for women to know. Because of the numerous programs and resources already in place to promote healthy and safe sexual practices for infections other than CMV (e.g., existing HIV/AIDS programs), this survey of OB/GYNs focused on prevention messages that might not be as widely promoted during pregnancy, such as good hand hygiene.

Whether OB/GYNs should routinely test pregnant women for CMV is a complicated matter. An initial negative maternal immunoglobulin G (IgG) test, which indicates that the woman has never been infected with CMV, might indicate a higher risk for fetal infection if the mother subsequently becomes infected during pregnancy and thus might be a useful motivational tool to encourage the mother to practice good hygiene. A positive maternal IgG test might indicate lower risk for fetal infection; nevertheless, good hand hygiene still should be advised to prevent possible maternal CMV reinfection. Additional CMV assays (e.g., immunoglobulin M) are difficult to interpret, often not commercially available in the United States (e.g., IgG avidity), or invasive (e.g., polymerase chain reaction testing of amniotic fluid). Furthermore, testing algorithms that use these assays are only moderately effective at predicting maternal infection, fetal infection, and fetal damage (10). For these reasons, and because no proven treatment exists, routine CMV testing during pregnancy is not recommended; testing is recommended only when a fetal anomaly is detected, a pregnant woman experiences a mononucleosis-like illness, or a pregnant woman requests the test.**

The findings in this report are subject to at least two limitations. First, data were self-reported by OB/GYNs and might have been subject to social-desirability bias, which might have resulted in overreporting and an overestimation of knowledge and practices relating to CMV infection. Second, only ACOG CARN members were surveyed, and the response rate among CARN members was only

50%. Both the OB/GYNs who agree to be in CARN and those who choose to respond to the survey might be more interested in prevention counseling and as a result more likely to provide such counseling; therefore, the results might not be representative of all practicing OB/GYNs and might have resulted in an overestimation of the prevalence of counseling for CMV infection prevention.

Based on the survey, fewer than half of OB/GYNs reported counseling their patients regarding CMV-infection prevention. In addition, responses indicated that many OB/GYNs did not have a comprehensive understanding of modes of CMV transmission and possible prevention measures. These results emphasize the need for additional training of OB/GYNs regarding CMV infection prevention and better understanding of the reasons that physician knowledge about CMV transmission does not necessarily result in patient counseling. Additional surveys of OB/GYNs should attempt to identify factors associated with providing CMV counseling, solicit more detailed information about CMV knowledge and counseling practices, and assess perceptions related to frequency of infection, role of testing, and efficacy of good hand hygiene and prevention counseling.

References

1. Kenneson A, Cannon MJ. Review and meta-analysis of the epidemiology of congenital cytomegalovirus (CMV) infection. *Rev Med Virol* 2007;17:253–76.
2. Dollard SC, Grosse SD, Ross DS. New estimates of the prevalence of neurological and sensory sequelae and mortality associated with congenital cytomegalovirus infection. *Rev Med Virol* 2007;17:355–63.
3. Cannon MJ, Davis KF. Washing our hands of the congenital cytomegalovirus disease epidemic. *BMC Public Health* 2005;5:70.
4. American College of Obstetricians and Gynecologists. Perinatal viral and parasitic infections. *ACOG Practice Bulletin* 20. 20th ed. Washington, DC: American College of Obstetricians and Gynecologists; 2000.
5. Jeon J, Victor M, Adler S, et al. Knowledge and awareness of congenital cytomegalovirus among women. *Infect Dis Obstet Gynecol* 2006;2006:80383.
6. Fowler KB, Pass RF. Risk factors for congenital cytomegalovirus infection in the offspring of young women: exposure to young children and recent onset of sexual activity. *Pediatrics* 2006;118:e286–e92.
7. Nigro G, Adler SP, La Torre R, Best AM. Passive immunization during pregnancy for congenital cytomegalovirus infection. *N Engl J Med* 2005;353:1350–62.
8. Kimberlin DW, Lin CY, Sanchez PJ, et al. Effect of ganciclovir therapy on hearing in symptomatic congenital cytomegalovirus disease involving the central nervous system: a randomized, controlled trial. *J Pediatr* 2003;143:16–25.
9. Institute of Medicine Committee to Study Priorities for Vaccine Development. *Vaccines for the 21st century: a tool for decision making*. Washington DC: National Academies Press; 2000.
10. Revello MG, Gerna G. Pathogenesis and prenatal diagnosis of human cytomegalovirus infection. *J Clin Virol* 2004;29:71–83.

**Additional information available at <http://www.cdc.gov/cmV/clinicians.htm>.

Multistate Outbreak of Human *Salmonella* Infections Associated with Exposure to Turtles — United States, 2007–2008

Turtles and other reptiles have long been recognized as a source of human *Salmonella* infections (1). To prevent turtle-associated *Salmonella* infections in humans, the sale and distribution of small turtles (i.e., those with a carapace length of less than 4 inches) (Figure 1) has been prohibited in the United States since 1975.* Despite this prohibition, small turtles remain available to the public from various sources, including pet shops, flea markets, street vendors, and Internet websites (2,3). In October 2007, the North Carolina Division of Public Health (NCDPH) notified CDC of human infections caused by *Salmonella* serotype Paratyphi B L (+) tartrate (+) (*Salmonella* Paratyphi B var. Java) in several states. *Salmonella* Paratyphi B var. Java is a nontyphoidal strain of *Salmonella* that causes gastroenteritis. This report describes the results of the epidemiologic and laboratory investigation conducted by CDC and state and local health departments during October 2007–January 2008. The findings document an ongoing, multistate outbreak of *Salmonella* Paratyphi B var. Java infections, with the first reported illness onset occurring on May 4, 2007. Many of these infections have occurred in young children and have been associated with exposure to small turtles. Prohibiting the sale and distribution of small turtles likely remains the most effective public health action to prevent turtle-associated salmonellosis.

*Food and Drug Administration. Human health hazards associated with turtles: information for regulators and public health educators. Available at <http://www.fda.gov/cvm/turtlereg.htm>.

FIGURE 1. A small turtle with a carapace length of less than 4 inches



Photo/C. Barton Behravesh

Detection of the Outbreak

On August 31, 2007, a girl aged 13 years visited a South Carolina hospital emergency department, where she reported a 5-day history of bloody diarrhea, abdominal cramps, fever, and vomiting. She was treated with trimethoprim-sulfamethoxazole and intravenous fluids but was not hospitalized. Her illness resolved in 7 days. A stool specimen yielded *Salmonella* Paratyphi B var. Java. Also on August 31, a girl aged 15 years was admitted to a North Carolina hospital with acute renal failure and a 4-day history of bloody diarrhea, abdominal cramps, fever, and vomiting. She was hospitalized for 8 days and recovered fully. A joint investigation by NCDPH and the South Carolina Department of Health and Environmental Control revealed that, on August 24, the two girls had swum in an unchlorinated, in-ground swimming pool belonging to the family of the older girl. Two pet turtles belonging to the family also were permitted to swim in the pool. The turtles, both of which had carapace lengths of less than 4 inches, had been purchased recently from a pet shop in South Carolina. A water sample collected from the turtle habitat yielded *Salmonella* Paratyphi B var. Java with an *Xba*I pattern indistinguishable by pulsed-field gel electrophoresis (PFGE) from the isolates of the younger girl. Stool specimens were not collected from the older girl.

On October 5, NCDPH informed PulseNet[†] that tests of isolates from three other persons revealed *Salmonella* Paratyphi B var. Java with an *Xba*I pattern indistinguishable from the isolates of the younger girl and the turtle habitat (defined as the outbreak strain). On October 5, in response to a request issued by NCDPH through PulseNet, several other state health departments reported human *Salmonella* Paratyphi B var. Java isolates with an *Xba*I pattern indistinguishable from the outbreak strain. The Ohio Department of Health provided further evidence of a turtle-associated outbreak by reporting that isolates indistinguishable from the outbreak strain had been obtained from a patient with exposure to a small turtle during the week before illness onset, from that patient's pet turtle, and from water collected from the turtle's habitat.

Multistate Investigation

After NCDPH contacted CDC on October 23 about the possible cluster of turtle-associated *Salmonella* Paratyphi B var. Java infections, CDC and state and local health departments initiated a multistate investigation to determine the extent of the outbreak and the sources of infec-

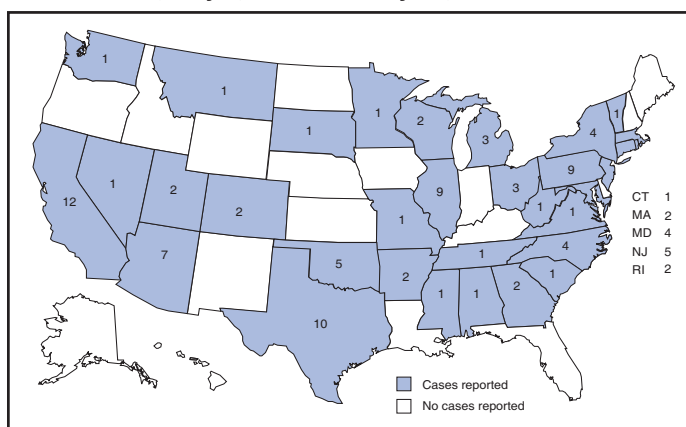
[†] A national molecular subtyping network for foodborne disease surveillance.

tion. A case was defined as a diarrheal illness with onset after May 1, 2007, in a person from whom a clinical specimen yielded *Salmonella* Paratyphi B var. Java with a PFGE *Xba*I pattern indistinguishable from the outbreak strain; cases were identified by a review of all PFGE-typed isolates in the PulseNet database.

As of January 18, 2008, a total of 103 cases with isolates indistinguishable from the outbreak strain had been reported to CDC from 33 states (Figure 2). Information initially was collected from general enteric disease questionnaires administered by state and local health departments. Of the 100 patients for whom age information was available (median age: 7.5 years; range: <1–87 years), 56 (56%) were aged ≤ 10 years. Fifty-two (51%) of the 101 patients for whom the sex was known were female. Illness onset dates ranged from May 4, 2007, to December 15, 2007 (Figure 3). Among the 78 patients for whom clinical information was available, 51 (65%) reported bloody diarrhea, with a median duration of illness of 7 days; 24 (30%) of the 80 patients for whom hospitalization status was known were hospitalized for their illnesses, with a median duration of 4 days. Among the 80 patients questioned about turtle exposure, 47 (59%) reported turtle exposure during the 7 days before illness onset. No deaths were reported.

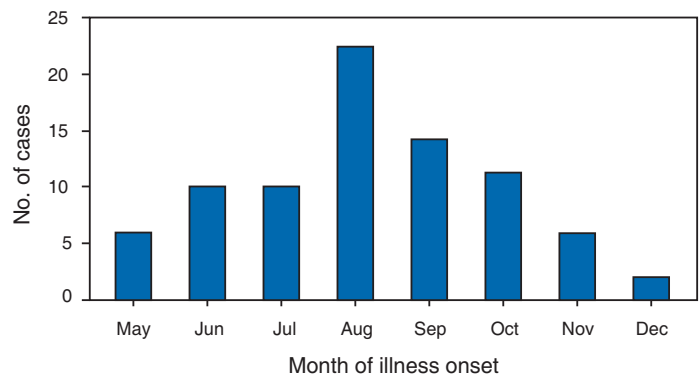
A case-control study was conducted during November 15–December 5 using age- and neighborhood-matched controls (age groups: <1 year, 1–9 years, 10–19 years, 20–49 years, ≥ 50 years; reverse-digit dialing was used to match cases to controls by neighborhood). A telephone questionnaire was used to determine whether the case-patient or control had exposure to turtles, other reptiles, or aquariums containing tropical fish during a 7-day exposure

FIGURE 2. Number* of human *Salmonella* Paratyphi B var. Java cases having isolates with a pulsed-field gel electrophoresis *Xba*I pattern indistinguishable from the outbreak strain, by state — United States, May 4, 2007–January 18, 2008



*N = 103.

FIGURE 3. Number* of human *Salmonella* Paratyphi B var. Java cases having isolates with a pulsed-field gel electrophoresis *Xba*I pattern indistinguishable from the outbreak strain, by month of illness onset — United States, May 4–December 15, 2007



*N = 81. Only includes cases with reported illness onset dates.

period (7 days before illness onset in the case-patient, for both cases and matched controls). Participants who reported exposure to turtles were asked about the nature of the exposure, including whether the patient had touched or held the turtle, kissed the turtle or put the turtle in his or her mouth, or come into contact with the turtle's habitat, such as by changing the water or cleaning the cage. Participants who reported exposure to turtles also were asked about turtle size, type, and source. All participants were asked about their awareness of the association between contact with reptiles and *Salmonella* infection. Seventy case-patients and 45 matched controls were enrolled in the study.

Among the 70 case-patients interviewed, 44 (63%) reported exposure to a turtle during the 7 days before illness onset, compared with two (4%) of 45 controls (matched odds ratio [mOR] = 40.9; 95% confidence interval [CI] = 7.0–unbounded). Two (3%) case-patients and four (9%) controls reported exposure to a reptile other than a turtle during the 7 days before illness onset. No other single characteristic for which data were collected has been implicated in this outbreak. Twelve (20%) of the 60 case-patients for whom such information was available and 13 (29%) of the 45 controls reported awareness of the association between contact with reptiles and *Salmonella* infection (mOR = 0.66; CI = 0.27–1.6). Among the 44 case-patients exposed to a turtle, 34 (77%) were exposed at home, and nine (20%) were exposed at the home of a friend or relative; one (2%) was exposed outdoors. Of the 43 case-patients exposed at home or at the home of a friend or relative, three were siblings exposed to turtles at the home of their babysitter, and two were a husband and wife exposed to a turtle in their own home; the remaining expo-

tures occurred in households independent of one another. Of 34 case-patients exposed to turtles at home, 12 (35%) still owned the turtle at the time of interview. Of the 42 case-patients for whom the details of the turtle exposure were known, 28 (67%) reported holding or touching the turtle, 24 (57%) reported feeding the turtle, and 29 (69%) reported contact with the turtle's habitat. Four (10%) case-patients reported kissing the turtle or having put the turtle in his or her mouth. Thirty-seven (86%) of the 43 case-patients who were exposed to a turtle and for whom turtle size information was available reported that the turtle had a carapace length of less than 4 inches; the remaining turtles involved in these exposures were reported to have carapace lengths of 4 inches or more.

Forty-two case-patients with turtle exposure reported details about the turtle source. Fifteen (36%) reported that the turtle was purchased at a pet shop, 10 (24%) reported that the turtle had been a gift, eight (19%) reported that the turtle was purchased at a flea market, five (12%) reported that the turtle was purchased from a street vendor, and one each (2%, respectively) reported that the turtle was purchased on an Internet website, acquired from the wild, hatched from an egg given by a relative, or purchased at a conference center event. *Salmonella* Paratyphi B var. Java matching the outbreak strain was isolated from six turtles or the water from their habitats in the homes of case-patients in California, North Carolina, Ohio, and Wisconsin. Investigations are ongoing to determine whether the turtles have a common distributor or farm of origin.

Reported by: D Bergmire-Sweat, MPH, North Carolina Div of Public Health; J Schlegel, MSP, C Marin, South Carolina Dept of Health and Environmental Control; K Winpisinger, MS, Ohio Dept of Health; C Perry, M Sotir, PhD, Div of Foodborne, Bacterial, and Mycotic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases; J Harris, PhD, EIS Officer, CDC.

Editorial Note: This ongoing, multistate outbreak of salmonellosis is associated with small turtles purchased at pet stores, flea markets, and other outlets, despite a federal prohibition on the sale of turtles with carapace lengths of less than 4 inches. These turtles are a risk to the public and especially to young children. Other outbreaks of turtle-associated *Salmonella* infections have been reported (2,3).

The prohibition on the sale and distribution of small turtles was enacted in 1975, after public health investigations demonstrated that small turtles were a major source of human *Salmonella* infections, particularly in children. In 1972, a study in New Jersey indicated that small pet turtles accounted for approximately 23% of *Salmonella* infections in children (4). In 1980, the 1975 prohibition

was estimated to have prevented 100,000 *Salmonella* infections in U.S. children each year since going into effect (5). However, this prohibition has an exception: small turtles may be sold legally for scientific, educational or exhibition purposes. During 2001–2006, the number of turtles kept as pets in the United States increased 86% to nearly 2 million turtles (6), suggesting that this exception might provide a mechanism by which small turtles become household pets.

Turtles, like other reptiles, commonly carry *Salmonella*, and fecal carriage rates can be as high as 90% (1). Small turtles sold as pets frequently come from breeding farms, where turtles are housed in crowded ponds and nesting areas in a way that promotes *Salmonella* transmission (7). Attempts to treat turtles, turtle eggs, and turtle breeding ponds with antibiotics to eliminate *Salmonella* have not been successful and have resulted in a high prevalence of antibiotic resistance (7,8). Other treatments reduce but do not eliminate *Salmonella* shedding from turtles (8), and the turtles that continue to shed *Salmonella* might recontaminate other turtles during rearing or shipment. Because *Salmonella* shedding might be intermittent and stress related, determining whether turtles are free of the bacteria is difficult (1).

Direct or indirect contact with a reptile is associated with an estimated 6% of human *Salmonella* infections in the United States (9). Persons coming into contact with reptiles, reptile habitats, or surfaces contaminated with reptile fecal matter risk infection from salmonellae shed by the reptile (10). Although most reptiles carry *Salmonella*, small turtles are likely to be handled differently than other reptiles and thus carry a greater risk of transmitting *Salmonella* to children. In contrast to the obvious risk for a bite or scratch, for example, from a snake or an iguana, a small turtle is likely to be perceived as safe, and thus might be given directly to small children to play with. In addition, a young child placed in charge of caring for a turtle has direct contact with water in the turtle habitat, where *Salmonella* are likely to multiply to high numbers. Although approximately half of the infections associated with this outbreak occurred in young children, who are at greater risk for severe illness from *Salmonella* infection (2,10), several illnesses occurred in adults with turtle exposure, demonstrating that turtle-associated *Salmonella* infection is not unique to children. Additionally, only 20% of case-patients interviewed reported awareness of the link between *Salmonella* and contact with reptiles, indicating that measures to educate the public about this link have not been successful. CDC has provided recommendations to prevent reptile-associated sal-

monellosis in humans (2). However, because of the particular hazard associated with small turtles, prohibiting the sale and distribution of small turtles likely remains the most effective public health action to prevent turtle-associated salmonellosis.

Acknowledgments

The findings in this report are based, in part, on contributions from R Reporter, MD, R Bagby, Los Angeles County Dept of Public Health, A Kao, PhD, San Diego Health and Human Svcs Agency, E Cox, MPH, Long Beach Dept of Health and Human Svcs, P Cast, San Bernardino County Dept of Public Health, A Norman, Sacramento Dept of Health and Human Svcs, A Kimura, MD, California Dept of Health; D Raccasi, T L'Estrange, Weber-Morgan Health Dept, Utah Dept of Health; Missouri Dept of Health and Senior Svcs; C Prunty, Summit County Health Dept, P Pflum, Henry County Health Dept, Ohio; J Tait, J Baney, CR Cook, CH Sandt, PhD, Pennsylvania Bur of Laboratories, K Warren, MPH, Pennsylvania Dept of Health; Y Khachadourian, T Quinlan, Wadsworth Center Laboratory, New York, T Fitzgerald, New York City Bur of Health, E Villamil, MPH, Perry Smith, MD, New York State Dept of Health; M Cumming, MS, B Bolstorff, MPH, Massachusetts Dept of Public Health; S Bidol, MPH, Michigan Dept of Community Health; and L Schaefer, South Dakota Dept of Health.

References

1. Chiodini RJ, Sundberg JP. Salmonellosis in reptiles: a review. *Am J Epidemiol* 1981;113:494–9.
2. CDC. Turtle-associated salmonellosis in humans—United States, 2006–2007. *MMWR* 2007;56:649–52.
3. CDC. Salmonellosis associated with pet turtles—Wisconsin and Wyoming, 2004. *MMWR* 2005;54:223–6.
4. Lamm S, Taylor A, Gangarosa E, et al. Turtle-associated Salmonellosis. I. An estimation of the magnitude of the problem in the United States, 1970–1971. *Am J Epidemiol* 1972;95:511–7.
5. Cohen ML, Potter M, Pollard R, Feldman RA. Turtle-associated salmonellosis in the United States: effect of public health action, 1970 to 1976. *JAMA* 1980;243:1247–9.
6. American Veterinary Medical Association. U.S. pet ownership and demographics sourcebook. Schaumburg, IL: American Veterinary Medical Association; 2007:2.
7. D'Aoust JY, Daley E, Crozier M, Sewell AM. Pet turtles: a continuing international threat to public health. *Am J Epidemiol* 1990;132:233–8.
8. Mitchell MA, Adamson T, Singleton C, et al. Evaluation of a combination of sodium hypochlorite and polyhexamethylene biguanide as an egg wash for red-eared slider turtles (*Trachemys scripta elegans*) to suppress or eliminate *Salmonella* organisms on egg surfaces and in hatchlings. *Am J Vet Res* 2007;68:158–64.
9. Mermin J, Hutwagner L, Vugia D, et al. Reptiles, amphibians, and human *Salmonella* infection: a population-based, case-control study. *Clin Infect Dis* 2004;38:S253–61.
10. Mermin J, Hoar B, Angulo FJ. Iguanas and *Salmonella* Marina infection in children: a reflection of the increasing incidence of reptile-associated salmonellosis in the United States. *Pediatrics* 1997;99:399–402.

Notice to Readers

National Stalking Awareness Month — January 2008

January 2008 marks the fifth annual observance of National Stalking Awareness Month, which aims to raise awareness about stalking and the need for integrated prevention strategies to reduce the impact of stalking on victims. Stalking is a criminal justice and public health problem and is linked to intimate partner violence, sexual violence, and intimate partner homicide. Data from a 2005 CDC study indicated that approximately 7 million women and 2 million men in the United States had been stalked at some time during their lifetime (1). Although some stalkers are strangers, most victims know the person who is stalking them; often, the stalker is a spouse or partner, ex-spouse, acquaintance, or family member (2).

Although the legal definition of stalking varies widely from state to state, the term “stalking” generally refers to harassing or threatening behavior a person engages in repeatedly, such as following a person, appearing at a person’s home or work, making harassing phone calls, leaving threatening messages, or vandalizing a person’s property. Stalking can disrupt a victim’s life at home, school, and work and affect their relationships with family, friends, and coworkers. Stalking also can lead to violence. In an estimated 25%–35% of cases, stalkers commit violence against the persons they are stalking (3). Factors that increase the likelihood of violence by stalkers are verbal threats and having had a prior intimate relationship with the victim (3). A 10-city, nationally representative study of female homicide victims conducted in 1999 indicated that 76% of female victims of intimate partner homicides were stalked by their partners before they were killed (4).

Information about National Stalking Awareness Month and recommendations and safety guidelines for victims of stalking and persons at risk are available online from the Stalking Resource Center at <http://www.ncvc.org/src/main.aspx>. In addition, information on intimate partner and sexual violence is available from CDC at <http://www.cdc.gov/injury>.

References

1. Basile KC, Swahn MH, Chen J, Saltzman LE. Stalking in the United States: recent national prevalence estimates. *Am J Prev Med* 2006;31:172–5.
2. Tjaden P, Thoennes N. Stalking in America: findings from the National Violence Against Women Survey. Washington, DC: National Institute of Justice, US Department of Health and Human Services, CDC; 1998. Available at <http://www.ncjrs.gov/pdffiles/169592.pdf>.
3. Meloy JR. The psychology of stalking: clinical and forensic perspectives. San Diego, CA: Academic Press; 1998.
4. McFarlane JM, Campbell JC, Wilt S, Sachs CJ, Ulrich Y, Xu X. Stalking and intimate partner femicide. *Homicide Studies* 1999;3:300–16.

Notice to Readers

Annual Conference on Antimicrobial Resistance, June 23–25, 2008

CDC and 10 other national agencies and organizations will collaborate with the National Foundation for Infectious Diseases in sponsoring the Annual Conference on Antimicrobial Resistance (including basic science, prevention, and control), June 23–25, 2008, at the Hyatt Regency Bethesda hotel in Bethesda, Maryland. Topics for the seven symposiums offered will include *Clostridium difficile*, the growing clinical challenges associated with

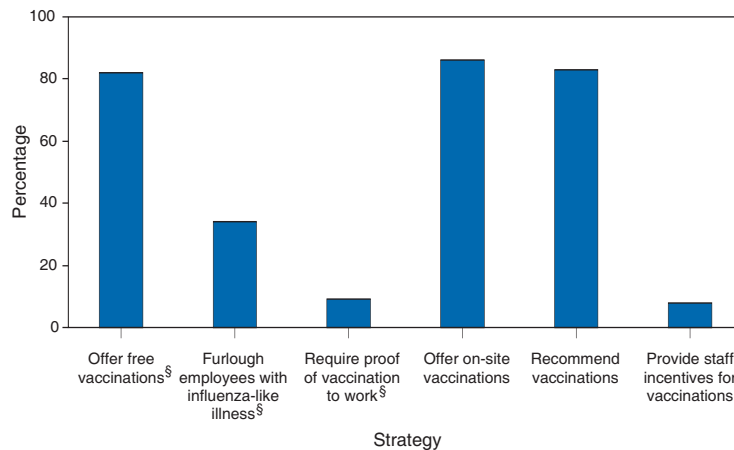
antimicrobial resistance, innovative practices for prevention of resistance, risk-benefit analysis of antibiotic use, and the role of ecology in the spread of resistant pathogens.

Oral and poster presentations will be selected through peer review of submitted abstracts. Deadline for submission of abstracts is March 2, 2008. Information regarding the preliminary program, abstract submission, registration, and hotel accommodations is available at <http://www.nfid.org/conferences/resistance08> and by e-mail (resistance@nfid.org), fax (301-907-0878), and telephone (301-656-0003, ext. 19).

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Nursing Home Facilities Using Certain Strategies to Encourage Influenza Vaccination of Their Employees,* by Strategy Used — National Nursing Home Survey, United States, 2004†



*Based on response to the following question: "Does (facility) do any of the following to encourage employees' influenza vaccinations? Vaccinations recommended; vaccinations offered on site; vaccinations offered for free; staff incentives provided for vaccination; proof of vaccination (or contraindication) required as a condition of work/employment; furlough or patient restriction policy for employees developing influenza-like illness; none of the above." Facilities could select all strategies that apply.

†Most recent data available.

§ Associated with staff influenza vaccination rates >60%.

In 2004, the majority (63%) of nursing homes reported <60% employees had received an influenza shot last influenza season. In 2004, nursing homes used different strategies to promote influenza vaccination among employees. Three of these strategies (offering free vaccinations, furloughing employees with influenza-like illness, and requiring proof of vaccination) were significantly associated with staff influenza vaccination rates >60%. Only 1% of surveyed facilities did not use at least one of the strategies.

SOURCE: National Nursing Home Survey; 2004. Available at <http://www.cdc.gov/nchs/nnhs.htm>.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending January 19, 2008 (3rd Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2007	2006	2005	2004	2003	
Anthrax	—	—	—	—	1	—	—	—	
Botulism:									
foodborne	—	1	0	19	20	19	16	20	
infant	—	3	1	81	97	85	87	76	
other (wound & unspecified)	—	—	0	23	48	31	30	33	
Brucellosis	—	2	1	122	121	120	114	104	
Chancroid	2	3	0	33	33	17	30	54	NY (1), TX (1)
Cholera	—	—	0	7	9	8	6	2	
Cyclosporiasis§	—	1	2	94	137	543	160	75	
Diphtheria	—	—	—	—	—	—	—	1	
Domestic arboviral diseases§¶:									
California serogroup	—	—	—	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§:									
<i>Ehrlichia chaffeensis</i>	—	—	—	N	N	N	N	N	
<i>Ehrlichia ewingii</i>	—	—	—	N	N	N	N	N	
<i>Anaplasma phagocytophilum</i>	—	—	—	N	N	N	N	N	
undetermined	—	—	—	N	N	N	N	N	
<i>Haemophilus influenzae</i> **									
invasive disease (age <5 yrs):									
serotype b	—	—	1	20	29	9	19	32	
nonserotype b	1	1	2	157	175	135	135	117	FL (1)
unknown serotype	4	16	4	189	179	217	177	227	OH (1), TN (1), UT (2)
Hansen disease§	—	1	1	63	66	87	105	95	
Hantavirus pulmonary syndrome§	—	—	0	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	—	3	1	232	288	221	200	178	
Hepatitis C viral, acute	7	19	13	748	766	652	720	1,102	PA (1), MI (1), MO (1), FL (1), KY (1), TN (1), CA (1)
HIV infection, pediatric (age <13 yrs)††	—	—	4	—	—	380	436	504	
Influenza-associated pediatric mortality§§§	—	—	1	76	43	45	—	N	
Listeriosis	5	16	10	741	884	896	753	696	VT (1), PA (1), GA (2), CA (1)
Measles¶¶	—	—	0	34	55	66	37	56	
Meningococcal disease, invasive***:									
A, C, Y, & W-135	—	—	6	269	318	297	—	—	
serogroup B	—	—	3	132	193	156	—	—	
other serogroup	—	—	1	31	32	27	—	—	
unknown serogroup	—	—	18	571	651	765	—	—	
Mumps	3	10	7	736	6,584	314	258	231	PA (1), MI (1), UT (1)
Novel influenza A virus infections	—	—	—	4	N	N	N	N	
Plague	—	—	—	6	17	8	3	1	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Poliovirus infection, nonparalytic§	—	—	—	—	N	N	N	N	
Psittacosis§	—	—	0	11	21	16	12	12	
Q fever§:									
acute	—	—	—	—	—	—	—	—	
chronic	—	—	—	—	—	—	—	—	
Rabies, human	—	—	0	—	3	2	7	2	
Rubella†††	—	—	0	11	11	11	10	7	
Rubella, congenital syndrome	—	—	0	—	1	1	—	1	
SARS-CoV§§§	—	—	—	—	—	—	—	8	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	—	3	102	125	129	132	161	
Syphilis, congenital (age <1 yr)	1	8	9	557	349	329	353	413	FL (1)
Tetanus	—	—	0	20	41	27	34	20	

—: 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.

** 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. One case occurring during the 2007–08 influenza season has been reported.

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

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

††† 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 January 19, 2008 (3rd Week)*

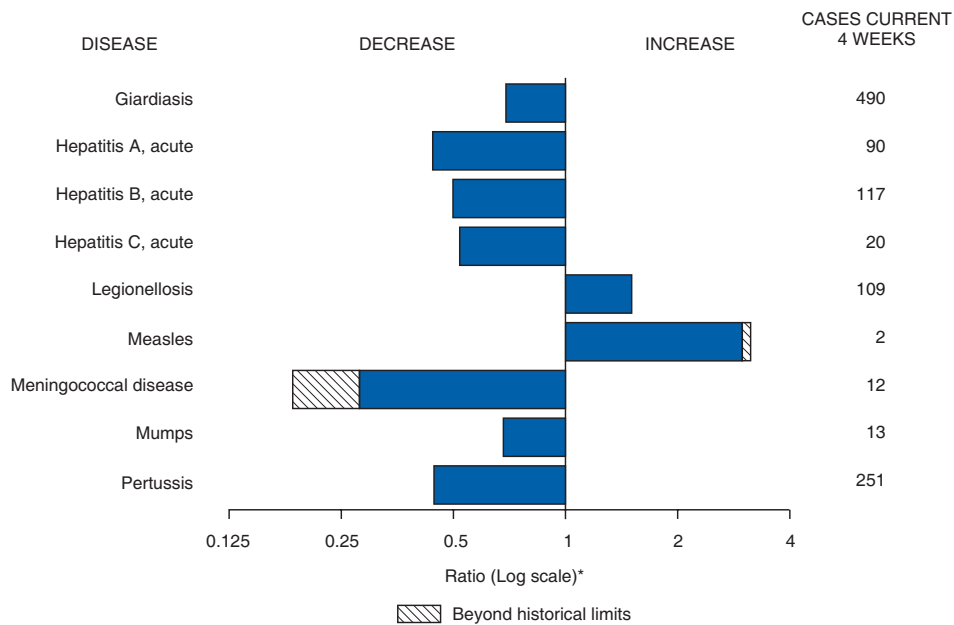
Disease	Current week	Cum 2008	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2007	2006	2005	2004	2003	
Toxic-shock syndrome (staphylococcal) [§]	—	1	2	83	101	90	95	133	
Trichinellosis	—	1	0	6	15	16	5	6	
Tularemia	—	—	0	113	95	154	134	129	
Typhoid fever	1	7	5	329	353	324	322	356	FL (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	—	—	—	28	6	2	—	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	—	—	1	3	1	N	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	2	4	0	357	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 January 19, 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.

Notifiable Disease Data Team and 122 Cities Mortality Data Team

Patsy A. Hall

Deborah A. Adams

Rosaline Dhara

Willie J. Anderson

Carol Worsham

Lence Blanton

Pearl C. Sharp

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd 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	9,933	20,959	25,202	35,551	48,855	95	140	254	328	404	36	78	978	97	194
New England	662	697	1,136	1,584	1,296	—	0	1	—	—	—	4	16	—	46
Connecticut	83	223	691	131	68	N	0	0	N	N	—	0	0	—	41
Maine [§]	64	48	74	137	123	—	0	0	—	—	—	1	5	—	2
Massachusetts	412	305	668	1,064	746	—	0	0	—	—	—	2	11	—	—
New Hampshire	47	38	73	116	117	—	0	1	—	—	—	1	5	—	2
Rhode Island [§]	56	62	98	130	182	—	0	0	—	—	—	0	3	—	—
Vermont [§]	—	18	32	6	60	N	0	0	N	N	—	1	3	—	1
Mid. Atlantic	1,645	2,851	4,161	4,633	7,537	—	0	0	—	—	10	10	113	18	23
New Jersey	186	398	526	497	1,252	N	0	0	N	N	—	0	6	—	—
New York (Upstate)	287	536	1,662	440	507	N	0	0	N	N	1	3	20	1	3
New York City	665	997	2,179	1,814	2,971	N	0	0	N	N	—	1	10	2	9
Pennsylvania	507	834	1,764	1,882	2,807	N	0	0	N	N	9	5	103	15	11
E.N. Central	599	3,219	6,210	3,052	9,528	—	1	3	1	3	4	20	134	22	36
Illinois	—	1,007	1,843	25	2,761	—	0	0	—	—	—	2	13	—	8
Indiana	201	395	631	835	1,286	—	0	0	—	—	—	2	23	—	—
Michigan	311	703	856	1,152	2,375	—	0	2	—	3	—	3	11	5	9
Ohio	87	746	3,633	770	2,014	—	0	1	1	—	4	6	61	15	11
Wisconsin	—	365	455	270	1,092	N	0	0	N	N	—	7	59	2	8
W.N. Central	523	1,199	1,465	1,748	3,221	—	0	1	—	2	3	14	125	7	19
Iowa	172	158	251	445	484	N	0	0	N	N	—	2	61	2	6
Kansas	—	151	294	—	344	N	0	0	N	N	—	2	16	—	4
Minnesota	1	251	300	173	763	—	0	0	—	—	—	3	34	—	1
Missouri	350	465	551	1,087	1,184	—	0	1	—	2	—	2	13	1	3
Nebraska [§]	—	94	183	—	237	N	0	0	N	N	2	1	24	3	3
North Dakota	—	27	61	6	78	N	0	0	N	N	1	0	6	1	—
South Dakota	—	49	81	37	131	N	0	0	N	N	—	2	16	—	2
S. Atlantic	2,536	3,969	5,893	9,654	6,523	—	0	1	—	—	14	20	66	33	36
Delaware	93	65	140	179	206	—	0	0	—	—	1	0	4	2	—
District of Columbia	—	115	166	194	231	—	0	0	—	—	—	0	2	—	—
Florida	1,166	1,242	1,565	3,202	952	N	0	0	N	N	7	9	35	16	19
Georgia	4	574	1,502	28	788	N	0	0	N	N	6	4	14	11	12
Maryland [§]	—	393	696	694	529	—	0	1	—	—	—	0	2	—	—
North Carolina	6	494	2,595	2,601	1,095	—	0	0	—	—	—	1	18	—	—
South Carolina [§]	996	512	3,030	1,666	1,404	N	0	0	N	N	—	1	15	3	2
Virginia [§]	261	485	628	1,026	1,156	N	0	0	N	N	—	1	5	—	3
West Virginia	10	60	93	64	162	N	0	0	N	N	—	0	5	1	—
E.S. Central	876	1,540	2,164	2,711	4,267	—	0	0	—	—	2	4	63	5	12
Alabama [§]	—	492	601	426	1,337	N	0	0	N	N	2	1	14	4	2
Kentucky	230	170	357	535	179	N	0	0	N	N	—	1	40	1	1
Mississippi	110	280	959	360	1,124	N	0	0	N	N	—	0	11	—	8
Tennessee [§]	536	507	721	1,390	1,627	N	0	0	N	N	—	1	18	—	1
W.S. Central	1,377	2,455	3,277	6,382	5,281	—	0	1	—	—	1	4	28	3	7
Arkansas [§]	2	178	395	515	446	N	0	0	N	N	—	0	8	1	1
Louisiana	194	368	851	379	797	—	0	1	—	—	—	1	4	—	3
Oklahoma	—	244	467	465	639	N	0	0	N	N	1	1	11	2	1
Texas [§]	1,181	1,645	2,462	5,023	3,399	N	0	0	N	N	—	1	16	—	2
Mountain	541	1,255	1,651	1,084	2,614	75	94	170	298	266	2	8	572	8	8
Arizona	83	479	665	135	678	75	91	169	297	260	—	1	6	2	1
Colorado	—	192	383	91	609	N	0	0	N	N	—	2	26	—	2
Idaho [§]	82	56	252	151	—	N	0	0	N	N	2	1	71	5	—
Montana [§]	25	43	230	90	167	N	0	0	N	N	—	1	7	1	—
Nevada [§]	178	183	293	238	465	—	1	5	1	2	—	0	6	—	—
New Mexico [§]	—	151	395	70	453	—	0	2	—	2	—	2	9	—	4
Utah	173	111	209	298	193	—	1	7	—	2	—	1	488	—	—
Wyoming [§]	—	23	35	11	49	—	0	1	—	—	—	0	8	—	1
Pacific	1,174	3,354	4,072	4,703	8,588	20	40	176	29	133	—	1	16	1	7
Alaska	64	86	124	143	201	N	0	0	N	N	—	0	2	—	—
California	892	2,685	3,283	3,951	6,987	20	40	176	29	133	—	0	0	—	—
Hawaii	—	110	134	—	282	N	0	0	N	N	—	0	0	—	—
Oregon [§]	218	175	403	553	379	N	0	0	N	N	—	1	16	1	7
Washington	—	179	621	56	739	N	0	0	N	N	—	0	0	—	—
American Samoa	—	0	32	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	13	34	—	38	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	129	613	99	331	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	3	10	—	12	—	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).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd Week)*

Reporting area	Giardiasis					Gonorrhea					<i>Haemophilus influenzae</i> , 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	142	297	546	373	704	2,925	6,783	7,919	11,520	17,252	46	41	65	127	166
New England	2	23	54	13	55	91	108	190	244	223	—	3	9	2	16
Connecticut	—	6	18	—	17	19	42	108	35	22	—	0	7	—	6
Maine [§]	1	3	10	3	2	1	2	8	3	3	—	0	4	—	—
Massachusetts	—	9	29	—	31	61	51	128	178	148	—	1	6	—	7
New Hampshire	1	0	3	1	—	1	2	6	3	4	—	0	2	—	3
Rhode Island [§]	—	0	15	5	—	9	7	14	25	40	—	0	2	1	—
Vermont [§]	—	3	8	4	5	—	1	5	—	6	—	0	1	1	—
Mid. Atlantic	37	56	97	78	148	323	680	1,014	958	2,212	9	9	19	23	37
New Jersey	—	5	11	1	21	98	115	159	272	345	—	1	3	—	6
New York (Upstate)	15	23	81	25	27	63	125	424	98	196	2	3	14	7	3
New York City	—	16	28	10	58	33	197	372	126	743	—	2	6	4	12
Pennsylvania	22	14	29	42	42	129	256	586	462	928	7	3	10	12	16
E.N. Central	18	47	89	64	114	261	1,279	2,586	1,242	3,963	6	5	14	13	27
Illinois	—	13	33	—	30	—	374	666	11	1,083	—	1	5	—	8
Indiana	N	0	0	N	N	131	161	307	413	582	—	1	7	—	—
Michigan	2	11	20	12	39	103	273	482	443	759	—	0	3	—	3
Ohio	16	15	37	47	21	27	339	1,565	309	1,081	6	2	6	13	12
Wisconsin	—	6	21	5	24	—	124	208	66	458	—	0	2	—	4
W.N. Central	9	22	184	29	45	101	370	514	495	1,178	—	3	18	9	10
Iowa	2	5	23	13	10	13	36	56	61	130	—	0	1	—	—
Kansas	—	3	11	—	3	—	43	86	—	115	—	0	1	—	3
Minnesota	—	0	170	—	—	—	63	86	56	230	—	0	16	—	—
Missouri	5	9	23	9	22	88	191	266	378	624	—	1	4	6	6
Nebraska [§]	1	3	8	6	4	—	25	57	—	63	—	0	3	3	1
North Dakota	1	0	3	1	—	—	2	4	—	6	—	0	1	—	—
South Dakota	—	1	6	—	6	—	5	11	—	10	—	0	0	—	—
S. Atlantic	33	54	94	90	92	955	1,587	2,335	3,898	2,552	14	11	30	44	33
Delaware	1	1	6	5	1	28	26	43	68	94	—	0	3	1	1
District of Columbia	—	0	6	—	2	—	47	71	79	128	—	0	1	—	—
Florida	22	24	47	55	31	423	489	623	1,212	402	5	3	10	8	4
Georgia	6	12	26	21	26	4	218	643	9	319	6	2	6	17	8
Maryland [§]	4	4	18	5	9	—	111	227	260	224	1	1	6	10	12
North Carolina	—	0	0	—	—	—	321	1,169	1,169	568	2	0	9	2	—
South Carolina [§]	—	2	6	3	1	337	203	1,361	655	635	—	1	4	3	4
Virginia [§]	—	9	22	1	22	163	126	224	435	135	—	1	23	2	4
West Virginia	—	0	8	—	—	—	17	37	11	47	—	0	3	1	—
E.S. Central	1	10	23	10	24	340	582	865	1,098	1,781	3	2	9	9	7
Alabama [§]	—	4	11	6	15	—	208	278	173	656	—	0	3	2	2
Kentucky	N	0	0	N	N	101	62	161	240	81	—	0	1	—	—
Mississippi	N	0	0	N	N	51	125	310	179	444	—	0	2	1	1
Tennessee [§]	1	5	16	4	9	188	180	261	506	600	3	1	6	6	4
W.S. Central	1	7	18	3	9	445	988	1,203	2,266	2,531	3	2	8	5	4
Arkansas [§]	—	2	9	—	1	—	76	133	189	243	—	0	1	—	—
Louisiana	—	2	11	—	4	128	220	384	225	583	—	0	1	—	1
Oklahoma	1	3	7	3	4	—	92	235	213	220	3	1	7	5	3
Texas [§]	N	0	0	N	N	317	597	858	1,639	1,485	—	0	2	—	—
Mountain	19	32	68	28	71	99	238	321	180	602	11	4	13	19	19
Arizona	5	3	11	7	15	25	101	130	57	147	9	2	6	12	9
Colorado	—	10	26	1	28	—	43	93	—	190	—	1	4	—	4
Idaho [§]	3	3	19	3	8	5	5	19	11	—	—	0	1	—	1
Montana [§]	—	2	8	2	1	1	1	48	1	9	—	0	1	1	—
Nevada [§]	—	2	7	—	3	55	44	87	62	115	—	0	1	1	1
New Mexico [§]	—	2	5	—	6	—	31	63	23	96	—	1	4	—	2
Utah	11	7	33	13	8	13	14	34	26	41	2	0	6	5	2
Wyoming [§]	—	1	4	2	2	—	1	5	—	4	—	0	1	—	—
Pacific	22	61	120	58	146	310	679	843	1,139	2,210	—	2	6	3	13
Alaska	1	1	5	2	5	7	10	17	21	22	—	0	4	—	4
California	16	42	82	43	112	271	595	717	1,024	1,913	—	0	5	—	4
Hawaii	—	0	2	—	—	—	12	24	—	33	—	0	1	—	—
Oregon [§]	3	8	17	11	27	32	23	63	88	55	—	1	5	3	5
Washington	2	8	71	2	2	—	27	142	6	187	—	0	1	—	—
American Samoa	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	2	13	—	3	—	0	0	—	—
Puerto Rico	—	5	21	—	11	—	5	23	1	14	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	1	3	—	4	—	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 *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd Week)*

Reporting area	Hepatitis (viral, acute), by type [†]										Legionellosis				
	A					B									
	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	25	52	81	84	125	43	79	107	106	194	29	45	91	78	81
New England	—	2	6	6	1	—	1	5	—	—	—	2	14	4	2
Connecticut	—	0	3	1	—	—	0	5	—	—	—	0	5	—	—
Maine [§]	—	0	1	1	—	—	0	2	—	—	—	0	2	—	—
Massachusetts	—	1	4	—	—	—	0	1	—	—	—	0	3	—	1
New Hampshire	—	0	3	—	1	—	0	1	—	—	—	0	2	—	—
Rhode Island [§]	—	0	3	4	—	—	0	3	—	—	—	0	6	3	—
Vermont [§]	—	0	1	—	—	—	0	1	—	—	—	0	2	1	1
Mid. Atlantic	7	9	21	13	16	3	9	15	8	41	18	12	37	25	24
New Jersey	—	2	6	—	7	—	1	8	—	10	—	1	11	—	8
New York (Upstate)	2	1	5	4	—	—	1	7	—	3	2	4	16	2	1
New York City	—	3	9	3	6	—	2	6	—	10	—	2	11	—	4
Pennsylvania	5	2	5	6	3	3	3	8	8	18	16	5	21	23	11
E.N. Central	2	5	12	6	17	6	8	15	12	38	1	9	28	20	22
Illinois	—	2	5	—	8	—	2	6	—	5	—	1	12	—	4
Indiana	—	0	4	—	—	—	0	8	—	—	—	1	7	—	1
Michigan	1	1	5	4	8	—	2	8	—	19	—	3	10	4	8
Ohio	1	1	4	2	1	6	2	7	12	9	1	4	17	16	8
Wisconsin	—	0	3	—	—	—	0	2	—	5	—	0	1	—	1
W.N. Central	2	3	18	12	3	—	3	8	4	9	1	1	9	2	3
Iowa	—	1	4	3	1	—	0	3	—	1	—	0	2	—	—
Kansas	—	0	3	—	—	—	0	2	—	—	—	0	1	—	—
Minnesota	—	0	17	1	—	—	0	4	—	—	—	0	6	—	—
Missouri	1	0	2	4	2	—	1	5	3	6	—	1	3	—	2
Nebraska [§]	1	0	2	3	—	—	0	1	1	1	1	0	2	2	1
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	1	1	—	—	0	1	—	1	—	0	1	—	—
S. Atlantic	4	10	21	17	20	22	18	36	47	40	6	7	18	20	16
Delaware	—	0	1	—	—	—	0	2	—	2	—	0	2	—	—
District of Columbia	—	0	5	—	—	—	0	1	—	—	—	0	1	—	—
Florida	2	3	8	11	9	5	7	12	17	13	4	2	12	11	6
Georgia	1	1	4	3	6	1	2	6	6	11	—	1	2	3	1
Maryland [§]	1	1	5	2	1	—	2	6	2	7	1	1	5	5	8
North Carolina	—	0	9	—	—	16	0	16	16	—	1	0	4	1	—
South Carolina [§]	—	0	4	—	2	—	1	4	3	4	—	0	2	—	—
Virginia [§]	—	1	5	1	2	—	3	8	2	2	—	1	3	—	1
West Virginia	—	0	2	—	—	—	0	9	1	1	—	0	3	—	—
E.S. Central	—	2	5	1	5	1	7	14	7	21	1	2	6	3	6
Alabama [§]	—	0	4	—	—	—	2	6	2	6	—	0	1	—	1
Kentucky	—	0	2	1	1	1	1	7	2	2	—	1	3	2	3
Mississippi	—	0	1	—	4	—	0	3	—	8	—	0	0	—	—
Tennessee [§]	—	1	5	—	—	—	2	8	3	5	1	1	4	1	2
W.S. Central	—	5	15	3	3	4	17	45	14	10	—	2	7	1	—
Arkansas [§]	—	0	2	—	—	—	1	4	—	3	—	0	3	1	—
Louisiana	—	0	3	—	2	—	1	6	—	4	—	0	1	—	—
Oklahoma	—	0	8	—	—	—	1	38	—	—	—	0	2	—	—
Texas [§]	—	3	10	3	1	4	12	28	14	3	—	2	6	—	—
Mountain	5	4	13	7	12	2	4	8	3	11	1	2	6	1	6
Arizona	5	3	11	7	10	—	1	4	—	5	—	0	5	—	2
Colorado	—	0	2	—	—	—	0	3	1	1	—	0	2	—	—
Idaho [§]	—	0	2	—	—	—	0	1	—	1	—	0	1	—	—
Montana [§]	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Nevada [§]	—	0	1	—	1	—	1	3	—	2	—	0	2	—	1
New Mexico [§]	—	0	1	—	—	—	0	2	—	2	—	0	1	—	2
Utah	—	0	2	—	—	2	0	2	2	—	1	0	3	1	—
Wyoming [§]	—	0	1	—	1	—	0	1	—	—	—	0	1	—	1
Pacific	5	11	32	19	48	5	10	15	11	24	1	3	7	2	2
Alaska	—	0	1	—	—	—	0	2	—	1	—	0	0	—	—
California	5	9	29	17	44	5	7	14	10	19	1	2	7	2	2
Hawaii	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
Oregon [§]	—	1	2	2	3	—	1	4	1	3	—	0	2	—	—
Washington	—	1	5	—	1	—	1	6	—	1	—	0	2	—	—
American Samoa	—	0	0	—	—	—	0	13	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Puerto Rico	—	1	5	—	3	—	1	5	2	2	—	0	1	—	2
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not 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).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd 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	131	306	1,296	208	479	10	23	39	25	47	—	17	41	—	71
New England	—	41	301	2	36	—	1	4	—	3	—	0	3	—	5
Connecticut	—	11	214	—	4	—	0	1	—	—	—	0	1	—	1
Maine§	—	4	61	—	—	—	0	2	—	1	—	0	1	—	1
Massachusetts	—	1	31	—	16	—	0	3	—	2	—	0	2	—	3
New Hampshire	—	8	88	2	14	—	0	4	—	—	—	0	1	—	—
Rhode Island§	—	0	74	—	—	—	0	0	—	—	—	0	1	—	—
Vermont§	—	1	13	—	2	—	0	2	—	—	—	0	1	—	—
Mid. Atlantic	120	151	660	147	300	2	5	16	6	9	—	2	8	—	10
New Jersey	—	34	175	4	88	—	0	0	—	—	—	0	2	—	3
New York (Upstate)	5	54	192	6	5	—	1	7	—	2	—	1	3	—	—
New York City	—	3	25	—	6	—	4	9	3	6	—	0	4	—	2
Pennsylvania	115	51	321	137	201	2	1	4	3	1	—	1	5	—	5
E. N. Central	—	12	168	2	17	1	2	7	3	12	—	3	9	—	11
Illinois	—	1	15	—	2	—	0	6	—	9	—	1	3	—	3
Indiana	—	0	7	—	—	—	0	2	—	—	—	0	4	—	—
Michigan	—	0	5	1	2	1	0	2	1	1	—	0	3	—	3
Ohio	—	0	3	1	1	—	0	3	2	2	—	0	2	—	3
Wisconsin	—	10	149	—	12	—	0	2	—	—	—	0	1	—	2
W. N. Central	—	5	379	—	2	—	0	8	—	3	—	1	5	—	6
Iowa	—	1	11	—	2	—	0	1	—	1	—	0	3	—	1
Kansas	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Minnesota	—	1	379	—	—	—	0	8	—	1	—	0	4	—	—
Missouri	—	0	4	—	—	—	0	1	—	—	—	0	2	—	5
Nebraska§	—	0	2	—	—	—	0	1	—	1	—	0	2	—	—
North Dakota	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
S. Atlantic	7	63	183	48	115	5	4	14	11	10	—	3	11	—	12
Delaware	—	12	34	5	21	—	0	1	—	—	—	0	1	—	—
District of Columbia	—	0	7	—	—	—	0	1	—	—	—	0	0	—	—
Florida	2	1	11	4	1	2	1	7	4	2	—	1	7	—	5
Georgia	1	0	3	1	—	1	1	3	3	1	—	0	3	—	3
Maryland§	4	32	128	36	84	2	1	5	4	4	—	0	2	—	2
North Carolina	—	0	8	—	—	—	0	4	—	1	—	0	4	—	—
South Carolina§	—	0	4	—	—	—	0	1	—	—	—	0	1	—	2
Virginia§	—	14	62	2	9	—	1	6	—	2	—	0	2	—	—
West Virginia	—	0	9	—	—	—	0	1	—	—	—	0	1	—	—
E. S. Central	—	1	5	—	1	—	1	3	1	1	—	1	3	—	8
Alabama§	—	0	3	—	—	—	0	1	1	—	—	0	2	—	2
Kentucky	—	0	2	—	—	—	0	1	—	—	—	0	2	—	—
Mississippi	—	0	1	—	—	—	0	1	—	1	—	0	2	—	4
Tennessee§	—	0	4	—	1	—	0	2	—	—	—	0	2	—	2
W. S. Central	—	1	6	—	1	—	2	7	—	2	—	1	7	—	5
Arkansas§	—	0	1	—	—	—	0	1	—	—	—	0	2	—	—
Louisiana	—	0	1	—	—	—	0	2	—	1	—	0	3	—	4
Oklahoma	—	0	0	—	—	—	0	2	—	—	—	0	3	—	—
Texas§	—	1	6	—	1	—	1	6	—	1	—	1	4	—	1
Mountain	—	0	3	1	2	—	1	6	1	1	—	1	4	—	2
Arizona	—	0	1	—	—	—	0	3	—	—	—	0	2	—	—
Colorado	—	0	1	1	—	—	0	2	1	1	—	0	2	—	—
Idaho§	—	0	2	—	—	—	0	2	—	—	—	0	2	—	1
Montana§	—	0	2	—	1	—	0	1	—	—	—	0	1	—	—
Nevada§	—	0	2	—	1	—	0	1	—	—	—	0	1	—	—
New Mexico§	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Utah	—	0	2	—	—	—	0	3	—	—	—	0	2	—	1
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Pacific	4	2	9	8	5	2	3	9	3	6	—	4	12	—	12
Alaska	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
California	4	2	9	8	5	2	2	7	3	3	—	3	9	—	11
Hawaii	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Oregon§	—	0	1	—	—	—	0	2	—	3	—	0	3	—	1
Washington	—	0	7	—	—	—	0	3	—	—	—	0	5	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	—	1	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not 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).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd 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	63	167	264	172	496	23	107	191	93	175	4	33	146	8	21
New England	1	25	43	3	96	3	11	22	6	26	—	0	1	—	—
Connecticut	—	0	5	—	7	—	4	10	—	15	—	0	0	—	—
Maine†	—	1	6	2	3	—	1	5	—	2	—	0	1	—	—
Massachusetts	—	19	33	—	79	—	0	0	—	N	—	0	1	—	—
New Hampshire	—	1	5	—	7	3	1	4	3	3	—	0	1	—	—
Rhode Island†	—	0	7	—	—	—	1	4	1	1	—	0	0	—	—
Vermont†	1	0	9	1	—	—	2	13	2	5	—	0	0	—	—
Mid. Atlantic	23	23	50	38	93	3	26	56	17	62	1	1	7	1	3
New Jersey	—	2	10	—	18	N	0	0	N	N	—	0	3	—	—
New York (Upstate)	5	9	31	7	39	3	9	20	17	12	—	0	1	—	—
New York City	—	3	7	—	12	—	1	5	—	5	—	0	3	—	1
Pennsylvania	18	7	22	31	24	—	16	44	—	45	1	0	3	1	2
E.N. Central	18	26	79	49	113	—	4	48	—	—	—	1	4	—	2
Illinois	—	3	12	—	28	—	1	15	—	—	—	0	3	—	—
Indiana	—	0	9	—	—	—	0	1	—	—	—	0	2	—	—
Michigan	1	4	16	1	12	—	1	27	—	—	—	0	1	—	1
Ohio	17	11	54	48	55	—	1	11	—	—	—	0	2	—	1
Wisconsin	—	0	24	—	18	N	0	0	N	N	—	0	0	—	—
W.N. Central	8	12	65	25	46	—	4	13	—	2	—	5	37	3	3
Iowa	—	2	8	—	19	—	0	3	—	—	—	0	4	—	—
Kansas	—	2	8	—	17	—	2	7	—	1	—	0	2	—	2
Minnesota	—	0	53	—	—	—	0	6	—	—	—	0	1	—	—
Missouri	8	2	11	21	4	—	0	3	—	1	—	5	29	3	1
Nebraska†	—	1	12	3	2	—	0	0	—	—	—	0	2	—	—
North Dakota	—	0	4	—	—	—	0	5	—	—	—	0	0	—	—
South Dakota	—	0	7	1	4	—	0	2	—	—	—	0	1	—	—
S. Atlantic	2	16	48	21	42	12	39	156	57	66	3	15	111	4	6
Delaware	—	0	2	—	—	—	0	0	—	—	—	0	2	—	1
District of Columbia	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
Florida	2	4	17	5	9	3	0	124	7	—	—	0	3	—	—
Georgia	—	0	3	—	5	—	5	12	11	10	2	0	6	2	2
Maryland†	—	2	6	4	12	—	7	18	8	21	—	1	4	1	2
North Carolina	—	4	34	10	—	9	9	19	19	18	1	5	96	1	—
South Carolina†	—	1	4	—	6	—	0	11	—	3	—	0	7	—	—
Virginia†	—	2	11	2	9	—	13	31	12	10	—	2	11	—	1
West Virginia	—	0	12	—	—	—	0	11	—	4	—	0	3	—	—
E.S. Central	1	6	35	8	23	—	3	6	1	9	—	4	16	—	7
Alabama†	—	1	6	3	7	—	0	0	—	—	—	1	10	—	4
Kentucky	—	0	4	1	—	—	0	3	1	4	—	0	2	—	—
Mississippi	1	2	32	4	11	—	0	1	—	—	—	0	2	—	1
Tennessee†	—	1	5	—	5	—	2	6	—	5	—	2	10	—	2
W.S. Central	1	20	48	8	6	3	1	23	3	1	—	1	30	—	—
Arkansas†	—	1	17	—	—	3	1	2	3	—	—	0	15	—	—
Louisiana	—	0	2	—	1	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	26	—	—	—	0	22	—	1	—	0	20	—	—
Texas†	1	16	33	8	5	—	0	0	—	—	—	1	5	—	—
Mountain	9	21	39	15	58	—	3	14	3	2	—	0	4	—	—
Arizona	1	3	13	1	17	—	2	12	3	2	—	0	1	—	—
Colorado	—	6	14	5	26	—	0	0	—	—	—	0	2	—	—
Idaho†	—	0	5	—	5	—	0	0	—	—	—	0	1	—	—
Montana†	2	0	7	3	1	—	0	3	—	—	—	0	1	—	—
Nevada†	—	0	3	—	—	—	0	2	—	—	—	0	0	—	—
New Mexico†	—	1	7	—	4	—	0	2	—	—	—	0	1	—	—
Utah	6	6	27	6	1	—	0	2	—	—	—	0	0	—	—
Wyoming†	—	0	4	—	4	—	0	4	—	—	—	0	2	—	—
Pacific	—	12	73	5	19	2	4	10	6	7	—	0	2	—	—
Alaska	—	0	6	3	8	2	0	6	4	6	N	0	0	N	N
California	—	5	15	—	3	—	3	8	2	1	—	0	2	—	—
Hawaii	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
Oregon†	—	1	14	2	7	—	0	3	—	—	—	0	1	—	—
Washington	—	3	68	—	1	—	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	1	—	—	1	0	5	1	5	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Incidence data for reporting years 2007 and 2008 are provisional.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd Week)*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]					Shigellosis				
	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	285	754	1,316	918	2,067	16	68	209	45	165	138	352	552	523	553
New England	2	30	74	21	480	—	4	11	1	80	—	3	11	1	58
Connecticut	—	0	10	10	415	—	0	0	—	73	—	0	0	—	44
Maine [§]	1	2	13	2	7	—	0	4	1	1	—	0	4	—	1
Massachusetts	—	22	58	—	48	—	2	10	—	5	—	2	8	—	12
New Hampshire	—	3	10	4	4	—	0	4	—	1	—	0	1	—	1
Rhode Island [§]	1	2	15	3	2	—	0	2	—	—	—	0	9	1	—
Vermont [§]	—	1	5	2	4	—	0	3	—	—	—	0	1	—	—
Mid. Atlantic	59	107	189	126	253	3	8	27	6	15	7	14	40	18	24
New Jersey	—	19	49	2	57	—	2	7	—	6	—	3	10	—	1
New York (Upstate)	17	27	63	27	24	1	3	12	3	2	3	3	17	3	2
New York City	1	24	51	28	72	—	1	5	—	2	—	5	11	7	15
Pennsylvania	41	35	69	69	100	2	2	11	3	5	4	2	21	8	6
E.N. Central	16	102	254	75	210	5	8	35	8	17	21	46	133	71	56
Illinois	—	32	187	—	81	—	1	10	—	2	—	12	24	—	39
Indiana	—	13	34	6	2	—	1	13	—	—	—	2	32	19	5
Michigan	3	18	41	21	34	—	1	8	3	4	—	1	7	1	2
Ohio	13	25	64	46	54	5	2	9	5	10	21	19	104	50	7
Wisconsin	—	15	50	2	39	—	3	11	—	1	—	4	13	1	3
W.N. Central	13	49	103	49	92	1	12	38	1	9	5	33	80	12	56
Iowa	—	9	18	4	19	—	2	13	—	—	—	1	6	—	4
Kansas	—	7	20	—	19	—	1	4	—	2	—	0	3	—	2
Minnesota	—	13	41	—	5	—	4	17	—	2	—	4	12	—	6
Missouri	8	15	29	34	29	1	2	12	1	2	5	22	72	12	39
Nebraska [§]	5	5	13	11	12	—	2	6	—	3	—	0	3	—	1
North Dakota	—	0	9	—	—	—	0	1	—	—	—	0	3	—	—
South Dakota	—	3	11	—	8	—	0	5	—	—	—	0	30	—	4
S. Atlantic	125	222	433	407	478	2	13	39	12	19	40	81	153	160	165
Delaware	—	2	8	1	7	—	0	2	1	2	—	0	2	—	1
District of Columbia	—	0	4	—	1	—	0	1	—	—	—	0	1	—	—
Florida	86	84	181	256	207	2	3	18	10	5	19	41	75	71	87
Georgia	31	31	84	85	83	—	1	6	1	3	18	27	85	70	64
Maryland [§]	4	15	43	27	32	—	1	6	—	5	—	2	7	3	5
North Carolina	—	28	191	—	73	—	1	24	—	—	—	0	10	—	—
South Carolina [§]	4	19	51	32	35	—	0	3	—	—	3	4	20	15	4
Virginia [§]	—	20	42	4	39	—	3	9	—	4	—	3	14	1	4
West Virginia	—	4	20	2	1	—	0	3	—	—	—	0	36	—	—
E.S. Central	15	59	143	73	192	3	4	26	9	7	12	49	177	75	53
Alabama [§]	3	16	49	25	34	1	1	19	3	1	3	13	41	20	20
Kentucky	1	10	23	10	25	1	1	12	2	2	2	6	35	13	5
Mississippi	—	13	57	12	101	—	0	1	1	1	—	16	111	20	13
Tennessee [§]	11	17	35	26	32	1	2	10	3	3	7	4	32	22	15
W.S. Central	10	81	248	24	56	—	3	12	2	5	40	41	135	149	21
Arkansas [§]	6	13	51	14	8	—	0	3	—	4	3	2	6	4	2
Louisiana	—	15	42	1	29	—	0	2	—	—	—	9	22	1	8
Oklahoma	4	9	43	9	7	—	0	3	—	1	5	2	8	8	1
Texas [§]	—	41	135	—	12	—	2	10	2	—	32	28	126	136	10
Mountain	16	49	84	51	121	1	9	42	2	10	3	17	41	16	42
Arizona	7	17	40	28	44	—	1	8	1	2	3	10	29	14	17
Colorado	—	10	24	5	38	—	1	17	—	5	—	2	6	1	6
Idaho [§]	3	3	9	7	8	1	1	16	1	1	—	0	2	—	—
Montana [§]	2	2	9	2	6	—	0	0	—	—	—	0	2	—	2
Nevada [§]	—	4	12	—	9	—	0	3	—	—	—	0	10	—	1
New Mexico [§]	—	5	13	—	8	—	1	3	—	1	—	2	6	—	5
Utah	3	4	17	4	5	—	1	9	—	1	—	1	5	—	1
Wyoming [§]	1	1	5	5	3	—	0	0	—	—	—	0	5	1	10
Pacific	29	109	191	92	185	1	9	38	4	3	10	27	70	21	78
Alaska	1	1	5	2	1	N	0	0	N	N	—	0	2	—	—
California	27	83	135	79	166	1	5	33	4	1	10	21	61	20	70
Hawaii	—	1	13	—	—	—	0	1	—	—	—	0	3	1	—
Oregon [§]	1	6	16	11	17	—	1	11	—	2	—	1	6	—	6
Washington	—	12	73	—	1	—	1	20	—	—	—	2	20	—	2
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	—	—	N	0	0	N	N	—	0	3	—	1
Puerto Rico	—	13	55	5	19	—	0	0	—	—	—	0	2	—	6
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 *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd Week)*

Reporting area	Streptococcal disease, invasive, group A					<i>Streptococcus pneumoniae</i> , 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	65	82	168	180	245	23	35	74	71	92
New England	—	5	28	1	19	—	1	7	—	17
Connecticut	—	0	22	—	1	—	0	2	—	2
Maine§	—	0	3	—	2	—	0	1	—	—
Massachusetts	—	3	12	—	10	—	1	4	—	11
New Hampshire	—	0	4	1	2	—	0	2	—	2
Rhode Island§	—	0	1	—	—	—	0	1	—	1
Vermont§	—	0	2	—	4	—	0	1	—	1
Mid. Atlantic	20	15	40	39	46	4	5	38	8	14
New Jersey	—	2	12	—	8	—	1	5	1	4
New York (Upstate)	10	5	20	19	4	4	2	10	7	7
New York City	—	4	13	—	15	—	2	35	—	3
Pennsylvania	10	4	11	20	19	N	0	0	N	N
E.N. Central	8	15	34	29	64	1	4	13	11	18
Illinois	—	4	13	1	23	—	1	6	—	3
Indiana	—	2	10	3	2	—	0	6	—	—
Michigan	1	3	10	9	13	—	1	5	5	8
Ohio	7	4	14	16	22	1	1	5	6	5
Wisconsin	—	0	5	—	4	—	0	2	—	2
W.N. Central	1	5	32	5	12	2	3	10	7	3
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	3	—	2	—	0	1	—	—
Minnesota	—	0	29	—	—	—	1	9	—	—
Missouri	1	2	4	5	8	2	0	2	5	3
Nebraska§	—	0	3	—	—	—	0	3	2	—
North Dakota	—	0	3	—	—	—	0	1	—	—
South Dakota	—	0	2	—	2	—	0	0	—	—
S. Atlantic	20	22	49	65	50	6	6	14	15	16
Delaware	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	3	—	—	—	0	0	—	—
Florida	10	6	16	24	11	1	1	5	4	1
Georgia	4	4	12	17	15	—	0	5	—	4
Maryland§	4	4	9	17	14	5	1	5	8	6
North Carolina	2	1	22	2	—	—	0	0	—	—
South Carolina§	—	1	7	5	7	—	1	4	3	1
Virginia§	—	2	11	—	3	—	0	3	—	4
West Virginia	—	0	3	—	—	—	0	1	—	—
E.S. Central	4	4	13	6	13	—	2	9	—	9
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	1	1	3	1	3	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	1	—	2
Tennessee§	3	3	13	5	10	—	2	9	—	7
W.S. Central	6	6	19	10	8	3	5	20	6	5
Arkansas§	—	0	2	—	1	1	0	1	1	—
Louisiana	—	0	4	—	1	—	0	4	—	2
Oklahoma	1	1	5	4	4	1	1	4	3	2
Texas§	5	4	12	6	2	1	2	16	2	1
Mountain	6	9	21	25	27	4	4	12	19	10
Arizona	3	4	10	11	7	3	2	8	14	9
Colorado	—	3	8	8	6	—	1	4	3	—
Idaho§	—	0	2	1	1	1	0	1	1	—
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	—	—	—	0	1	—	—
New Mexico§	—	1	4	—	6	—	0	4	—	1
Utah	3	2	6	5	6	—	0	2	1	—
Wyoming§	—	0	1	—	1	—	0	0	—	—
Pacific	—	3	7	—	6	3	0	4	5	—
Alaska	—	0	3	—	1	3	0	4	5	—
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	5	—	5	—	0	1	—	—
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	4	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	—	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, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDS event code 11717).

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd Week)*

Reporting area	<i>Streptococcus pneumoniae</i> , 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	60	42	97	177	224	8	8	23	22	27	103	209	278	349	473
New England	—	1	7	2	16	—	0	2	1	—	4	5	14	9	6
Connecticut	—	0	5	—	10	—	0	2	—	—	—	0	3	—	—
Maine§	—	0	1	1	3	—	0	1	1	—	—	0	2	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	4	3	8	8	5
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	3	—	1
Rhode Island§	—	0	3	—	1	—	0	1	—	—	—	0	5	1	—
Vermont§	—	0	2	1	2	—	0	1	—	—	—	0	5	—	—
Mid. Atlantic	2	2	9	9	17	1	0	5	2	3	27	34	46	83	80
New Jersey	—	0	0	—	—	—	0	0	—	—	2	4	9	9	9
New York (Upstate)	—	1	5	1	1	1	0	4	1	—	1	3	7	1	5
New York City	—	0	0	—	—	—	0	0	—	—	12	18	35	54	36
Pennsylvania	2	1	6	8	16	—	0	2	1	3	12	8	17	19	30
E.N. Central	14	10	31	31	71	3	2	8	6	6	12	15	25	30	39
Illinois	—	1	7	—	16	—	0	5	—	2	—	7	14	—	22
Indiana	—	3	11	—	10	—	0	4	—	—	1	1	6	3	1
Michigan	1	0	1	2	—	—	0	1	—	—	1	2	9	1	5
Ohio	13	6	23	29	45	3	1	3	6	4	10	4	9	23	9
Wisconsin	N	0	0	N	N	—	0	0	—	—	—	1	4	3	2
W.N. Central	1	2	49	14	20	—	0	3	—	3	—	7	13	13	7
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Kansas	—	0	7	—	13	—	0	2	—	2	—	0	2	—	1
Minnesota	—	0	46	—	—	—	0	3	—	—	—	1	4	4	3
Missouri	1	1	8	14	6	—	0	1	—	—	—	4	10	9	3
Nebraska§	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	1	—	1	—	0	1	—	1	—	0	3	—	—
S. Atlantic	38	19	39	98	69	3	4	12	11	14	28	49	85	79	101
Delaware	—	0	1	1	—	—	0	1	—	—	—	0	3	—	—
District of Columbia	—	0	1	—	—	—	0	0	—	—	—	3	12	—	6
Florida	27	11	27	68	40	3	2	7	9	9	15	16	34	38	35
Georgia	10	6	19	27	27	—	1	5	2	5	—	9	31	—	6
Maryland§	1	0	1	1	—	—	0	0	—	—	—	6	15	10	20
North Carolina	—	0	0	—	—	—	0	0	—	—	6	5	23	19	23
South Carolina§	—	0	0	—	—	—	0	0	—	—	3	1	11	4	6
Virginia§	N	0	0	N	N	—	0	0	—	—	4	4	16	8	5
West Virginia	—	1	8	1	2	—	0	1	—	—	—	0	1	—	—
E.S. Central	5	3	9	19	12	1	1	3	2	—	9	19	31	39	30
Alabama§	N	0	0	N	N	—	0	0	—	—	—	7	17	13	11
Kentucky	—	0	2	2	3	—	0	1	—	—	—	1	7	4	5
Mississippi	—	0	0	—	—	—	0	0	—	—	4	2	9	5	4
Tennessee§	5	2	9	17	9	1	0	3	2	—	5	7	15	17	10
W.S. Central	—	2	12	—	13	—	0	3	—	—	15	37	55	62	55
Arkansas§	—	0	1	—	—	—	0	0	—	—	—	2	10	2	2
Louisiana	—	1	4	—	5	—	0	2	—	—	—	10	23	3	6
Oklahoma	—	0	10	—	8	—	0	2	—	—	—	1	4	2	5
Texas§	—	0	0	—	—	—	0	0	—	—	15	23	39	55	42
Mountain	—	1	5	4	6	—	0	2	—	1	2	8	25	5	21
Arizona	—	0	0	—	—	—	0	0	—	—	1	4	17	1	6
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	3	1	1
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	3	—	—
Nevada§	—	0	3	3	4	—	0	2	—	—	1	2	6	3	7
New Mexico§	—	0	1	—	—	—	0	0	—	—	—	1	3	—	6
Utah	—	0	5	1	1	—	0	2	—	1	—	0	2	—	1
Wyoming§	—	0	2	—	1	—	0	1	—	—	—	0	1	—	—
Pacific	—	0	0	—	—	—	0	0	—	—	6	40	55	29	134
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
California	N	0	0	N	N	—	0	0	—	—	6	37	52	20	130
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Oregon§	N	0	0	N	N	—	0	0	—	—	—	0	2	2	1
Washington	N	0	0	N	N	—	0	0	—	—	—	2	12	7	3
American Samoa	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	—	3	10	—	5
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not 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).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 19, 2008, and January 20, 2007 (3rd Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Neuroinvasive					Nonneuroinvasive§				
		Med	Max			Current week	Med	Max	Cum 2008	Cum 2007	Current week	Med	Max	Cum 2008	Cum 2007
United States	363	601	1,277	1,025	2,316	—	1	141	—	—	—	2	299	—	1
New England	3	13	47	22	40	—	0	2	—	—	—	0	2	—	—
Connecticut	—	0	1	—	—	—	0	2	—	—	—	0	1	—	—
Maine¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
New Hampshire	—	6	17	8	19	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Vermont¶	3	5	38	14	21	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	83	74	168	149	424	—	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	—	0	0	—	—	—	0	3	—	—	—	0	3	—	—
Pennsylvania	83	74	168	149	424	—	0	1	—	—	—	0	1	—	—
E.N. Central	133	163	568	388	1,055	—	0	18	—	—	—	0	12	—	1
Illinois	—	3	11	2	11	—	0	13	—	—	—	0	8	—	—
Indiana	N	0	0	N	N	—	0	4	—	—	—	0	2	—	—
Michigan	62	75	160	163	448	—	0	5	—	—	—	0	0	—	—
Ohio	71	77	449	223	474	—	0	4	—	—	—	0	3	—	1
Wisconsin	—	11	80	—	122	—	0	2	—	—	—	0	2	—	—
W.N. Central	12	23	114	43	116	—	0	41	—	—	—	1	117	—	—
Iowa	N	0	0	N	N	—	0	4	—	—	—	0	3	—	—
Kansas	—	6	52	—	47	—	0	3	—	—	—	0	7	—	—
Minnesota	—	0	0	—	—	—	0	9	—	—	—	0	12	—	—
Missouri	12	13	78	43	59	—	0	9	—	—	—	0	3	—	—
Nebraska¶	N	0	0	N	N	—	0	5	—	—	—	0	15	—	—
North Dakota	—	0	60	—	—	—	0	11	—	—	—	0	49	—	—
South Dakota	—	1	14	—	10	—	0	9	—	—	—	0	32	—	—
S. Atlantic	35	93	214	169	298	—	0	12	—	—	—	0	6	—	—
Delaware	—	1	4	—	5	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	8	—	—	—	0	0	—	—	—	0	0	—	—
Florida	17	26	76	68	49	—	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	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
South Carolina¶	16	18	72	32	98	—	0	2	—	—	—	0	1	—	—
Virginia¶	—	19	85	15	37	—	0	1	—	—	—	0	1	—	—
West Virginia	2	22	58	54	109	—	0	0	—	—	—	0	0	—	—
E.S. Central	1	10	81	21	27	—	0	11	—	—	—	0	14	—	—
Alabama¶	1	10	81	21	25	—	0	2	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	—	2	—	0	7	—	—	—	0	12	—	—
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	76	148	521	180	203	—	0	34	—	—	—	0	18	—	—
Arkansas¶	—	9	46	1	12	—	0	5	—	—	—	0	2	—	—
Louisiana	—	1	8	1	16	—	0	5	—	—	—	0	3	—	—
Oklahoma	—	0	0	—	—	—	0	11	—	—	—	0	7	—	—
Texas¶	76	140	475	178	175	—	0	18	—	—	—	0	10	—	—
Mountain	20	49	130	51	152	—	0	36	—	—	—	1	143	—	—
Arizona	—	0	0	—	—	—	0	8	—	—	—	0	10	—	—
Colorado	—	20	62	9	70	—	0	17	—	—	—	0	65	—	—
Idaho¶	N	0	0	N	N	—	0	3	—	—	—	0	22	—	—
Montana¶	7	7	40	21	18	—	0	10	—	—	—	0	30	—	—
Nevada¶	—	0	1	—	—	—	0	1	—	—	—	0	3	—	—
New Mexico¶	—	5	37	—	24	—	0	8	—	—	—	0	6	—	—
Utah	13	10	72	20	40	—	0	8	—	—	—	0	8	—	—
Wyoming¶	—	0	9	1	—	—	0	4	—	—	—	0	33	—	—
Pacific	—	0	9	2	1	—	0	18	—	—	—	0	23	—	—
Alaska	—	0	9	2	1	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	17	—	—	—	0	21	—	—
Hawaii	N	0	0	N	N	—	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	—	4	24	4	16	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	11	37	11	19	—	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).

TABLE III. Deaths in 122 U.S. cities,* week ending January 19, 2008 (3rd Week)

Reporting Area	All causes, by age (years)							P&I [†] Total	Reporting Area	All causes, by age (years)							P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
New England	622	436	114	33	19	20	73	S. Atlantic	1,269	800	307	89	35	37	78		
Boston, MA	171	112	28	11	13	7	15	Atlanta, GA	143	72	49	16	5	1	4		
Bridgeport, CT	37	27	6	4	—	—	1	Baltimore, MD	189	102	59	16	4	8	21		
Cambridge, MA	19	16	3	—	—	—	5	Charlotte, NC	133	91	24	10	6	2	14		
Fall River, MA	34	28	5	1	—	—	6	Jacksonville, FL	205	136	49	11	5	4	11		
Hartford, CT	51	32	14	2	2	1	12	Miami, FL	95	66	17	6	2	3	4		
Lowell, MA	28	21	4	3	—	—	2	Norfolk, VA	60	36	8	6	2	8	3		
Lynn, MA	11	8	3	—	—	—	1	Richmond, VA	67	35	22	4	3	3	3		
New Bedford, MA	36	27	7	2	—	—	2	Savannah, GA	57	38	10	3	3	3	1		
New Haven, CT	41	28	8	4	—	1	3	St. Petersburg, FL	62	45	11	3	1	2	2		
Providence, RI	64	46	13	2	2	1	4	Tampa, FL	243	169	53	14	4	3	13		
Somerville, MA	4	2	2	—	—	—	1	Washington, D.C.	U	U	U	U	U	U	U		
Springfield, MA	43	27	4	2	1	9	9	Wilmington, DE	15	10	5	—	—	—	2		
Waterbury, CT	28	19	7	1	—	1	3	E.S. Central	1,140	723	286	71	31	29	91		
Worcester, MA	55	43	10	1	1	—	9	Birmingham, AL	223	144	51	10	8	10	24		
Mid. Atlantic	2,247	1,533	525	100	41	47	108	Chattanooga, TN	111	79	25	5	2	—	9		
Albany, NY	42	32	7	1	—	2	3	Knoxville, TN	138	84	31	16	2	5	11		
Allentown, PA	22	17	3	1	1	—	1	Lexington, KY	102	65	27	8	1	1	7		
Buffalo, NY	84	58	20	4	—	2	6	Memphis, TN	188	118	50	14	4	2	10		
Camden, NJ	46	28	14	2	1	1	5	Mobile, AL	116	71	29	8	7	1	6		
Elizabeth, NJ	18	13	3	1	—	1	2	Montgomery, AL	82	53	20	1	3	5	8		
Erie, PA	30	24	5	—	—	1	3	Nashville, TN	180	109	53	9	4	5	16		
Jersey City, NJ	U	U	U	U	U	U	U	W.S. Central	1,725	1,087	439	101	39	59	99		
New York City, NY	1,128	777	263	54	19	14	47	Austin, TX	95	63	18	9	—	5	11		
Newark, NJ	U	U	U	U	U	U	U	Baton Rouge, LA	U	U	U	U	U	U	U		
Paterson, NJ	19	8	9	2	—	—	1	Corpus Christi, TX	91	64	16	4	2	5	8		
Philadelphia, PA	566	353	149	24	17	23	20	Dallas, TX	251	141	78	20	6	6	18		
Pittsburgh, PA [§]	27	15	10	1	1	—	1	El Paso, TX	U	U	U	U	U	U	U		
Reading, PA	28	21	5	1	1	—	3	Fort Worth, TX	159	108	34	7	1	9	9		
Rochester, NY	U	U	U	U	U	U	U	Houston, TX	460	272	126	28	17	17	19		
Schenectady, NY	17	13	2	2	—	—	1	Little Rock, AR	98	55	30	5	4	4	—		
Scranton, PA	25	22	3	—	—	—	1	New Orleans, LA [†]	U	U	U	U	U	U	U		
Syracuse, NY	129	96	24	5	1	3	10	San Antonio, TX	320	200	85	19	7	9	25		
Trenton, NJ	26	22	2	2	—	—	—	Shreveport, LA	80	59	16	4	—	1	4		
Utica, NY	16	14	2	—	—	—	2	Tulsa, OK	171	125	36	5	2	3	5		
Yonkers, NY	24	20	4	—	—	—	2	Mountain	1,319	857	323	81	31	25	111		
E.N. Central	2,393	1,610	556	127	54	45	156	Albuquerque, NM	152	103	33	14	2	—	7		
Akron, OH	82	58	15	1	5	3	5	Boise, ID	46	30	12	1	3	—	2		
Canton, OH	40	22	15	2	—	1	—	Colorado Springs, CO	82	48	23	7	2	2	5		
Chicago, IL	307	175	85	24	13	9	25	Denver, CO	89	58	17	11	1	2	8		
Cincinnati, OH	112	73	30	5	2	2	16	Las Vegas, NV	364	236	102	13	6	7	38		
Cleveland, OH	256	197	49	6	3	1	8	Ogden, UT	34	28	5	1	—	—	4		
Columbus, OH	235	160	46	19	3	7	19	Phoenix, AZ	204	108	58	18	10	8	16		
Dayton, OH	162	122	29	7	3	1	15	Pueblo, CO	34	27	5	2	—	—	5		
Detroit, MI	212	118	70	19	3	2	15	Salt Lake City, UT	140	102	22	6	4	6	12		
Evansville, IN	48	35	12	—	—	1	1	Tucson, AZ	174	117	46	8	3	—	14		
Fort Wayne, IN	72	56	10	3	2	1	6	Pacific	1,668	1,186	349	85	26	22	185		
Gary, IN	14	10	2	2	—	—	1	Berkeley, CA	24	13	10	1	—	—	3		
Grand Rapids, MI	34	23	8	—	—	3	1	Fresno, CA	U	U	U	U	U	U	U		
Indianapolis, IN	314	199	77	20	13	5	18	Glendale, CA	29	23	5	1	—	—	9		
Lansing, MI	38	25	12	—	1	—	3	Honolulu, HI	86	68	12	3	1	2	10		
Milwaukee, WI	137	87	35	9	3	3	11	Long Beach, CA	55	33	13	6	1	2	6		
Peoria, IL	55	41	12	1	—	1	4	Los Angeles, CA	270	180	64	20	5	1	43		
Rockford, IL	48	37	7	2	1	1	1	Pasadena, CA	35	31	2	1	—	1	5		
South Bend, IN	26	19	4	2	—	1	1	Portland, OR	189	133	43	11	1	1	14		
Toledo, OH	116	82	25	4	2	3	3	Sacramento, CA	230	161	47	13	7	2	22		
Youngstown, OH	85	71	13	1	—	—	3	San Diego, CA	188	139	32	8	3	6	20		
W.N. Central	529	376	101	25	12	15	44	San Francisco, CA	33	22	5	5	1	—	5		
Des Moines, IA	U	U	U	U	U	U	U	San Jose, CA	195	140	44	6	2	3	24		
Duluth, MN	43	32	10	1	—	—	5	Santa Cruz, CA	45	33	9	2	1	—	4		
Kansas City, KS	35	21	7	4	2	1	—	Seattle, WA	129	85	33	6	2	3	6		
Kansas City, MO	117	80	24	6	3	4	17	Spokane, WA	48	36	10	1	—	1	6		
Lincoln, NE	35	31	3	1	—	—	2	Tacoma, WA	112	89	20	1	2	—	8		
Minneapolis, MN	78	58	8	3	2	7	7	Total	12,912**	8,608	3,000	712	288	299	945		
Omaha, NE	U	U	U	U	U	U	U										
St. Louis, MO	75	46	19	4	5	1	4										
St. Paul, MN	65	46	13	5	—	1	4										
Wichita, KS	81	62	17	1	—	1	5										

U: Unavailable. —:No reported cases.

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

† Pneumonia and influenza.

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

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

** Total includes unknown ages.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's Internet server at <http://www.cdc.gov/mmwr> or from CDC's file transfer protocol server at <ftp://ftp.cdc.gov/pub/publications/mmwr>. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Data are compiled in the National Center for Public Health Informatics, Division of Integrated Surveillance Systems and Services. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to www.mmwrq@cdc.gov.

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

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

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