



## **Morbidity and Mortality Weekly Report**

www.cdc.gov/mmwr

Weekly

August 7, 2009 / Vol. 58 / No. 30

# Contraceptive Use Among Postpartum Women — 12 States and New York City, 2004–2006

Postpartum use of highly effective contraceptive methods can prevent unintended pregnancies and ensure adequate birth spacing. Unintended pregnancies and short interpregnancy intervals are associated with adverse maternal and infant outcomes (1,2). In 2001, the year for which the most recent data are available, 49% of all pregnancies were unintended (3), and 21% of women gave birth within 24 months of a previous birth (4). Two Healthy People 2010 goals are to increase the percentage of intended pregnancies to 70% (objective 9-1) and to reduce the percentage of births occurring within 24 months of a previous birth to 6% (objective 9-2) (5). To estimate the prevalence and types of contraception being used by women 2-9 months postpartum, CDC analyzed data from the 2004–2006 Pregnancy Risk Assessment Monitoring System (PRAMS) from 12 states and New York City. This report summarizes those results, which indicated that 88.0% of postpartum women reported current use of at least one contraceptive method; 61.7% reported using a method defined as highly effective, 20.0% used a method defined as moderately effective, and 6.4% used less effective methods. Rates of using highly effective contraceptive methods postpartum were lowest among Asian/Pacific Islanders (35.3%), women who had wanted to get pregnant sooner (49.9%), women aged ≥35 years (53.0%), and women who had no prenatal care (54.5%). State policy makers and health-care providers can use these results to promote use of highly effective contraception among postpartum women and target interventions for those with particularly low rates of usage, including women with no prenatal care.

PRAMS began in 1987 as an ongoing, state- and populationbased surveillance system designed to monitor maternal behaviors and experiences that occur before, during, and after pregnancy among women who deliver live infants. The system currently is active in 39 reporting areas in the United States. PRAMS uses a mixed mode data-collection methodology; up to three self-administered questionnaires are mailed monthly to a stratified random sample of mothers selected from birth certificates 2–4 months after delivery (median = 3.7 months). Nonresponders receive follow-up telephone interviews. Self-reported survey data are linked to birth certificate data and weighted for sample design, nonresponse, and noncoverage to create annual PRAMS analysis data sets.\*

The PRAMS questionnaire in each state includes core questions that appear on all PRAMS surveys, optional standard questions, and questions developed by the state. The 2004–2006 surveys incorporated various topics, including current contraceptive practices. Respondents were asked, "Are you or your husband or partner doing anything now to keep from getting pregnant?" (core question) and "What kind of birth control are you or your husband or partner using now to keep from getting pregnant?" (standard question). Participants who responded "no" to the first question were classified as using no method and were not asked the second question, which included response options for 13 specific contraceptive methods and "other," with instructions to "check all that apply." The standard question about postpartum contraceptive method type was used by 14 reporting areas; however, to minimize bias

## **INSIDE**

- 826 Evaluation of Rapid Influenza Diagnostic Tests for Detection of Novel Influenza A (H1N1) Virus — United States, 2009
- 829 Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP) Regarding Routine Poliovirus Vaccination
- 831 QuickStats

<sup>\*</sup> Additional information regarding PRAMS is available at http://www.cdc.gov/prams.

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 2009;58:[inclusive page numbers].

## Centers for Disease Control and Prevention Thomas R. Frieden, 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, ID Editor, MMWR Series Christine G. Casey, MD Deputy Editor, MMWR Series Robert A. Gunn, MD, MPH Associate Editor, MMWR Series Teresa F. Rutledge Managing Editor, MMWR Series Douglas W. Weatherwax Lead Technical Writer-Editor Donald G. Meadows, MA Jude C. Rutledge Writers-Editors Martha F. Boyd Lead Visual Information Specialist Malbea A. LaPete Stephen R. Spriggs Visual Information Specialists Kim L. Bright Quang M. Doan, MBA Phyllis H. King

## Information Technology Specialists Editorial Board

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

resulting from nonresponse, this report only includes data from 13 reporting areas that achieved overall weighted response rates of ≥70% for at least 1 year of the study period. Responses from Arkansas, Florida, Louisiana, Michigan, Mississippi, North Carolina, Nebraska, New York, New York City, Oregon, Rhode Island, South Carolina, and West Virginia were assessed for this report. To focus on postpartum women at risk for unintended pregnancy or short interpregnancy interval, responses from women who were currently pregnant (n = 362) or not currently sexually active (n = 3,615) were excluded. Respondents who answered "yes" to the core question and either did not respond to the second question (n = 267) or only responded "other" (n = 310) also were excluded.

Contraceptive methods were categorized by effectiveness based on published effectiveness rates for typical use (6). Women reporting use of more than one contraceptive method were classified as using the more effective method based on a hierarchy of effectiveness rates during the first year of typical use (6). Contraceptive effectiveness was categorized as highly effective (<10% of women experience an unintended pregnancy; includes sterilization, intrauterine device, shot, pill, patch, and ring), moderately effective (10%–15% failure rate; includes condoms), and less effective (>15% failure rate; includes diaphragm, cervical cap, sponge, rhythm, and withdrawal). Chi-square testing was used to identify statistically significant differences between subcategories of maternal characteristics.

Among 43,887 postpartum women in the sample, 88.0% reported current use of at least one method of contraception during 2004–2006 (Table 1). Women with the lowest rates of using at least one method included those with no prenatal care (76.9%), women who reported that for their most recent pregnancy they wanted to get pregnant sooner (80.1%), Asian/ Pacific Islanders (82.8%), and women aged ≥35 years (83.2%) (Table 2). Among all respondents, 61.7% reported using highly effective contraceptive methods, 20.0% relied on moderately effective methods, 6.4% used less effective methods, and 12.0% used no method. Prevalence of using highly effective contraceptive methods varied from 43.2% in New York City to 79.3% in Mississippi (Table 1). Use of highly effective postpartum contraceptive methods also varied by the respondent's age, ranging from 53.0% among women aged ≥35 years to 72.9% among those aged <20 years; and by race, ranging from 35.3% among Asian/Pacific Islanders to 71.3% among black women and 71.5% among American Indian/Alaska Native women (Table 2). Women with Medicaid coverage before pregnancy had a higher rate of using highly effective methods (67.8%) than women without Medicaid (60.6%), and women with no prenatal care had a lower rate of using highly effective methods (54.5%) than women with early (60.5%) or late (66.5%) entry into prenatal care.

TABLE 1. Percentage of postpartum (2–9 months) contraceptive use among nonpregnant, sexually active women who delivered live infants, by contraceptive effectiveness and state/area — Pregnancy Risk Assessment Monitoring System, 12 states and New York City, 2004–2006

	Sample		At least e method*		y highly ve method†		manent ethod <sup>§</sup>	ı	Reversible method¶
State/Area	no.††	%	(95% CI§§)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Arkansas	5,885	92.0	(91.0–92.9)	70.5	(68.8–72.1)	20.3	(19.0–21.7)	50.2	(48.4–51.9)
Florida	3,670	87.0	(85.3-88.4)	60.6	(58.2-62.8)	16.6	(14.9 - 18.4)	44.0	(41.7-46.2)
Louisiana	1,502	91.7	(89.9–93.2)	72.6	(69.9–75.0)	20.3	(18.0–22.7)	52.3	(49.4–55.2)
Michigan	3,430	88.5	(87.2–89.7)	60.4	(58.5–62.3)	15.7	(14.4–17.2)	44.7	(42.8–46.7)
Mississippi	2,210	92.3	(90.7 - 93.5)	79.3	(77.1-81.3)	21.0	(19.0-23.2)	58.3	(55.7-60.8)
Nebraska	3,213	90.8	(89.5-91.9)	63.2	(61.2 - 65.0)	12.7	(11.4-14.1)	50.5	(48.4-52.5)
New York	2,528	87.1	(85.4–88.6)	55.1	(52.7–57.6)	13.8	(12.2–15.6)	41.3	(38.9–43.8)
New York City	2,780	78.5	(76.5–80.3)	43.2	(40.8–45.4)	7.2	(6.1–8.4)	36.0	(33.8–38.2)
North Carolina	2,378	90.2	(88.7–91.6)	71.6	(69.2–73.7)	16.2	(14.4–18.1)	55.4	(52.8–57.8)
Oregon	5,101	91.8	(90.5–92.9)	64.4	(62.4–66.5)	13.5	(12.1–15.1)	50.9	(48.8–53.1)
Rhode Island	3,753	89.8	(88.6–90.9)	63.9	(62.1–65.7)	14.0	(12.8–15.4)	49.9	(48.0–51.8)
South Carolina	3,619	93.4	(92.0-94.6)	73.7	(71.3–76.9)	18.0	(16.0–20.1)	55.7	(53.1–58.3)
West Virginia	3,818	88.4	(86.9–89.9)	67.3	(65.1–69.4)	20.9	(19.0–22.8)	46.4	(44.2–48.7)
Total	43,887	88.0	(87.5-88.5)	61.7	(60.9-62.4)	15.3	(14.7-15.8)	46.4	(45.6-47.2)

	Modera	tely effective*	Les	s effective*		
	Co	ondoms	Othe	r methods**	Ne	o method*
State/Area	%	(95% CI)	%	(95% CI)	%	(95% CI)
Arkansas	16.6	(15.3–18.0)	4.9	(4.2–5.7)	8.0	(7.1–9.0)
Florida	21.1	(19.3-23.1)	5.3	(4.3-6.6)	13.1	(11.6-14.7)
Louisiana	15.1	(13.1-17.2)	4.1	(3.1-5.3)	8.3	(6.9-10.1)
Michigan	20.7	(19.2-22.3)	7.4	(6.4-8.5)	11.5	(10.3-12.8)
Mississippi	10.2	(8.7–11.8)	2.8	(2.1-3.8)	7.8	(6.5-9.3)
Nebraska	20.3	(18.7-21.9)	7.4	(6.4-8.5)	9.2	(8.1-10.5)
New York	22.8	(20.8-24.9)	9.2	(7.9-10.7)	12.9	(11.4-14.6)
New York City	27.0	(25.0–29.1)	8.4	(7.2–9.8)	21.5	(19.7–23.5)
North Carolina	13.7	(12.1–15.5)	5.0	(4.0-6.3)	9.8	(8.4-11.4)
Oregon	21.6	(19.9-23.4)	5.7	(4.8-6.8)	8.2	(7.1 - 9.5)
Rhode Island	18.5	(17.0-20.0)	7.5	(6.5 - 8.5)	10.2	(9.1-11.4)
South Carolina	15.5	(13.7–17.6)	4.2	(3.3-5.4)	6.6	(5.4–8.0)
West Virginia	16.5	(14.9–18.3)	4.6	(3.7-5.6)	11.6	(10.3–13.1)
Total	20.0	(19.4–20.6)	6.4	(6.0-6.8)	12.0	(11.5-12.5)

Na daugtali, affaatii, a

**Reported by:** M Whiteman, PhD, K Curtis, PhD, S Hillis, PhD, L Zapata, PhD, DV D'Angelo, MPH, SL Farr, PhD, Y Zhang, PhD, W Barfield, MD, P Marchbanks, PhD, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; CL Robbins, PhD, EIS Officer, CDC.

**Editorial Note:** Despite availability and use of contraceptives, the overall unintended pregnancy rate in the United States has remained stable (*3*) and is one of the highest among industrialized nations (51 per 1,000 women annually) (*2,3,5*). In addition, the percentage of births occurring within 24 months of a previous birth increased from 11% in 1995 (*5*) to 21% in 2002 (*4*) (the most recent data available), moving away from the

Healthy People 2010 target of 6% (5). Increased use of highly effective postpartum contraception is an important strategy to both prevent unintended pregnancy in the postpartum period and prevent short interpregnancy intervals (7).

1 --- - #-- - #: · · · \*

This is the first population-based report to examine the prevalence of contraceptive use among postpartum women by contraceptive method effectiveness. The finding that 88% of postpartum women reported current use of some form of contraception is consistent with previous estimates of 78%-90% (7-10). Rates of using at least one method were generally uniform across reporting areas and maternal characteristics, although women with no prenatal care had the lowest rate at

<sup>\*</sup> Percentages based on weighted data. Effectiveness determined by percentage of women who experience pregnancy during first year of typical use and categorized as highly effective (<10%), moderately effective (10%–15%), and less effective (>15%). Totals might not equal 100% because of rounding.

<sup>†</sup> Includes permanent and reversible methods.

<sup>§</sup> Includes tubal ligation or vasectomy.

<sup>¶</sup> Includes shot, pill, patch, ring, or intrauterine device.

<sup>\*\*</sup> Includes diaphragm, cervical cap, sponge, rhythm, or withdrawal.

<sup>††</sup> Based on unweighted data.

<sup>§§</sup> Confidence interval.

TABLE 2. Percentage of postpartum (2–9 months) contraceptive use among nonpregnant, sexually active women who delivered live infants, by contraceptive effectiveness and selected characteristics — Pregnancy Risk Assessment Monitoring System, 12 states and New York City, 2004–2006

							Highl	y effective*		
	Sam	ple <sup>†</sup>	-	At least e method*		ny highly ive method§		rmanent ethod <sup>¶</sup>		versible ethod**
Characteristic	No.	%*	%	(95% CI <sup>§§</sup> )	%	(95% CI)	%	(95% CI)	%	(95% CI)
Maternal age (yrs)										
<20	5,828	9.8	90.1	(88.6-91.4)	72.9	(70.8 - 74.9)	1.1	(0.6-1.8)	71.8	(69.7-73.9)
20–24	11,566	25.3	89.1	(88.1–90.1)	68.7	(67.2-70.1)	9.8	(8.9-10.7)	58.9	(57.4-60.4)
25–29	11,623	27.4	88.8	(87.8-89.7)	60.5	(59.0-62.0)	15.3	(14.3-16.4)	45.1	(43.7 - 46.6)
30–34	9,310	23.5	88.0	(86.9-89.1)	56.1	(54.4 - 57.7)	19.2	(17.9-20.5)	36.9	(35.3 - 38.5)
<u>≥</u> 35	5,557	14.1	83.2	(81.5-84.7)	53.0	(50.9–55.2)	28.4	(26.5-30.4)	24.6	(22.8–26.5)
Race										
Black	9,732	18.6	89.8	(88.7 - 90.8)	71.3	(69.7-72.7)	16.7	(15.5-17.9)	54.6	(53.0-56.2)
White	29,530	73.4	87.8	(87.1 - 88.4)	60.4	(59.4 - 61.3)	15.3	(14.6-16.0)	45.1	(44.2 - 46.0)
American Indian/Alaska Native	1,104	0.5	87.4	(79.6 - 92.5)	71.5	(63.0-78.7)	27.1	(19.9-35.8)	44.4	(36.3-53.0)
Asian/Pacific Islander	2,046	3.3	82.8	(79.2 - 85.8)	35.3	(31.3 - 39.5)	7.8	(5.7-10.7)	27.5	(23.9 - 31.3)
Other***	1,413	4.2	88.9	(86.3–91.2)	62.6	(58.8–66.2)	13.5	(11.0–16.4)	49.1	(45.2–53.0)
Hispanic										
Yes	5,806	16.8	89.1	(87.7 - 90.4)	61.0	(58.9-63.1)	12.7	(11.3-14.2)	48.3	(46.2 - 50.4)
No	37,366	83.2	87.8	(87.2-88.4)	61.8	(61.0-62.7)	15.8	(15.2-16.4)	46.0	(45.2-46.9)
Maternal education (yrs)										
<12	8,911	19.2	86.5	(85.1-87.7)	66.2	(64.4 - 68.0)	13.7	(12.4-15.0)	52.6	(50.7-54.4)
12	13,823	30.3	87.4	(86.4–88.4)	66.1	(64.7–67.4)	17.7	(16.6–18.8)	48.4	(47.0-49.8)
>12	20,768	50.5	89.1	(88.4–89.7)	57.5	(56.4–58.6)	14.4	(13.7–15.2)	43.1	(42.0–44.1)
Marital status										
Married	26,189	62.7	86.7	(86.0 - 87.4)	56.1	(55.1-57.1)	16.7	(16.0-17.5)	39.4	(38.4-40.4)
Other	17,668	37.3	90.3	(89.5-91.1)	71.0	(69.8-72.2)	12.8	(12.0-13.7)	58.2	(56.9–59.5)
Parity										
0	19,135	41.2	87.2	(86.4 - 88.0)	58.5	(57.3-59.7)	1.5	(1.2-1.8)	57.0	(55.8-58.2)
1–2	20,205	48.8	89.1	(88.4 - 89.8)	63.5	(62.4-64.6)	22.3	(21.4-23.2)	41.3	(40.2 - 42.4)
>2	4,351	10.0	86.4	(84.5-88.0)	66.0	(63.6-68.4)	38.1	(35.7-40.5)	27.9	(25.8–30.2)
Prepregnancy insurance coverage										
Yes	23,872	58.4	87.7	(86.9 - 88.3)	57.8	(56.8 - 58.8)	14.9	(14.2-15.7)	42.9	(41.9-43.9)
No	19,895	41.6	88.6	(87.8-89.4)	67.2	(66.0–68.3)	15.8	(15.0-16.7)	51.4	(50.2-52.6)
Prepregnancy Medicaid coverage										
Yes	7,804	15.7	85.3	(83.8-86.7)	67.8	(65.9-69.6)	16.3	(14.9–17.8)	51.5	(49.5–53.4)
No	35,944	84.3	88.6	(88.0-89.10)	60.6	(59.7–61.4)	15.1	(14.5-15.7)	45.5	(44.6–46.3)
Pregnancy intendedness <sup>†††</sup>										
Wanted sooner	7,321	16.4	80.1	(78.5-81.6)	49.9	(47.9 - 51.8)	11.7	(10.5-13.0)	38.2	(36.3-40.1)
Wanted as occurred	16,874	41.7	87.2	(86.3–88.0)	57.1	(55.9–58.3)	12.9	(12.1–13.7)	44.2	(43.0–45.4)
Wanted later	14,287	31.8	91.8	(91.0-92.6)	69.4	(68.1-70.7)	13.5	(12.6-14.5)	55.9	(54.5-57.3)
Never wanted	4,779	10.0	93.2	(91.9-94.3)	75.9	(73.7–77.9)	36.3	(34.0-38.7)	39.6	(37.2-41.9)
Prenatal care entry										
Early (first trimester)	33,597	78.7	88.4	(87.8-88.9)	60.5	(59.7-61.4)	15.1	(14.4 - 15.7)	45.5	(44.6-46.4)
Late (second or third trimester)	8,837	20.5	87.6	(86.4–88.8)	66.5	(64.8–68.2)	16.5	(15.2–17.8)	50.0	(48.3–51.8)
No prenatal care	506	0.8	76.9	(68.5–83.6)	54.5	(46.1–62.7)	7.6	(4.3–13.0)	46.9	(38.7–55.4)

See Table 2 footnotes on next page.

TABLE 2. (Continued) Percentage of postpartum (2–9 months) contraceptive use among nonpregnant, sexually active women who delivered live infants, by contraceptive effectiveness and selected characteristics — Pregnancy Risk Assessment Monitoring System, 12 states and New York City, 2004–2006

	Modera	tely effective*	Less	effective*			
	C	ondoms	Other i	methods <sup>††</sup>	No method*		
Characteristic	%	(95% CI)	%	(95% CI)	%	(95% CI)	
Maternal age (yrs)							
<20	15.0	(13.4-16.7)	2.3	(1.7-3.1)	9.9	(8.6-11.4)	
20–24	16.8	(15.7-18.0)	3.7	(3.1-4.3)	10.9	(9.9-11.9)	
25–29	20.8	(19.5-22.0)	7.6	(6.8-8.4)	11.2	(10.3-12.2)	
30–34	23.3	(22.0-24.8)	8.6	(7.8–9.6)	12.0	(10.9-13.1)	
<u>≥</u> 35	22.1	(20.4-24.0)	8.0	(6.9-9.2)	16.8	(15.3–18.5)	
Race							
Black	15.2	(14.1-16.4)	3.3	(2.8-4.0)	10.2	(9.3-11.3)	
White	20.4	(19.6–21.1)	7.1	(6.6–7.6)	12.2	(11.6–12.9)	
American Indian/Alaska Native	13.5	(8.8–20.1)	2.4¶¶	(0.9-6.3)	12.6	(7.5–20.4)	
Asian/Pacific Islander	36.4	(32.3-40.5)	11.1	(8.7–14.1)	17.2	(14.2-20.8)	
Other***	22.0	(19.0-25.4)	4.4	(3.1–6.2)	11.1	(8.9–13.7)	
Hispanic							
Yes	22.6	(20.9-24.4)	5.5	(4.6-6.6)	10.9	(9.6-12.3)	
No	19.4	(18.8–20.1)	6.6	(6.1–7.0)	12.2	(11.6–12.8)	
Maternal education (yrs)							
<12	16.6	(15.3–18.1)	3.6	(2.9-4.5)	13.5	(12.3-14.9)	
12	16.7	(15.6–17.8)	4.7	(4.1–5.3)	12.6	(11.7–13.6)	
>12	23.1	(22.2–24.1)	8.5	(7.9–9.1)	10.9	(10.3–11.7)	
Marital status		,		,		,	
Married	22.7	(21.9-23.6)	7.9	(7.3-8.4)	13.3	(12.7-14.0)	
Other	15.4	(14.5–16.4)	3.9	(3.4–4.5)	9.7	(8.9–10.5)	
Parity		( /		( /		(	
0	22.5	(21.5–23.5)	6.3	(5.7–6.9)	12.8	(12.0-13.6)	
1–2	19.0	(18.2–19.9)	6.6	(6.0–7.2)	10.9	(10.2–11.6)	
>2	14.5	(12.7–16.4)	5.9	(4.7–7.3)	13.7	(12.0–15.5)	
Prepregnancy insurance coverage		(		(*** ****)		(1210 1010)	
Yes	22.2	(21.4–23.1)	7.7	(7.1–8.2)	12.4	(11.7–13.1)	
No	16.9	(16.0–17.9)	4.6	(4.0–5.1)	11.4	(10.6–12.2)	
Prepregnancy Medicaid coverage	10.0	(10.0 17.0)	4.0	(4.0 0.1)	11.7	(10.0 12.2)	
Yes	14.0	(12.8–15.4)	3.5	(2.8-4.3)	14.7	(13.4–16.2)	
No	21.1	(20.4–21.8)	6.9	(6.5–7.4)	11.4	(10.9–12.0)	
	21	(20.4 21.0)	0.0	(0.0 1.4)	117	(10.0 12.0)	
Pregnancy intendedness††† Wanted sooner	21.8	(00.0.00.4)	0.5	(74.06)	19.9	(10.4.01.6)	
Wanted as occurred	21.8	(20.2–23.4)	8.5 7.8	(7.4–9.6) (7.1–8.5)	19.9	(18.4–21.6) (12.0–13.7)	
Wanted later	22.3 18.2	(21.3–23.4) (17.2–19.3)	7.8 4.2	, ,	12.8 8.2	,	
Never wanted	18.2	(17.2–19.3)	4.2 3.8	(3.7–4.8) (2.9–5.0)	8.2 6.8	(7.4–9.0) (5.7–8.0)	
	13.3	(11.9–13.3)	3.0	(2.3–3.0)	0.0	(3.7-0.0)	
Prenatal care entry	20.0	(00.0.017)	6.0	(6.4.74)	44.7	(44.4.40.0)	
Early (first trimester)	20.9	(20.2–21.7)	6.9	(6.4–7.4)	11.7	(11.1–12.3)	
Late (second or third trimester)	16.5	(15.2–17.8)	4.7 —§§§	(3.9–5.5) —§§§	12.4	(11.2–13.6)	
No prenatal care	19.0	(13.7–25.7)	-333	222	23.1	(16.4–31.5)	

<sup>\*</sup> Percentages based on weighted data. Effectiveness determined by percentage of women who experience pregnancy during first year of typical use and categorized as highly effective (<10%), moderately effective (10%–15%), and less effective (>15%). Totals might not equal 100% because of rounding.

<sup>†</sup> Based on unweighted data, N = 43,887; subcategories might not equal sample total because of missing data on maternal characteristics.

<sup>§</sup> Includes permanent and reversible methods.

<sup>1</sup> Includes tubal ligation or vasectomy.

<sup>\*\*</sup> Includes shot, pill, patch, ring, or intrauterine device.

<sup>††</sup> Includes diaphragm, cervical cap, sponge, rhythm, or withdrawal.

<sup>§§</sup> Confidence interval.

<sup>¶ &</sup>lt;60 respondents; might not be reliable.

<sup>\*\*\*</sup> Excludes data from Louisiana and Mississippi, which reported no respondents in this category.

<sup>†††</sup> Pregnancy intention of recent pregnancy that ended in a live birth.

<sup>§§§</sup> Not reported (<30 respondents).

76.4%. However, the findings indicate substantial variation in use of highly effective contraceptive methods by reporting area and maternal characteristics. For example, some subgroups with the lowest rates of highly effective contraceptive method use included Asian/Pacific Islanders (35.3%), women who reported that their most recent pregnancy was wanted sooner (49.9%), women aged ≥35 years (53.0%), and women who had no prenatal care (54.5%). Additional analyses and research are needed to determine reasons for the variations found in the use of highly effective methods by reporting area and maternal characteristics.

These findings point to possible missed opportunities for promoting healthy birth spacing and reducing unintended pregnancies. Women who do not receive prenatal care, for example, might benefit from more consultation about post-partum contraceptive options. This population likely does not routinely access preventive health-care services. Therefore, for these women the period after delivery and before hospital discharge might constitute an especially opportune time for health-care providers to promote the use of effective contraception postpartum and adequate birth spacing.

Although use of condoms for protection against sexually transmitted diseases was not a focus of the study, 13% of the women reported use of condoms along with a highly effective method. All women not using condoms should be counseled regarding the use of condoms for the prevention of sexually transmitted diseases, including human immunodeficiency virus infection.<sup>†</sup>

The findings in this report are subject to at least four limitations. First, although population based, these findings are not nationally representative and are generalizable only to mothers with recent live births in the 13 reporting areas. Second, because PRAMS data are self-reported, prevalence rates of desirable behaviors might be overestimated and those for undesirable behaviors might be underestimated. Third, the survey did not ascertain use of some additional contraceptive methods, such as spermicides, emergency contraception, and lactational amenorrhea. Finally, because of the survey skip pattern, information was not obtained about contraceptive methods used by women who might have incorrectly reported they were not doing anything currently to keep from getting pregnant. If this occurred, particularly among respondents who had a tubal ligation or whose partners had a vasectomy, the use of highly effective contraceptive methods might have been underestimated.

Knowing the characteristics associated with low rates of effective contraceptive use during the postpartum period will better enable health-care providers to target interventions. Health-care providers should consider encouraging postpartum women to use highly effective contraceptive methods to increase the proportion of pregnancies that are intended and promote healthy birth spacing.

## **Acknowledgments**

The findings in this report are based, in part on contributions by members of the PRAMS Working Group; the CDC PRAMS Team, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

### References

- Zhu BP, Rolfs RT, Nangle BE, Horan JM. Effect of the interval between pregnancies on perinatal outcomes. N Engl J Med 1999;340:589–94.
- Institute of Medicine. Demography of unintended pregnancy. In: Brown SS, Eisenberg L, eds. The best intentions: unintended pregnancy and the well-being of children and families. Washington, DC: The National Academies Press; 1995:21–49.
- 3. Finer LB, Henshaw SK. Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. Perspect Sex Reprod Health 2006;38:90–6.
- 4. Chandra A, Martinez GM, Mosher WD, Abma JC, Jones J. Number of women 15–44 years of age who had at least 1 live birth and percent distribution by number of months from first birth to second birth, according to selected characteristics: United States, 2002 [Table 13]. Fertility, family planning, and reproductive health of U.S. women: data from the 2002 National Survey of Family Growth. Vital Health Stat 2005;23(25).
- US Department of Health and Human Services. Healthy people 2010 (conference ed., in 2 vols). Washington, DC: US Department of Health and Human Services; 2000. Available at http://www.healthypeople.gov.
- Trussell J. Contraceptive failure in the United States. Contraception 2004;70:89–96.
- 7. CDC. Preconception and interconception health status of women who recently gave birth to a live born infant—Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 26 reporting areas, 2004. MMWR 2007;56(No. SS-10).
- 8. DePineres T, Blumenthal PD, Diener-West M. Postpartum contraception: the New Mexico Pregnancy Risk Assessment Monitoring System. Contraception 2005;72:422–5.
- CDC. PRAMS 2002 surveillance report. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.
- CDC. Surveillance for selected maternal behaviors and experiences before, during, and after pregnancy. Pregnancy Risk Assessment Monitoring System (PRAMS), 2000. MMWR 2003;52(No. SS-11).

# Evaluation of Rapid Influenza Diagnostic Tests for Detection of Novel Influenza A (H1N1) Virus — United States, 2009

The recent appearance and worldwide spread of novel influenza A (H1N1) virus (1,2) has highlighted the need to evaluate commercially available, widely used, rapid influenza diagnostic tests (RIDTs) for their ability to detect these viral antigens in

<sup>&</sup>lt;sup>†</sup> Additional information on sexually transmitted disease prevention and treatment available at http://www.cdc.gov/std/treatment.

respiratory clinical specimens. As an initial assessment, CDC conducted an evaluation of multiple RIDTs. Sixty-five clinical respiratory specimens collected during April–May 2009\* that had previously tested positive either for novel influenza A (H1N1) or for seasonal influenza A (H1N1) or A (H3N2) viruses by real-time reverse transcription-polymerase chain reaction (rRT-PCR) assay were used in the evaluation. The results showed that, although the RIDTs were capable of detecting novel A (H1N1) virus from respiratory specimens containing high levels of virus (as indicated by low cycle threshold [Ct] values), the overall sensitivity was low (40%-69%) among all specimens tested and declined substantially as virus levels decreased (and Ct values increased). These findings indicate that, although a positive RIDT result can be used in making treatment decisions, a negative result does not rule out infection with novel influenza A (H1N1) virus. Patients with illnesses compatible with novel influenza A (H1N1) virus infection but with negative RIDT results should be treated empirically based on the level of clinical suspicion, underlying medical conditions, severity of illness, and risk for complications. If a more definitive determination of infection with influenza virus is required, testing with rRT-PCR or virus isolation should be performed. Additional evaluations of the accuracy of RIDTs in detecting novel influenza A (H1N1) virus should be conducted.

Original clinical materials (e.g., specimens from nasopharyngeal swabs and oropharyngeal swabs) collected from patients with confirmed novel influenza A (H1N1) or seasonal influenza A (H1N1) or (H3N2) virus infection and provided largely by state health laboratories were used in the study. The presence of novel or seasonal influenza A virus was confirmed by rRT-PCR assay developed by CDC and approved as a Section 501(k) device by the Food and Drug Administration. Detailed data regarding sensitivity (99.3%) and specificity (92.3%) for the seasonal influenza A CDC rRT-PCR assay compared with viral culture are available.<sup>†</sup> The original clinical specimens were tested using RIDTs from three companies: Inverness Medical BinaxNOW Influenza A&B (Binax, Inc., Scarborough, Maine); Becton Dickinson Directigen EZ Flu A+B (Becton, Dickinson and Company, Sparks, Maryland); and Quidel QuickVue Influenza A+B (Quidel Corporation, San Diego, California). RIDTs from four other companies were tested with limited numbers of specimens; those results are not presented in this report.

Each clinical specimen was characterized by the Ct value demonstrated in the universal influenza type A rRT-PCR assay with the M gene used as the target. The numbers of specimens positive using each of the three RIDTs were determined within four intervals of Ct values: <20, 20 to <25, 25–30, and >30. Ct values are indicators of the amount of virus in a specimen, with lower values indicating higher viral titers (i.e., greater amounts of viral material in the specimen). Sensitivity of each rapid test was determined as the percentage of RIDT-positive specimens among the number of specimens that tested positive by rRT-PCR.

A total of 65 original clinical specimens were tested. Forty-five of the specimens were positive for novel influenza A (H1N1) virus, five were positive for seasonal influenza A (H1N1), and 15 were positive for seasonal influenza A (H3N2), all by CDC rRT-PCR assay.

For the nine specimens with high viral titers (Ct values <20), one RIDT had nine positive results, and the other two had eight positives, demonstrating 89%–100% sensitivity in detecting novel influenza A (H1N1) virus when compared with rRT-PCR. However, among the 36 specimens with Ct values ≥20 that had tested positive for novel influenza A (H1N1) by rRT-PCR, the sensitivity of the three RIDT tests declined substantially (Table 1). Overall, for the 45 specimens that had tested positive for novel influenza A (H1N1) by rRT-PCR, the sensitivity of the three RIDT tests was 40% for BinaxNOW Influenza A&B, 49% for Directigen EZ Flu A+B,\*\* and 69% for QuickVue Influenza A+B.

Sensitivity of the RIDTs was generally greater for seasonal influenza A (H1N1) and (H3N2) than for novel influenza A (H1N1), although the number of specimens tested was small, especially for seasonal influenza A (H1N1). None of the specimens had a Ct value <20. Compared with rRT-PCR, the three tests demonstrated sensitivity ranging from 60% to 80% for seasonal A (H1N1) and from 80% to 83% for seasonal A (H3N2) (Table 1).

To evaluate approximate viral titers in clinical specimens positive for novel influenza A (H1N1) virus, serial 10-fold dilutions (from 10<sup>-1</sup> through 10<sup>-5</sup>) of the virus isolate A/California/4/2009, an early representative strain of novel H1N1, was prepared. This virus was grown in Madin-Darby canine kidney (MDCK) cells and had a titer of 10<sup>7.5</sup> 50% tissue culture infectious dose (TCID<sub>50</sub>/mL). Each virus dilution was tested in duplicate using the three RIDTs. Only specimens that tested positive for both test runs were considered positive. Limits of detection were measured as Ct values for

<sup>\*</sup>One H3N2 specimen was collected in March.

<sup>&</sup>lt;sup>†</sup> Additional information available at http://www.accessdata.fda.gov/cdrh\_docs/pdf8/k080570.pdf.

<sup>§</sup> CDC protocol of rRT-PCR testing for influenza A (H1N1) virus is available at http://www.who.int/csr/resources/publications/swineflu/realtimeptpcr/en/index.html.

A Ct value of 37 or lower is considered a positive rRT-PCR result.

<sup>\*\*</sup> Only 43 of the 45 specimens positive for novel influenza A (H1N1) by rRT-PCR were tested using this RIDT.

TABLE 1. Comparison of the number of positive influenza A test results from three RIDTs\* with the number of positive results from rRT-PCR† assay, by influenza A type and cycle threshold (Ct) interval — United States, 2009

No of engainment positive by PIDT/

		r	No. of specime No. positi	ve by rRT-PC			
	_		Ct in	terval§	Total no. of specimens positive by RIDT/		
RIDT	Influenza A virus type	(<20)	(20 to <25)	(25–30)	(>30)	Total no. positive by rRT-PCR	(%)
BinaxNOW Influenza A&B	Novel H1N1	8/9	7/17	2/13	1/6	18/45	(40)
	Seasonal H1N1	<b></b> ¶	2/3	1/2	_	3/5	(60)
	Seasonal H3N2	_	10/10	2/4	0/1	12/15	(80)
Directigen EZ Flu A+B	Novel H1N1	8/9	10/16	2/12	1/6	21/43**	(49)
	Seasonal H1N1	_	2/2	1/2	_	3/4**	(75)
	Seasonal H3N2	_	8/8	2/3	0/1	10/12**	(83)
QuickVue A+B	Novel H1N1	9/9	13/17	6/13	3/6	31/45	(69)
	Seasonal H1N1	_	2/3	2/2	_	4/5	(80)
	Seasonal H3N2	_	10/10	2/4	0/1	12/15	(80)

- \* Rapid influenza A diagnostic tests.
- † Real-time reverse transcription-polymerase chain reaction.
- § A Ct value of 37 or lower is considered a positive rRT-PCR result.
- <sup>¶</sup> No data available.
- \*\* For this RIDT, insufficient material was available to test two specimens that were rRT-PCR positive for novel H1N1, one for seasonal H1N1, and three for seasonal H3N2

the three RIDTs. The limit of detection of MDCK-grown A/California/4/2009 was the same for QuickVue A+B and Directigen EZ Flu A+B, but BinaxNOW Influenza A&B was 10-fold higher (10<sup>-2</sup> versus 10<sup>-3</sup>) (Table 2).

**Reported by:** A Balish, CM Warnes, K Wu, MD, N Barnes, MS, S Emery, MS, L Berman, MS, B Shu, MD, S Lindstrom, PhD, X Xu, MD, T Uyeki, MD, M Shaw, PhD, A Klimov, PhD, J Villanueva, PhD, Influenza Div, National Center for Immunization and Respiratory Diseases, CDC.

**Editorial Note:** The sensitivity of RIDTs to detect seasonal influenza viruses compared with virus isolation or rRT-PCR varies among commercial kits and has been shown to be low in some reports (3–5). In this evaluation, the sensitivity of three RIDTs to detect novel influenza A (H1N1) viral antigen in clinical specimens ranged from 40% to 69% and declined substantially with lower viral titers (as determined by Ct values). These findings are compatible with other recent studies, which reported that the sensitivity of some RIDTs to detect novel influenza A (H1N1) in clinical specimens ranged from 10% to 51% (6,7). Overall, the findings in this report demonstrate that these RIDTs are capable of detecting novel influenza A (H1N1) in respiratory specimens, but that many infections will be missed, especially in specimens with low viral titers.

RIDTs do not distinguish among influenza A virus subtypes, and RIDT sensitivity might vary by subtype of influenza A (4,6,8). Therefore, when using a positive RIDT result to help determine the appropriate course of clinical treatment or other action, the result should always be interpreted in the context of currently circulating strains. Conversely, as indicated by the results of this and other studies, a negative RIDT result should not be interpreted as indicating the absence of infection. In this

analysis, the sensitivity of all three assays evaluated declined as the viral titer in the specimen decreased. The amount of virus found in respiratory specimens can be affected by timing of the specimen collection; viral titers are highest in the first 3 days of illness. Other factors that can affect the amount of virus in the specimen include age (e.g., children generally shed more virus and for longer periods than adults), type of specimen collected, and transportation and storage of the specimen before testing. Testing with rRT-PCR or virus isolation should be performed if a more definitive determination of the presence of influenza virus is required. In the titered cultured virus results presented in this report, all three RIDTs detected the cultured novel H1N1 influenza A/California/4/2009 virus with a lower limit of detection between 10<sup>4.5</sup> and 10<sup>5.5</sup> TCID<sub>50</sub>, slightly higher TCID<sub>50</sub> levels than for detection of seasonal influenza viruses. These findings are consistent with the analytical sensitivities of RIDTs to detect novel influenza A (H1N1) virus described in one report (9), but higher than those described in another report (10).

The findings in this report are subject to at least three limitations. First, relatively few clinical specimens were tested for each RIDT across the range of Ct values, limiting the ability to compare results between different RIDTs, particularly for seasonal influenza A (H1N1). Second, clinical specimens were not tested immediately after collection but were stored and shipped to CDC under varying conditions. The clinical materials used in this evaluation were prepared and shipped in different (often unknown) transport media that might not be optimal for some of the RIDTs. Finally, the data used to estimate virus load in clinical materials obtained by comparing with different dilutions of influenza A/California/4/2009

TABLE 2. Limits of detection of Madin-Darby canine kidney (MDCK)-grown influenza A/California/4/2009 (H1N1) for three rapid influenza diagnostic tests (RIDTs), by selected measurement values — United States, 2009

_	Value	es	
RIDT	Lowest dilution with positive result	TCID <sub>50</sub> / mL*	Ct†
BinaxNOW Influenza A&B	10 <sup>-2</sup>	10 <sup>5.5</sup>	22.15
Directigen EZ Flu A+B QuickVue A+B	10 <sup>-3</sup> 10 <sup>-3</sup>	10 <sup>4.5</sup> 10 <sup>4.5</sup>	26.05 26.05

<sup>\*</sup> TCID<sub>50</sub> = 50% tissue culture infectious dose.

grown in MDCK cells should be viewed with caution, because Ct limit of detection values for cultured viruses can vary with the virus strain, its passage history, and the substrate used for propagation (e.g., MDCK cells or chicken embryos). Optimizing specimen collection, transportation, and testing practices to ensure that specimens have the highest amount of virus possible would be expected to increase the likelihood of detecting influenza virus, when present, using RIDTs and other diagnostic tests.

The results described in this report should be viewed as preliminary. More data are needed on the clinical performance of all RIDTs to detect novel influenza A (H1N1) virus in different respiratory specimens. Because of the limitations of RIDTs and until additional data are available, all results from RIDTs, both positive and negative, when used for clinical decision-making in a patient with suspected novel influenza A (H1N1) virus infection, should be interpreted in the context of circulating influenza virus strains in the patient's community, level of clinical suspicion, severity of illness, and risk for complications. Additional CDC guidance on interpretation of RIDTs for testing of patients with suspected novel influenza A (H1N1) virus infection is available at http://www.cdc.gov/h1n1flu/guidance/rapid\_testing.htm.

#### **Acknowledgments**

This report is based, in part, on contributions from national and international laboratories participating in the Global Influenza Surveillance Network.

## References

- Dawood FS, Jain S, Finelli L, et al. Emergence of a novel swineorigin influenza A (H1N1) virus in humans. N Engl J Med 2009;360: 2605–15.
- CDC. Update: novel influenza A (H1N1) virus infections—worldwide May 6, 2009. MMWR 2009;58:453–8.
- 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.
- Hurt AC, Alexander R, Hibbert J, Deed N, Barr IG. Performance of six influenza rapid tests in detecting human influenza in clinical specimens. J Clin Virol 2007;39:132–5.

- Uyeki TM, Prasad R, Vukotich C, et al. Low sensitivity of rapid diagnostic test for influenza. Clin Infect Dis 2009;48:e89.
- Faix DJ, Sherman SS, Waterman SH. Rapid-test sensitivity for novel swine-origin influenza A (H1N1) virus in humans. N Engl J Med 2009; e-published ahead of print.
- Ginocchio CC, Zhang F, Manji R, et al. Evaluation of multiple test methods for the detection of the novel 2009 influenza A (H1N1) during the New York City outbreak. J Clin Virol 2009;45:191–5.
- 8. Carrat F, Vergu E, Ferguson NM, et al. Time lines of infection and disease in human influenza: a review of volunteer challenge studies. Am J Epidemiol 2008;167:775–85.
- 9. Hurt AC, Baas C, Deng YM, Roberts S, Kelso A, Barr IG. Performance of influenza rapid point-of-care tests in the detection of swine lineage A (H1N1) influenza viruses. Influenza Other Respi Viruses 2009;3:171–6.
- Chan KH, Lai ST, Poon LL, Guan Y, Yuen KY, Peiris JS. Analytical sensitivity of rapid influenza antigen detection tests for swine-origin influenza virus (H1N1). J Clin Virol 2009;45:205–7.

## Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP) Regarding Routine Poliovirus Vaccination

This report updates Advisory Committee on Immunization Practices (ACIP) recommendations for routine poliovirus vaccination. These updates aim to 1) emphasize the importance of the booster dose at age  $\geq 4$  years, 2) extend the minimum interval from dose 3 to dose 4 from 4 weeks to 6 months, 3) add a precaution for the use of minimum intervals in the first 6 months of life, and 4) clarify the poliovirus vaccination schedule when specific combination vaccines are used.

On June 17, 1999, ACIP recommended that all poliovirus vaccine administered in the United States be an inactivated poliovirus vaccine (IPV) beginning January 1, 2000. This policy was implemented to eliminate the risk for vaccine-associated paralytic poliomyelitis, a rare condition that has been associated with use of the live oral poliovirus vaccine (OPV). Since 1999, no OPV has been distributed in the United States. Under these ACIP recommendations, the routine IPV vaccination schedule in the United States consists of 4 doses administered at ages 2 months, 4 months, 6–18 months, and 4–6 years with the minimum interval between all IPV doses as 4 weeks (1,2).

Since the ACIP recommendation was made 10 years ago, three different combination vaccines containing IPV have been licensed for routine use in the United States (Table). Because of potential confusion in using different vaccine products for routine and catch-up immunization, ACIP recommends the following:

<sup>&</sup>lt;sup>†</sup> Ct (cycle threshold) values reported as an average of three reactions each of duplicate dilution series.

TABLE. Currently licensed vaccines containing inactivated poliovirus vaccine (IPV) — United States, 2009\*

Vaccine composition	Trade name	Manufacturer	Approved use in ACIP <sup>†</sup> routine schedule	Comments
IPV	Ipol (Poliovax§)	Sanofi Pasteur	2, 4, 6–18 mos, and 4–6 yrs	Approved for use in infants, children, and adults¶
DTaP-HepB-IPV**	Pediarix	GlaxoSmithKline	2, 4, and 6 mos	Approved for first 3 doses of IPV through age 6 yrs <sup>††</sup>
DTaP-IPV/Hib <sup>§§</sup>	Pentacel	Sanofi Pasteur	2, 4, 6, and 15-18 mos	Approved for 4 doses of IPV through age 4 yrs <sup>111</sup>
DTaP-IPV***	Kinrix	GlaxoSmithKline	4–6 yrs	Approved for booster dose at age 4–6 yrs <sup>†††</sup>

- \* As of August 5, 2009.
- † Advisory Committee on Immunization Practices. Full schedule available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5751a5.htm.
- § Not currently distributed in the United States.
- Package insert available at http://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm133479.pdf.
- \*\* Diphtheria and tetanus toxoids and acellular pertussis adsorbed, hepatitis B (recombinant), and inactivated poliovirus vaccine combined.
- †† Package insert available at http://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm168055.pdf.
- §§ Diphtheria and tetanus toxoids and acellular pertussis adsorbed, inactivated poliovirus, and Haemophilus b conjugate (tetanus toxoid conjugate) vaccine.
- Package insert available at http://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm109810.pdf.
- \*\*\* Diphtheria and tetanus toxoids and acellular pertussis adsorbed, and inactivated poliovirus vaccine.
- ††† Package insert available at http://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm107220.pdf.
  - The 4-dose IPV series should continue to be administered at ages 2 months, 4 months, 6–18 months, and 4–6 years.
  - The final dose in the IPV series should be administered at age ≥4 years regardless of the number of previous doses.
  - The minimum interval from dose 3 to dose 4 is extended from 4 weeks to 6 months.
  - The minimum interval from dose 1 to dose 2, and from dose 2 to dose 3, remains 4 weeks.
  - The minimum age for dose 1 remains age 6 weeks.

ACIP also is making a new recommendation concerning the use of minimum age and minimum intervals for children in the first 6 months of life. Use of the minimum age and minimum intervals for vaccine administration in the first 6 months of life are recommended only if the vaccine recipient is at risk for imminent exposure to circulating poliovirus (e.g., during an outbreak or because of travel to a polio-endemic region). ACIP is making this precaution because shorter intervals and earlier start dates lead to lower seroconversion rates (3–5).

In addition, ACIP is clarifying the poliovirus vaccination schedule to be used for specific combination vaccines. When DTaP-IPV/Hib\* (Pentacel) is used to provide 4 doses at ages 2, 4, 6, and 15–18 months, an additional booster dose of age-appropriate IPV-containing vaccine (IPV [Ipol] or DTaP-IPV† [Kinrix]) should be administered at age 4–6 years. This will result in a 5-dose IPV vaccine series, which is considered acceptable by ACIP. DTaP-IPV/Hib is not indicated for the booster dose at age 4–6 years. ACIP recommends that the minimum interval from dose 4 to dose 5 should be at least 6 months to provide an optimum booster response. In accordance with existing recommendations, if a child misses an IPV

dose at age 4–6 years, the child should receive a booster dose as soon as feasible (2).

#### References

- CDC. Recommendations of the Advisory Committee on Immunization Practices: revised recommendations for routine poliomyelitis vaccination. MMWR 1999;48:590.
- CDC. Poliomyelitis prevention in the United States: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(No. RR-5).
- 3. Vidor E, Meschievitz C, Plotkin S. Fifteen years of experience with Veroproduced enhanced potency inactivated poliovirus vaccine. Pediatr Infect Dis J 1997;16:312–22.
- Sormunen H, Stenvik M, Eskola J, Hovi T. Age- and dose-intervaldependent antibody responses to inactivated poliovirus vaccine. J Med Virol 2001;63:305–10.
- Dayan GH, Thorley M, Yamamura Y, et al. Serologic response to inactivated poliovirus vaccine: a randomized clinical trial comparing 2 vaccination schedules in Puerto Rico. J Infect Dis 2007;195:12–20.

## Notice to Readers

# Publication of HIV Testing Algorithms: a Status Report

In the past 20 years, advances in human immunodeficiency virus (HIV) diagnostics have resulted in approval by the Food and Drug Administration of 1) rapid tests for screening at the point of contact, 2) immunoassays that are more sensitive earlier during seroconversion, and 3) HIV-1 RNA assays for the diagnosis of acute infection and for confirmation of reactive antibody tests. As a result of these developments, CDC and the Association of Public Health Laboratories (APHL) convened a panel of HIV diagnostic subject matter experts to examine alternatives to the two-test HIV confirmatory algorithm that has been recommended for use in the United States since 1989 (1). That panel's efforts culminated in publication of HIV Testing Algorithms: a Status Report, which describes

<sup>\*</sup>Diphtheria and tetanus toxoids and acellular pertussis adsorbed, inactivated poliovirus, and *Haemophilus* b conjugate (tetanus toxoid conjugate) vaccine.

<sup>&</sup>lt;sup>†</sup> Diphtheria and tetanus toxoids and acellular pertussis adsorbed, and inactivated poliovirus vaccine.

proposed alternative combinations of tests that might be used for diagnosing HIV infection.

The status report does not contain formal guidelines or recommendations but reviews the supporting evidence and limitations regarding the proposed algorithms, and the additional data needed to substantiate each of them. The report is intended to solicit performance data from laboratories to validate the proposed algorithms and feedback regarding operational parameters associated with the algorithms.

The report is available online at http://www.aphl.org/hiv/statusreport and http://hivtestingconference.org. Inquiries, comments, and descriptions of pertinent performance data should be directed to APHL via e-mail at hiv.algorithm@aphl.org.

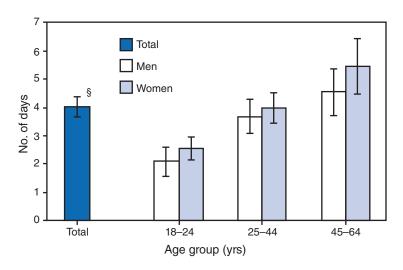
#### Reference

 CDC. Interpretation and use of the Western blot assay for serodiagnosis of human immunodeficiency virus type 1 infections. MMWR 1989;38 (No. SU-7).

## **QuickStats**

#### FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Average Number of Work-Loss Days During the Preceding 12 Months Among Persons Aged 18–64 Years,\* by Age Group and Sex — National Health Interview Survey, United States, 2007<sup>†</sup>



- \* Based on responses to the question, "In the past 12 months...about how many days did you miss work at a job or business because of illness or injury (do not include maternity leave)?" Only respondents who had worked in the past week were asked this question.
- <sup>†</sup> Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. population and are derived from the National Health Interview Survey sample adult component.

§ 95% confidence interval.

In 2007, U.S. adults who had worked in the past week missed 4.0 days of work on average during the 12 months preceding the interview. Work-loss days increased with age for both men and women. Men aged 18–24 years missed 2.1 days of work, aged 25–44 years missed 3.7 days, and aged 45–64 years missed 4.5 days. Women aged 18–24 years missed 2.6 days of work, aged 25–44 years missed 4.0 days, and aged 45–64 years missed 5.5 days.

**SOURCES:** National Health Interview Survey 2007 data. Available at http://www.cdc.gov/nchs/nhis.htm. Pleis JR, Lucas JW. Summary health statistics for U.S. adults: National Health Interview Survey, 2007. Vital Health Stat 2009;10(240). Available at http://www.cdc.gov/nchs/data/series/sr\_10/sr10\_240.pdf.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 1, 2009 (30th week)\*

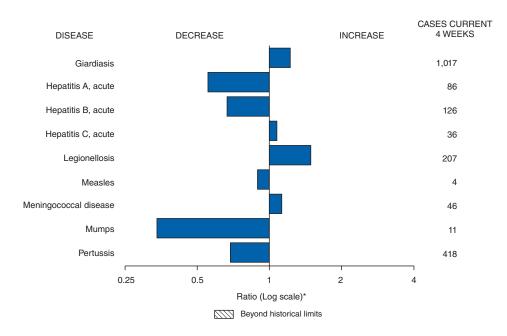
	Current	Cum	5-year weekly			ases re	eported years	l 	States reporting cases
Disease	week	2009	average†	2008	2007	2006	2005	2004	during current week (No.)
Anthrax	_	_	_	_	1	1	_	_	
Botulism:									
foodborne	_	10	0	17	32	20	19	16	
infant	_	29	2	109	85	97	85	87	
other (wound and unspecified)	_	13	1	19	27	48	31	30	
Brucellosis Chancroid	_	53 22	2 1	80 25	131 23	121 33	120 17	114 30	
Cholera		2	0	5	7	9	8	6	
Cyclosporiasis§	2	69	6	139	93	137	543	160	NY (1), FL (1)
Diphtheria	_	_	_	_	_	_	_	_	(.), . = (.)
Domestic arboviral diseases§,¶:									
California serogroup	_	2	4	62	55	67	80	112	
eastern equine	_	_	0	4	4	8	21	6	
Powassan	_	_	0	2	7	. 1	. 1	. 1	
St. Louis	_	4	0	13	9	10	13	12	
western equine	_	_	_	_	_	_	_	_	
Ehrlichiosis/Anaplasmosis§,**:	0	217	00	1 107	000	E 70	FOC	200	NV (1) OH (1) MO (0) NO (0) OA (1) TN (1)
Ehrlichia chaffeensis	9	317	28	1,137	828	578	506	338	NY (1), OH (1), MO (2), NC (2), GA (1), TN (1), AR (1)
Ehrlichia ewingii	_	_	0	9	_	_	_	_	. ,
Anaplasma phagocytophilum	6	227	30	1,026	834	646	786	537	NY (3), WI (2), FL (1)
undetermined	2	69	8	180	337	231	112	59	WI (1), TN (1)
Haemophilus influenzae,††									
invasive disease (age <5 yrs):		40		00	00	00	•	40	
serotype b	_	13	0	30	22	29	9	19	
nonserotype b unknown serotype	2	124 137	3 3	244 163	199 180	175 179	135 217	135 177	NV (1) EL (1)
Hansen disease§	_	34	1	80	101	66	87	105	NY (1), FL (1)
Hantavirus pulmonary syndrome§	_	6	i	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	4	103	7	330	292	288	221	200	NY (2), TN (2)
Hepatitis C viral, acute	6	952	16	878	845	766	652	720	PA (2), MI (2), FL (1), TN (1)
HIV infection, pediatric (age <13 years)§§	_	_	3	_	_	_	380	436	(=), (=), . = (.), (.)
Influenza-associated pediatric mortality\$,¶¶	1	99	0	90	77	43	45	_	NYC (1)
Listeriosis	12	329	21	759	808	884	896	753	PA (2), OH (1), MI (1), WV (1), FL (1), TX (3), CA (3)
Measles***	3	46	1	140	43	55	66	37	TN (1), CA (2)
Meningococcal disease, invasive†††:									TV (4)
A, C, Y, and W-135	1	167	4	330	325	318	297	_	TX (1)
serogroup B other serogroup	1	95 16	3 1	188 38	167 35	193 32	156 27	_	WV (1)
unknown serogroup	6	293	9	616	550	651	765	_	PA (1), OH (1), FL (2), TX (1), CA (1)
Mumps	1	189	14	454		6,584	314	258	PA (1), OH (1), 1 L (2), 1 X (1), OA (1) PA (1)
Novel influenza A virus infections		§§§	···	2	4	N	N	N	.,,(1)
Plague	_	4	0	2	7	17	8	3	
Poliomyelitis, paralytic	_	_	_	_	_	_	1	_	
Polio virus infection, nonparalytic§	_	_	_	_	_	N	N	N	
Psittacosis§	_	7	0	8	12	21	16	12	
Q fever total <sup>§</sup> ,¶¶¶:	_	46	3	124	171	169	136	70	
acute	_	41	1	110	_	_	_	_	
chronic	_	5	0	14	_	_	_	_	
Rabies, human Rubella****	_	1 2	0	2 16	1 12	3	2	7	
Rubella, congenital syndrome	_	1		16	12	11	11 1	10	
SARS-CoV <sup>§</sup> ,††††	_		_	_	_			_	
Smallpox§	_	_	_	_	_	_	_	_	
Streptococcal toxic-shock syndrome§	1	92	2	157	132	125	129	132	CT (1)
Syphilis, congenital (age <1 yr)	_	101	8	434	430	349	329	353	. ,
Tetanus	_	6	0	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	_	48	2	71	92	101	90	95	
Trichinellosis	_	11	0	39	5	15	16	5	
Tularemia	1_	33	5	123	137	95	154	134	AR (1)
Typhoid fever	7	190	8	449	434	353	324	322	OH (1), MN (1), MD (1), FL (1), TX (1), CA (2)
Vancomycin-intermediate Staphylococcus aureus		40	0	63	37	6	2	_	
Vancomycin-resistant Staphylococcus aureus§ Vibriosis (noncholera Vibrio species infections)§	10	100		400	2	1	3	1 N	MD (1), NC (1), FL (1), AZ (1), WA (2), CA (5), HI (
VIDUOSIS (DODODOJETA VIDIO SPECIES INTECTIONS)§	12	182	11	492	549	N	N	N	IVID (1), NC (1), FL (1), AZ (1), WA (2), CA (5), HI (

See Table I footnotes on next page.

## TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 1, 2009 (30th week)\*

- —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts.
  - \* Incidence data for reporting year 2008 and 2009 are provisional, whereas data for 2004, 2005, 2006, and 2007 are finalized.
- † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. The total sum of incident cases is then divided by 25 weeks. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.
- § Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.
- Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
- \*\* The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingil*).
- †† 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. Ninety-eight influenza-associated pediatric deaths occurring during the 2008–09 influenza season have been reported.
- \*\*\* Of the three measles cases reported for the current week, two were indigenous, and one was imported.
- ††† Data for meningococcal disease (all serogroups) are available in Table II.
- SSS CDC discontinued reporting of individual confirmed and probable cases of novel influenza A (H1N1) viruses infections on July 24, 2009. CDC will report the total number of novel influenza A (H1N1) hospitalizations and deaths weekly on the CDC H1N1 influenza website (http://www.cdc.gov/h1n1flu).
- 1111 In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.
- \*\*\*\* No rubella cases were reported for the current week.
- titt Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

## FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 1, 2009, with historical data



<sup>\*</sup> 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 Willie J. Anderson Jose Aponte Lenee Blanton Rosaline Dhara Michael S. Wodajo Pearl C. Sharp

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

			Chlamydi	a <sup>†</sup>				idiodomy	cosis		Cryptosporidiosis				
		Prev					Prev						rious		
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med Med	Max	Cum 2009	Cum 2008	Current week	Med	week Max	Cum 2009	Cum 2008
United States	11,145	22,842	25,700	629,265	673,280	284	149	474	5,932	3,816	101	124	482	3,133	2,797
New England	747	751	1,655	22,776	20,856	_	0	1	1	1	1	5	23	130	201
Connecticut Maine§	203	228	1,306	6,740	5,854	N N	0	0	N N	N N	_	0	16 6	16 14	41 14
Massachusetts	31 489	49 323	72 946	1,416 11,202	1,410 10,146	N	0	0	N N	N N	_	1	13	35	72
New Hampshire	3	32	63	814 1,941	1,151	_	0	1	1	1	_	1	4	28 4	38
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	21	60 21	244 53	663	1,625 670	N	0	0 0	N	N	1	0 1	3 7	33	4 32
Mid. Atlantic	2,081	2,887	6,734	88,063	84,433		0	0	_	_	15	13	35	363	337
New Jersey New York (Upstate)	533	429 571	846 4,563	12,363 16,888	12,804 15,500	N N	0 0	0 0	N N	N N	12	0 4	4 17	8 93	19 98
New York City	1,110	1,137	3,130	34,476	32,458	N	0	0	N	N	_	1	.8	39	55
Pennsylvania E.N. Central	438 1,495	816 3,479	1,072 4,382	24,336 94,178	23,671 110,357	N —	0	0 4	N 22	N 32	3 15	7 31	17 126	223 793	165 741
Illinois	411	1,094	1,356	29,082	33,415	N	0	Ó	N	N	—	2	13	69	76
Indiana Michigan	273 589	413 849	713 1.332	12,981 26.158	12,353 26.029	N	0	0 3	N 11	N 25	_ 3	5 5	18 13	182 132	95 128
Ohio	56	782	1,300	16,100	26,206	_	0	2	11	7	11	9	59	226	140
Wisconsin	166	368	494	9,857	12,354	N	0	0	N	N	1	8	46	184	302
W.N. Central lowa	321 93	1,324 192	1,551 256	37,125 5,491	38,011 4,972	N	0 0	1 0	4 N	1 N	26 6	18 4	68 30	465 107	399 102
Kansas	20	178	548	5,173	5,229	N	0	0	N	N	2	1	8	47	30
Minnesota Missouri	— 89	268 500	338 633	6,881 14,723	8,245 13.899	_	0	0 1	4	1	11 5	4 3	19 13	133 73	91 86
Nebraska§	65	96	219	2,581	3,025	N	0	0	N	Ň	2	2	8	45	57
North Dakota South Dakota	 54	23 58	60 85	552 1,724	1,060 1,581	N N	0	0 0	N N	N N	_	0 2	10 9	6 54	2 31
S. Atlantic	2,462	4,331	5,730	110,633	135,318	_	0	1	5	2	18	21	49	525	443
Delaware District of Columbia	68	81 128	180 227	2,747 3,849	2,139 3,991	_	0	1 0	1	_	_	0	1 2	2	8 9
Florida	723	1,399	1,597	41,724	41,139	N	0	Ō	N	N	9	8	35	173	189
Georgia Maryland <sup>§</sup>	347	755 436	1,909 772	15,914 12,252	23,570 13,133	N	0 0	0 1	N 4	N 2	5 1	6 1	20 5	212 22	125 17
North Carolina	_	0	1,309	· —	16,847	N	0	Ö	N	N	3	į	16	58	17
South Carolina <sup>§</sup> Virginia <sup>§</sup>	612 649	534 616	1,425 924	14,008 17,985	15,181 17,501	N N	0	0	N N	N N	_	1	6 4	23 28	27 38
West Virginia	63	69	101	2,154	1,817	N	Ö	ő	N	Ň	_	Ö	3	7	13
E.S. Central Alabama§	1,083	1,712 473	2,180 624	50,826 12.605	47,249 14.632	 N	0	0	_ N	N	3 1	3 1	10 6	95 30	75 31
Kentucky	_	248	458	6,825	6,481	N	0	0	N	N	1	i	4	26	16
Mississippi Tennessee§	433 650	454 570	841 809	14,026 17,370	10,930 15,206	N N	0	0	N N	N N	_ 1	0 1	2 5	5 34	7 21
W.S. Central	422	2,941	5,187	85,765	85,899	_	0	1	_	2	8	10	271	178	138
Arkansas§	268	275	418	8,068	8,203	N	0	Ó	N	N	ĭ	1	10	20	18
Louisiana Oklahoma	154	428 177	1,134 2.737	12,980 8.027	12,507 7,511	 N	0	1 0	N	2 N	4	1 2	5 16	12 49	26 23
Texas§	_	1,959	2,527	56,690	57,678	N	0	0	Ν	N	3	7	258	97	71
Mountain Arizona	1,047 53	1,272 395	2,145 627	33,593 7,106	42,591 14.133	213 213	98 96	368 364	4,479 4,418	2,547 2,481	6	9 1	38 9	242 22	241 33
Colorado	425	326	729	9,244	10,240	N	0	0	N	2,401 N	3	2	12	69	48
Idaho <sup>§</sup> Montana <sup>§</sup>	41 27	67 56	314 88	1,999 1,712	2,208 1,782	N N	0	0 0	N N	N N	1	1 0	7 4	39 21	35 30
Nevada <sup>§</sup>	284	171	366	5,596	5,675	_	1	3	35	33	2	0	4	11	8
New Mexico <sup>§</sup> Utah	182 33	159 109	540 251	4,278 2,490	4,341 3,408	_	0	2 2	8 18	22 9	_	2 0	23 6	55 10	53 21
Wyoming§	2	34	97	1,168	804	_	ŏ	1	_	2	_	ŏ	2	15	13
Pacific	1,487	3,666	4,763	106,306	108,566	71 N	39 0	172	1,421	1,231	9	11 0	19	342 5	222
Alaska California	1,262	116 2,844	233 3,599	4,784 83,001	2,703 84,356	N 71	39	0 172	N 1,421	N 1,231	4	6	2 15	196	2 124
Hawaii Oregon§		118 198	247 631	3,323 5,219	3,332 5,868	N N	0	0	N N	N N	_ 1	0 2	1 10	1 97	1 48
Washington	225	377	557	9,979	12,307	N	0	0	N	N	4	1	7	43	48
American Samoa	_	0	0	_	73	N	0	0	N	N	N	0	0	N	N
C.N.M.I. Guam	_	3	 8	_	103	_			_	_	_			_	_
Puerto Rico	182	130	333	4,505	4,090	N	0	0	N	N	N	Ö	0	Ν	N
U.S. Virgin Islands		8	17	205	406		0	0				0	0		

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

			Giardiasi	s				Gonorrhe	ea	Haemophilus influenzae, invasive All ages, all serotypes <sup>†</sup>					
			rious reeks					vious veeks					rious reeks		
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	222	318	641	8,685	9,082	2,857	5,548	7,164	148,919	189,909	14	53	124	1,686	1,780
New England	2	22	64	554	791	81	97	301	2,798	2,916	_	3	16	96	99
Connecticut Maine <sup>§</sup>		6 4	14 12	141 103	180 79	31 2	46 2	275 9	1,290 78	1,305 52	_	0	12 2	37 14	22 8
Massachusetts	_	9	27	150	337	45	37	112	1,158	1,273	_	1	5	32	48
New Hampshire Rhode Island§	_	3 1	10 8	69 32	73 48	1	2 5	6 19	62 184	66 199	_	0	2 7	7 3	8 6
Vermont§	_	3	15	52 59	74	2	1	4	26	21	_	0	1	3	7
Mid. Atlantic	38	60	116	1,600	1,710	428	591	1,138	17,436	18,737	6	11	25	364	328
New Jersey New York (Upstate)	 21	7 24	21 81	108 664	280 564	— 89	91 104	127 664	2,541 2,949	3,103 3,483	 5	2 3	7 20	62 84	54 92
New York City	3	16	30	413	460	231	210	577	6,507	5,816	_	2	11	82	58
Pennsylvania	14	16	46	415	406	108	188	267	5,439	6,335	1	4	10	136	124
E.N. Central Illinois	21	44 9	90 32	1,166 207	1,372 374	576 171	1,108 356	1,627 499	29,196 8,875	39,264 11,480	_	8 3	27 9	251 88	289 89
Indiana	N	Ö	11	N	N	106	149	256	4,315	5,020	_	1	22	74	52
Michigan	6	12	22	320	294	221	290	493	8,512	9,659	_	0	3	15	17
Ohio Wisconsin	14 1	16 8	31 19	434 205	446 258	22 56	251 94	482 149	4,960 2,534	9,435 3,670	_	1 0	6 4	65 9	90 41
W.N. Central	21	25	143	842	929	94	290	393	7,829	9,632	_	3	15	97	130
Iowa Kansas	7	6 3	18 11	164 67	166 70	10 42	31 36	53 83	906 1,149	888 1,267	_	0	0	_ 11	2 15
Minnesota	_	0	106	250	259	42 —	36 44	63 67	1,149	1,850	_	0	10	30	37
Missouri	12	7	22	217	255	24	138	184	3,715	4,585	_	1	4	33	50
Nebraska <sup>§</sup> North Dakota	2	3 0	10 16	93 8	108 10	11	22 2	51 7	703 33	813 68	_	0	4 4	18 5	18 8
South Dakota	_	2	11	43	61	7	8	20	213	161	_	0	0	_	_
S. Atlantic	68	67	108	2,046	1,515	694	1,203	2,042	31,246	47,471	8	12	30	460	459
Delaware District of Columbia	_	0 0	3 5	17 —	26 38	20	16 50	37 88	530 1.524	663 1.474	_	0	1 2	3	6 4
Florida	60	35	57	1,093	644	247	415	507	12,059	13,886	4	4	10	160	117
Georgia Maryland <sup>§</sup>	4	13 5	67 10	515 135	375 140	1 122	251 118	876 212	5,377 3,253	8,602 3,554	2 2	3 1	9 6	100 56	93 72
North Carolina	N	0	0	N	N	_	0	542	, —	7,508	_	1	17	48	45
South Carolina§ Virginia§		2 8	8 31	50 210	68 188	184 114	163 152	414 308	4,337 3,864	5,600 5,742	_	1 1	5 6	30 42	39 66
West Virginia	2	ĭ	5	26	36	6	11	26	302	442	_	Ö	3	21	17
E.S. Central	7	8	22	189	238	270	510	771	14,565	17,092	_	3	9	100	92
Alabama <sup>§</sup> Kentucky	2 N	4 0	12 0	85 N	137 N	_	148 80	216 153	3,465 1,962	5,746 2,540	_	0	4 5	24 15	15 6
Mississippi	N	0	0	N	N	129	145	253	4,392	4,035	_	0	1	_	11
Tennessee§	5	4	13	104	101	141	162	301	4,746	4,771	_	2	6	61	60
W.S. Central Arkansas§	7	8 2	22 8	208 68	198 65	340 87	895 83	1,356 134	24,990 2.483	29,688 2,689	_	2	22 2	74 13	84 11
Louisiana	_	2	10	61	74	_	157	420	4,220	5,568	_	0	1	11	8
Oklahoma Texas <sup>§</sup>	7 N	3 0	18 0	79 N	59 N	253	69 563	614 725	2,861 15,426	2,783 18,648	_	1 0	20 1	49 1	59 6
Mountain	26	27	62	709	756	92	170	313	4,076	6,821	_	5	11	153	202
Arizona	4	3	10	101	64	4	47	82	832	2,025	_	1	7	53	82
Colorado Idaho <sup>§</sup>	13 7	9 3	27 14	238 83	272 90	12 1	56 2	152 13	1,419 53	2,071 94	_	1 0	6 2	50 2	39 10
Montana§	<del>-</del>	2	10	64	43	_	2	6	45	65	_	0	1	1	2
Nevada <sup>§</sup> New Mexico <sup>§</sup>	1	2 1	8 8	53 48	63 52	52 21	30 23	86 52	983 581	1,391 807	_	0	2 3	12 15	11 30
Utah	1	6	18	91	152	2	5	15	115	303	_	1	2	19	27
Wyoming§	_	1	4	31	20	_	2	8	48	65	_	0	2	1	1
Pacific Alaska	32	54 2	130 10	1,371 80	1,573 43	282	561 17	775 40	16,783 768	18,288 299	_	2	8 4	91 20	97 13
California	23	35	59	936	1,074	251	472	658	14,013	15,047	_	0	3	20	35
Hawaii Oregon <sup>§</sup>	_	0 7	4 17	8 166	23 252	_	13 20	19 48	361 546	345 714	_	0 1	3 3	18 30	12 35
Washington	9	7	74	181	181	31	46	81	1,095	1,883	_	Ö	2	3	2
American Samoa	_	0	0	_	_	_	0	0	_	3	_	0	0	_	_
C.N.M.I. Guam	_			_	_	_	_ 1	— 15	_	<u> </u>	_			_	_
Puerto Rico	_	3	15	49	100	3	4	24	156	159	_	0	1	1	_
U.S. Virgin Islands	_	0	0				2	7	63	79	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting year 2008 and 2009 are provisional.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

(John Week)				Hepat	itis (viral,	acute), by	type†	1							
			Α					В				Le	gionellosi	is	
	Current		ious eeks	Cum	Cum	Current		rious reeks	Cum	Cum	Current		/ious /eeks	Cum	Cum
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008	week	Med	Max	2009	2008
United States	21	36	89	1,027	1,558	19	68	197	1,768	2,161	43	50	110	1,297	1,486
New England Connecticut	2 2	1 0	8 4	37 14	76 14	_	1 0	4 3	17 7	46 17	4 2	2 1	18 5	48 29	89 16
Maine <sup>§</sup> Massachusetts	_	0	5 2	1	4	_	0	2 2	7 1	9	_	0	2	2	4 38
New Hampshire	_	0	2	3	6	_	0	2	2	3	1	0	4	5	14
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	0 0	2 1	3 2	10 2	_	0 0	1 1	_	3 1	<u> </u>	0 0	14 1	4 2	12 5
Mid. Atlantic	1	5	13	122	171	_	6	17	173	274	14	14	55	479	444
New Jersey New York (Upstate)	_	1 1	5 4	21 29	39 37	_	1	5 11	31 37	79 36	9	2 5	14 24	69 145	60 120
New York City Pennsylvania	1	2 1	6 4	34 38	57 38	_	1 2	4 8	36 69	61 98	 5	2 6	18 24	91 174	60 204
E.N. Central	_	5	12	134	213	3	10	21	258	283	8	8	29	208	344
Illinois Indiana	_	1 0	9 3	51 13	78 12	_	2	7 18	29 70	105 23	_	1	13 5	9 18	45 32
Michigan	_	1	5	39	77	_	3	8	78	77	_	2	10	47	101
Ohio Wisconsin	_	1 0	4 3	26 5	26 20	3	1 0	13 4	60 21	65 13	8 —	4 0	17 6	129 5	152 14
W.N. Central	_	2	16 3	69 17	190 88		2	16	80 15	48 13	_	2	8	41 12	70 9
Iowa Kansas	_	0 0	1	7	12	_	0	3 2	4	6	_	0	2 1	2	1
Minnesota Missouri	_	0	12 3	13 15	26 23	_	0 1	11 5	14 36	4 19	_	0 1	3 5	6 14	8 37
Nebraska§	_	Ö	2	15	39	_	0	2	10	5	_	Ö	1	6	14
North Dakota South Dakota	_	0 0	2 1	2	2	_	0 0	1 1	1	1	_	0 0	3 1	1	1
S. Atlantic Delaware	11	7 0	15 1	238 3	203 5	7 U	18 0	31 1	552 U	536 U	9	9	22 5	257 8	245 6
District of Columbia	U	0	0	U	U	U	0	0	U	U	_	0	2	_	8
Florida Georgia	5 3	4 1	8 4	112 39	78 29	3 3	6 3	11 9	179 88	187 101	4	3 1	7 5	89 32	79 20
Maryland <sup>§</sup> North Carolina	1 2	1	4 7	25 24	25 35	_	1	5 19	43 128	49 51	4	2	10 7	58 36	68 12
South Carolina§	_	Ó	3	20	7	_	i	4	24	43	_	0	1	3	6
Virginia <sup>§</sup> West Virginia	_	1 0	6 1	15 —	21 3	<u> </u>	2 1	10 19	45 45	62 43	1	1 0	5 3	29 2	30 16
E.S. Central	_	1	5	25	46	_	7	1 <u>1</u>	168	215	1	2	5	55	74
Alabama <sup>§</sup> Kentucky	_	0 0	2 2	6 4	7 16	_	2 2	7 7	53 45	56 56	_	0 1	1 3	6 23	10 37
Mississippi Tennessee§	_	0	1 4	7 8	4 19	_	0 2	3 6	8 62	22 81	_ 1	0 1	1 4	1 25	1 26
W.S. Central	2	3	43	98	154	7	11	99	254	438	_	1	21	42	44
Arkansas <sup>§</sup> Louisiana	_	0	1 2	4 2	4 8	_	1	5 4	23 23	32 55	_	0	2 1	3 2	6 8
Oklahoma	_	Ō	6	1	7	2	2	17	52	59	_	0	6	3	3
Texas <sup>§</sup> Mountain	2 1	3 3	37 8	91 92	135 144	5 —	6 3	76 9	156 76	292 115	_	1 2	19 8	34 57	27 44
Arizona	i	2	6	44	75	_	1 0	4	28	46	_	0	3 2	24 6	12
Colorado Idaho <sup>§</sup>	_	0 0	5 1	27 2	26 14	_	0	3 2	15 4	18 4	_	0	1	_	3 2
Montana <sup>§</sup> Nevada <sup>§</sup>	_	0 0	1 3	4 6	 5	_	0	1 3	 16	 27	_	0	2 2	4 8	4 6
New Mexico§ Utah	_	0	1 2	5 4	14 7	_	0	2	5	7	_	0	2 4	14	3 14
Wyoming§	_	0	0	_	3	_	Ö	2	3	5	_	0	1	14	—
Pacific Alaska	4	8 0	18 1	212 6	361 3	2	7 0	36 2	190 5	206 6	7	3 0	12 1	110 3	132 1
California	4	6	17	162	295	1	5	28	142	143	5	3	9	85	100
Hawaii Oregon <sup>§</sup>	_	0 0	2 2	4 12	8 21	_	0	1 3	3 20	4 28	_	0 0	1 2	1 7	5 12
Washington	_	1	4	28	34	1	1	8	20	25	2	0	4	14	14
American Samoa C.N.M.I.					_			0		_	<u>N</u>	0	_0	<u>N</u>	<u>N</u>
Guam Puerto Rico	_	0	0 2	 15	 18	_	0	0 5	 10	 31	_	0	0	_	_
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
\* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for acute hepatitis C, viral are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

		L	yme disea	ıse				Malaria		Meningococcal disease, invasive <sup>†</sup> All groups					
	0		vious veeks	0	0	0		rious reeks	0	0	0		rious eeks	0	0
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	578	539	1,637	10,999	17,202	25	22	46	584	604	8	17	48	571	795
New England	42	66	552	1,080	6,864	_	0	5	15	31	_	0	4	18	23
Connecticut Maine <sup>§</sup>	33	0 8	136 73	300	2,562 92	_	0 0	4 1	4 1	6 1	_	0 0	1 1	2 3	1 4
Massachusetts	_	11	203	117	3,010	_	0	4	6	15	_	0	3	9	15
New Hampshire Rhode Island <sup>§</sup>	_	15 0	98 78	452 54	962 113	_	0 0	1 1	1 1	3 2	_	0	1 1	1 2	2 1
Vermont§	9	5	41	157	125	_	ŏ	i	2	4	_	ŏ	i	1	<u>.</u>
Mid. Atlantic	428	238	1,401	7,098	6,644	_	5	17	130	149	1	2	5	62	84
New Jersey New York (Upstate)	4 272	37 87	211 1,368	1,817 1,951	2,378 1,804	_	0 1	4 10	27	34 15	_	0 0	2 2	8 16	11 22
New York City		1	54	7	380	_	3	11	75	77	_	0	2	9	17
Pennsylvania E.N. Central	152 5	53 21	407 149	3,323 778	2,082 1,355	_	1 3	4 6	28 81	23 94	1 1	1 3	4 9	29 109	34 140
Illinois	<del>-</del>	1	5	30	80	1	1	4	31	48		1	6	25	50
Indiana Michigan	_ 1	0	6 10	15 30	19 23	_	0	2	11 13	4 10	_	0	6 5	35 17	17 23
Michigan Ohio	2	1 1	6	20	13	1	1	5	23	20	1	0	3	26	32
Wisconsin	2	17	135	683	1,220	_	0	2	3	12	_	0	1	6	18
W.N. Central lowa	14	5 1	336 8	107 43	257 75	_	1 0	7 3	32 5	35 3	_	1 0	9 1	42 4	72 14
Kansas	_	0	4	13	6	_	Ō	2	3	3	_	Ō	2	8	3
Minnesota	14	1 0	326 2	39 4	168 2	_	0	7 2	13 7	16 7	_	0	4 2	9 14	21 22
Missouri Nebraska <sup>§</sup>	_	0	3	7	3	_	0	1	3	6	_	0	1	5	10
North Dakota South Dakota	_	0	10 1	<u> </u>	3	_	0	0 1	_ 1	_	_	0	3 1	_	1 1
S. Atlantic	88	65	223	1,782	1,923	— 11	6	15	193	160	3	0 2	9	104	112
Delaware	18	12	56	531	504	_	0	1	2	1	_	0	1	2	1
District of Columbia Florida	_ 1	0 1	5 6	 23	38 24		0 1	2 7	— 57	2 27		0 1	0 4	 39	<u> </u>
Georgia	3	Ó	6	29	25		i	4	38	37	_	Ó	2	20	14
Maryland <sup>§</sup> North Carolina	66	30 1	163 7	861 37	926 6	1 3	1 0	8 5	48 21	44 17	_	0	1 5	5 16	12 10
South Carolina§	_	Ó	3	14	14	_	0	1	1	6	_	0	1	8	16
Virginia <sup>§</sup> West Virginia	_	12 1	61 17	223 64	294 92	_	1 0	4 1	24 2	25 1	_ 1	0	2 2	9 5	15 4
E.S. Central		0	3	11	29	1	0	3	21	11	_	0	3	19	38
Alabama§	=	0	1	2	8	_	0	3	6	3	_	Ö	1	5	5
Kentucky Mississippi	_	0 0	1 0	1	4 1	1	0 0	2 0	8	3 1	_	0	1 1	4 1	7 9
Tennessee§	_	Ö	3	8	16	_	0	3	7	4	_	0	i	9	17
W.S. Central	_	1	21	18	49	7	1	10	25	29	2	1	12	49	81
Arkansas <sup>§</sup> Louisiana	_	0 0	0 1	_	_ 1	_	0 0	1	1	_	_	0	2 3	5 9	13 18
Oklahoma	_	0	2	_	_	1	0	2	2	2	_	0	3	4	10
Texas <sup>§</sup>	_	1	21	18	48	6	1	10	21	25	2	1	9	31	40
Mountain Arizona		1 0	13 2	21 2	26 4	_	0	4 2	13 3	16 6	_	1 0	4 2	44 10	42 5
Colorado	_	0	1	2	2	_	0	3	6	3	_	0	2	13	9
Idaho <sup>§</sup> Montana <sup>§</sup>	1 —	0 0	2 13	8 1	4 2	_	0 0	1	1	_	_	0	1 2	5 4	4 4
Nevada§	_	0	2	7	5	_	0	į	_	4	_	0	2	4	7
New Mexico <sup>§</sup> Utah	_	0 0	2 1	_	6 2	_	0 0	1 2		1 2	_	0	1 1	3 1	6 5
Wyoming§	_	0	1	1	1	_	Ö	ō	_	_	_	Ö	2	4	2
Pacific	_	3 0	13	104 3	55 3	5	3	10	74	79 3	1	4 0	14	124	203 5
Alaska California	_	3	2 7	91	32	3	2	1 8	3 55	59	1	2	2 8	2 80	150
Hawaii	N	0	0	N	N	_	0	1	1	2	_	0	1	3	4
Oregon <sup>§</sup> Washington	_	0 0	3 12	7 3	16 4		0 0	2 3	6 9	4 11	_	0 0	7 6	26 13	25 19
American Samoa	N	0	0	N	N	_	0	0	_	_	_	0	0	_	_
C.N.M.I.	_		<u>_</u> 0	_	_	_	<u>_</u>		_	_ 1	_	<u>_</u>	<u>_</u>	_	_
Guam Puerto Rico	N	0	0	N	N	_	0	1	1	2	_	0	1	_	_
U.S. Virgin Islands	N	0	0	N	N	_	0	0	_	_	_	0	0	_	_

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

			Pertussis	i				bies, anin	nal	Rocky Mountain spotted fever					
			/ious /eeks	_				rious eeks	_	_			rious reeks		
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	104	260	1,697	6,981	4,704	37	67	138	1,970	2,342	28	30	179	747	1,007
New England Connecticut	_	15 0	33 4	254 18	548 33	9 5	8	15 10	193 85	214 102	_	0	2	4	3
Maine <sup>†</sup>	_	1	10	63	33 16	5 1	1	5	33	31	_	0	2	4	_
Massachusetts	_	8	26	105	432	_	0	0	_	_	_	0	1	_	1
New Hampshire Rhode Island <sup>†</sup>	_	1 0	7 5	49 11	19 41	1	1 0	7 3	23 21	23 18	_	0 0	0 2	_	1 1
Vermont†	_	ŏ	2	8	7	2	ĭ	4	31	40	_	ŏ	ō	_	
Mid. Atlantic	11	23	64	602	554	13	15	30	347	503	_	1	29	35	74
New Jersey New York (Upstate)	1	4 5	12 41	92 108	115 195	— 13	0 8	0 20	229	263	_	0	6 29	4	51 10
New York City	_	0	21	48	48	_	0	2	_	11	_	0	4	20	6
Pennsylvania	10	11	33	354	196	_	6	17	118	229	_	0	2	11	7
E.N. Central Illinois	32	50 14	238 45	1,511 255	812 126	4 2	2 1	28 20	103 40	101 36	_	2 1	15 10	41 26	74 56
Indiana	_	5	158	188	28	_	Ô	12	12	3	_	0	3	2	2
Michigan Ohio	3 29	10 18	21 57	326 665	118 475	1 1	1 0	9 7	31 20	37 25	_	0	2 3	4 9	2 14
Wisconsin	_	4	10	77	65	Ń	0	0	N	N	_	0	0	_	_
W.N. Central	21	33	872	1,057	391	6	5	17	151	160	2	4	25	108	250
lowa	_	5 4	21 12	107 118	64 33		0 1	5 6	9 55	12 44	_	0 0	1 1	2 1	6
Kansas Minnesota	_	0	808	165	110	_	0	11	29	26	_	0	Ö		_
Missouri	21	15	51	546	132	4	1	8	27	25	2	3	24	99	233
Nebraska† North Dakota	_	4 0	32 24	92 15	38 1	_	0	2 9	4	23 16	_	0	4 1	6	8
South Dakota	_	ŏ	10	14	13	_	ŏ	4	27	14	_	ŏ	Ö	_	3
S. Atlantic	12	26	71	903	452	1	25	111	893	1,051	10	14	54	315	299
Delaware District of Columbia	_	0 0	3 2	8	6 1	_	0 0	0	_	_	_	0 0	3 0	5	20 6
Florida	10	8	32	308	126	_	Ö	95	100	138	_	Ö	3	5	5
Georgia Mandand <sup>†</sup>	_ 1	3	11	106	48	_	4	71	225	229	2	1	5 7	24	45
Maryland <sup>†</sup> North Carolina		3 0	10 65	61 199	58 77	N	6 2	13 4	184 N	264 N	8	9	36	26 203	38 106
South Carolina†	_	3	16	118	63	_	0	0			_	0	9	14	17
Virginia† West Virginia	_ 1	4 0	24 2	94 9	67 6	_ 1	10 2	24 6	315 69	359 61	_	2	15 1	35 3	56 6
E.S. Central	6	13	33	429	170	1	2	7	65	104	1	4	19	132	166
Alabama†	4	3	19	164	23	_	0	0	_	_	_	1	6	28	43
Kentucky Mississippi	1	4 1	15 4	126 30	37 69	1	1 0	4 2	31	24 2	_	0	0 1	<u> </u>	1 7
Tennessee <sup>†</sup>	1	3	14	109	41	_	2	6	34	78	1	3	17	99	115
W.S. Central	1	54	389	1,260	647	_	0	7	31	61	15	2	161	94	120
Arkansas† Louisiana	_	4 2	38 7	123 62	46 40	_	0 0	5 0	23	34	13	0	61 2	41 2	13 3
Oklahoma	1	0	45	18	19	_	0	6	7	25	2	Ö	98	40	80
Texas <sup>†</sup>	_	44	304	1,057	542	_	0	1	1	2	_	0	6	11	24
<b>Mountain</b> Arizona	12 1	16 3	31 8	476 107	501 140	N	2 0	9 0	52 N	38 N	_	1 0	3 2	16 3	19 6
Colorado	10	5	12	170	85	_	0	0	_	_	_	0	1	_	_
Idaho†	1	1	5	45	21	_	0	2	15	4	_	0	1	_	_
Montana† Nevada†	_	0 0	4 3	11 7	63 21	_	0	4 5	15 2	3 3	_	0 0	2 2	8 1	3
New Mexico†	_	1	10	30	28	_	0	2	15	19	_	0	1	1	2
Utah Wyoming <sup>†</sup>		4 0	19 2	105 1	133 10	_	0 0	6 4	3 17	2 7	_	0	1 2	1 2	3 5
Pacific	9	22	98	489	629	3	4	13	135	110	_	0	1	2	2
Alaska	_	4	21	56	63	_	0	4	18	12	N	0	Ö	N	N
California Hawaii	_	6 0	19 3	128 17	312 6	3	4 0	12 0	115	94	 N	0	1 0	2 N	N
Oregon <sup>†</sup>	_	3	13	131	95	_	Ö	2	2	4	_	0	1	_	2
Washington	9	6	76	157	153	_	0	0	_	_	_	0	0	_	_
American Samoa C.N.M.I.	_	0	0	_	_	N	0	0	N	N	N	0	0	N	N
Guam	_	0	0	_	_	_	0	0	_	_	N	0	0	N	N
Puerto Rico	_	0	1	1	_	_	1	3	22	37	N	0	0	N	N
U.S. Virgin Islands	_	0	0	_	_	N	0	0	N	N	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
\* Incidence data for reporting year 2008 and 2009 are provisional.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

		S	almonello	sis		Shig	ga toxin-pı	roducing	E. coli (S1	Shigellosis						
			vious veeks	_				ious eeks					/ious /eeks			
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	
United States	605	858	2,323	20,801	23,204	51	80	255	1,881	2,371	178	323	1,268	8,518	10,560	
New England	2	25	246	835	1,374	1	3	52	105	146	_	2	24	78	136	
Connecticut Maine <sup>§</sup>	1	0 2	220 8	220 65	491 81	_	0 0	52 3	52 10	47 6	_	0 0	19 6	19 3	40 10	
Massachusetts	_	16	41	263	621	_	1	9	15	65	_	2	9	40	72	
New Hampshire Rhode Island <sup>§</sup>	1	3 2	42 11	177 78	85 50	1	1 0	3 1	21	14 7	_	0	3 1	5 8	4 8	
Vermont§	_	1	7	32	46	_	Ö	6	7	7	_	Ö	2	3	2	
Mid. Atlantic	90	89	189	2,320	2,957	6	6	23	123	259	15	55	74	1,593	1,368	
New Jersey New York (Upstate)	66	12 24	44 65	192 659	719 690	6	1 3	7 12	19 61	85 74	4	16 5	35 23	334 122	418 378	
New York City	5	19	49	589	667	_	1	5	37	30	1	9	23	233	472	
Pennsylvania	19	29	78	880	881	_	0	8	6 344	70	10	21	57	904	100	
E.N. Central Illinois	39	97 25	156 50	2,656 645	2,799 832	<u>5</u>	14 1	74 10	62	374 69	34	79 14	132 34	1,649 316	1,922 572	
Indiana	 5	11 18	50 38	311 521	321 521	_	2 3	13 43	55 75	41 74	_	2 5	21 24	51 131	445 64	
Michigan Ohio	33	27	52	836	714	4	3	15	69	86	31	40	80	852	639	
Wisconsin	1	12	30	343	411	1	3	16	83	104	1	11	42	299	202	
W.N. Central lowa	41 5	52 7	109 16	1,468 224	1,510 247	15 2	12 2	42 17	342 92	434 111	20	14 3	49 12	499 45	515 93	
Kansas	6	7	19	213	244	_	1	7	25	24	2	3	11	145	11	
Minnesota Missouri	14 14	13 11	56 48	349 279	373 396	6 6	2 2	14 10	100 61	83 103	5 11	3 3	24 37	48 241	152 155	
Nebraska <sup>§</sup>	2	5	41	228	139	1	2	12	47	82	2	0	3	15	1	
North Dakota South Dakota	_	0 4	30 22	32 143	27 84	_	0 0	28 5	3 14	1 30	_	0 0	9 1	3 2	29 74	
S. Atlantic	223	262	457	5,706	5,516	6	13	48	335	386	30	48	85	1,334	1,905	
Delaware	2	2	8	48	82	_	0	2	8	8	3	0	8	52	7	
District of Columbia Florida	163	0 103	2 180	2,614	41 2,334	_ 3	0 2	1 10	— 89	5 82	7	0 9	2 26	251	10 532	
Georgia	50	39	96	1,045	1,065	1	1	8	37	46	12	13	30	387	743	
Maryland <sup>§</sup> North Carolina	2 1	16 27	35 106	374 742	438 469	1	2 2	11 21	44 70	57 40	7	6 6	13 27	216 240	44 60	
South Carolina§	_	16	57	333	473	_	0	3	16	24	_	4	17	71	388	
Virginia <sup>§</sup> West Virginia	1 4	19 4	88 23	430 120	493 121	_ 1	3 0	27 3	57 14	98 26	1	4 0	59 3	112 5	101 20	
E.S. Central	26	53	140	1,247	1,538	3	5	12	122	145	4	22	58	521	1,193	
Alabama <sup>§</sup>	4	15	49	348	416	1	1	4	29	41	_	4	12	90	281	
Kentucky Mississippi	10	10 13	18 57	254 284	242 485	_	2 0	7 1	40 6	41 3	1	2 1	25 6	132 17	202 252	
Tennessee§	12	14	62	361	395	2	2	6	47	60	3	13	48	282	458	
W.S. Central	27	87	1,333	1,761	3,058	2	4	139	68	186	41	69	967	1,566	2,317	
Arkansas <sup>§</sup> Louisiana	13	12 15	38 54	299 330	340 524	1	1 0	5 1	19	28 5	6	9 5	21 20	205 88	282 408	
Oklahoma	14	14	102	306	338	1	0	82	13	18	4	5	61	149	63	
Texas <sup>§</sup>	34	49 57	1,204 106	826	1,856	_	2 10	55	36 244	135 272	31 17	48 27	889 54	1,124 644	1,564	
Mountain Arizona	8	57 19	43	1,511 509	1,774 505	4 1	10	40 4	30	36	17	27 17	40	479	448 209	
Colorado	18	12	26	359	427	_	3	18	94	80	5	2	11	52	51	
Idaho <sup>§</sup> Montana <sup>§</sup>	4	3 2	9 7	92 69	96 59	2	2 0	15 3	37 14	51 23	_	0 0	2 5	5 13	6 3	
Nevada <sup>§</sup>	3	4	10	141	132	_	0	3	16	10	2	1	13	36	119	
New Mexico <sup>§</sup> Utah	1	6 7	22 19	143 155	340 172	_ 1	1 1	4 7	17 31	30 32	_	2 1	12 3	48 11	43 14	
Wyoming§	_	1	6	43	43		Ö	2	5	10	_	Ö	1		3	
Pacific	123	125	537 9	3,297	2,678	9	9	31 1	198	169	17	29	82	634	756	
Alaska California	96	2 95	516	67 2,524	27 1,928		0 5	15	123	4 88	 15	0 25	1 75	3 512	652	
Hawaii	2	5	13	138	145	_	0	2	2	9	_	0	3	16	25	
Oregon <sup>§</sup> Washington	1 24	7 11	20 85	214 354	243 335	4	1 3	7 16	16 57	24 44		1 3	10 11	20 83	39 40	
American Samoa	_	0	1	_	1	_	0	0	_	_	_	0	2	3	1	
C.N.M.I. Guam	_			_	_ 8	_			_	_	_		_ 1	_	 14	
Puerto Rico	_	13	40	185	351	_	0	0	_	_	_	0	4	5	12	
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_	

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median.

\* Incidence data for reporting year 2008 and 2009 are provisional.

† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

				asive, group A		Streptococcus pneumoniae, invasive disease, nondrug resistant <sup>†</sup> Age <5 years							
	Current	Prev 52 w		Cum	Cum	Current	Prev 52 w		Cum	Cum			
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008			
United States	39	102	239	3,532	3,715	9	35	122	1,066	1,127			
New England	_	5	28	178	279	_	1	12	26	56			
Connecticut Maine§	_	0 0	21 2	53 13	78 20	_	0 0	11 1		_ 1			
Massachusetts	_	2	10	60	132	_	1	2	15	42			
New Hampshire Rhode Island <sup>§</sup>	_	1 0	4 2	30 9	17 20	_	0 0	2 2	7	7 6			
Vermont§	_	Ö	3	13	12	_	Ö	1	2	_			
Mid. Atlantic	6	19	42	716	772	3	5	33	162	144			
New Jersey New York (Upstate)		2 7	6 25	83 241	142 245	3	1 2	4 17	28 76	42 65			
New York City	_	4	12	139	141	_	0	31	58	37			
Pennsylvania	4	6	18	253	244	N	0	2	N	N			
E.N. Central Illinois	4	17 5	42 12	741 181	733 198	1	6 1	18 5	167	205 60			
Indiana	_	3	23	184	96	_	0	13	19 32	21			
Michigan	1	3	11	109	125	_	1	5	44	54			
Ohio Wisconsin	3	4 2	13 10	170 97	201 113	_ 1	1 1	6 4	48 24	36 34			
W.N. Central	8	6	37	290	272		2	11	91	56			
lowa	_	0	0	_	_	_	0	0	_	_			
Kansas Minnesota	<del>_</del> 7	1 0	5 34	37 125	32 127	N	0 0	1 10	N 50	N 13			
Missouri		2	8	65	64	_	0	4	27	26			
Nebraska <sup>§</sup>	_	1	3	32	25	_	0	1	5	6			
North Dakota South Dakota	<u> </u>	0 0	4 3	11 20	8 16	_	0 0	3 2	4 5	5 6			
S. Atlantic	15	22	47	774	739	1	6	16	206	217			
Delaware	_	0	1	9	6	_	0	0	_	_			
District of Columbia Florida	<u> </u>	0 6	2 12	— 185	8 167	<u>N</u>	0 1	0 6	N 48	N 39			
Georgia	4	5	13	184	168	1	2	6	50	58			
Maryland <sup>§</sup> North Carolina	1 3	3 2	12 12	122 79	134 93	N	1 0	4 0	45 N	43 N			
South Carolina§	_	2	5	79 49	42	_	1	6	33	37			
Virginia <sup>§</sup>	_	3	9	116	93	_	0	4	18	35			
West Virginia	1	1	4	30	28	_	0	3	12	5			
E.S. Central Alabama§	1 N	4 0	10 0	135 N	125 N	N	1 0	6 0	42 N	59 N			
Kentucky	_	1	5	23	28	N	0	0	N	N			
Mississippi Tennessee <sup>§</sup>	N 1	0 3	0 9	N 112	N 97	_	0 1	2 6	<u>-</u> 42	8 51			
W.S. Central	2	9	79	290	316	3	6	46	182	173			
Arkansas <sup>§</sup>	_	0	2	13	7	1	0	4	19	10			
Louisiana Oklahoma	_	0 3	3 20	9 98	13 72		0 1	3 7	13 35	10 47			
Texas <sup>§</sup>		6	59	170	224	_	4	34	115	106			
Mountain	2	9	22 7	307	393	1	4	16	158	183			
Arizona	1	3 3	7 9	102	136	1	2 1	10	82	85 40			
Colorado Idaho <sup>§</sup>	<u>1</u>	0	2	103 4	100 12	_	0	4 2	30 6	3			
Montana <sup>§</sup>	N	0	0	N	N	N	0	0	N	N			
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	0 2	1 7	5 52	6 97	_	0 0	1 4	— 15	3 25			
Utah	_	1	6	40	36	_	ŏ	5	25	26			
Wyoming§	_	0	1	1	6	_	0	1	_	1			
Pacific	1	4	10	101	86	_	1 0	6	32 27	34 22			
Alaska California	 N	1 0	4 0	27 N	19 N	 N	0	5 0	27 N	22 N			
Hawaii	1	3	8	74	67	_	0	2	5	12			
Oregon <sup>§</sup> Washington	N N	0 0	0 0	N N	N N	N N	0 0	0	N N	N N			
American Samoa		0	0	_	30	N	0	0	N	N			
C.N.M.I.	_	_	_	_	_	_	_	_		_			
Guam Puerto Rico	N	0 0	0 0	N	N	N	0 0	0	N	N			
U.S. Virgin Islands	- IN	0	0	_		N	0	0	N	N			

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

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

\* Incidence data for reporting year 2008 and 2009 are provisional.

† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008 (30th week)\*

	Streptococcus pneumoniae, invasive disease, drug resistant <sup>†</sup>																	
			All ages					jed <5 yea	irs		Sy			d seconda	ry			
	Current	Prev 52 w		Cum	Cum	Current		ious eeks	Cum	Cum	Current		rious reeks	Cum	Cum			
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008	week	Med	Max	2009	2008			
United States	15	61	276	1,950	2,074	2	9	21	296	309	121	262	452	7,237	7,159			
New England Connecticut	_	1 0	48 48	32	45 —	_	0 0	5 5	<u>1</u>	6	4	5 1	15 5	186 36	186 14			
Maine <sup>§</sup>	_	0	2	8 1	14	_	0	1 1	_ 1	_	4	0 4	1 11	1 129	8 137			
Massachusetts New Hampshire	_	0	3	5	_	_	0	0		_	_	0	2	11	10			
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	0	6 2	7 11	18 13	_	0 0	1 0	_	4 2	_	0 0	5 2	9	12 5			
Mid. Atlantic	_	4	14	111	215	_	0	3	19	17	46	34	51	1,081	962			
New Jersey New York (Upstate)	_	0 1	0 10	<u> </u>	— 45	_	0 0	0 2	 10	<u> </u>	<u> </u>	4 2	13 8	133 73	120 83			
New York City	_	0	4	3	89	_	0	2	_	_	40	22	36	677	592			
Pennsylvania	_	1	8	59 501	81	_	0 1	2 8	9	11	2	6 24	12 44	198	167			
E.N. Central Illinois	1 N	12 0	41 0	501 N	453 N	N	Ô	0	67 N	61 N	13 1	9	44 19	583 174	648 252			
Indiana Michigan	_	4 0	32 2	225 18	158 15	_	0	6 1	28 2	19 2	1 10	2 3	10 18	85 141	78 120			
Ohio	1	7	18	258	280	_	Ĭ	4	37	40	_	6	15	157	169			
Wisconsin W.N. Central	_ 1	0 2	0 161	90	— 148	_	0 1	0 3	 20	 28	1 1	1 6	4 14	26 165	29 236			
Iowa		0	0	_	_	_	Ö	0	_	_	_	0	2	12	12			
Kansas Minnesota	_	1 0	5 156	38	58 20	_	0	2 3	13	3 20	1	0 2	3 6	14 37	17 60			
Missouri	1	1	5	40	64	_	Ö	1	5	2	_	3	10	83	140			
Nebraska <sup>§</sup> North Dakota	_	0	0 3	10	_	_	0 0	0 0	_	_	_	0 0	3 1	15 3	7			
South Dakota	_	0	2	2	4	_	0	2	2	3	_	0	1	1	_			
S. Atlantic Delaware	12	26 0	53 2	887 13	823 3	2	4 0	14 0	132	131	29	63 0	262 3	1,781 22	1,554 10			
District of Columbia	N	0	0	N	N	N	0	0	N	N	_	3	9	96	81			
Florida Georgia	8 4	15 8	36 25	524 268	453 282	2	2 1	13 5	84 41	83 40		20 14	31 227	563 385	586 327			
Maryland <sup>§</sup> North Carolina	 N	0	1 0	4 N	4 N	N	0	0	 N	1 N	5 9	6 8	16 19	168 308	190 159			
South Carolina§		0	0		_	<u> </u>	0	0	<u> </u>	_	2	2	6	61	50			
Virginia <sup>§</sup> West Virginia	N	0 2	0 13	N 78	N 81	<u>N</u>	0	0 3	N 7	N 7	8	5 0	16 2	174 4	144 7			
E.S. Central	_	5	25	186	229	_	1	3	27	42	13	22	36	640	606			
Alabama§	N	0	0 5	N 51	N 56	N	0	0	N 7	N 9	_	8 1	16 10	237 31	257 49			
Kentucky Mississippi	_	0	3	_	27	_	0	1	_	8	8	3	18	122	81			
Tennessee§	_	3	23	135	146	_	0	3	20	25	5	8	19	250	219			
W.S. Central Arkansas§	_	1 0	6 5	64 37	73 13	_	0	3 3	13 9	12 3	9 9	49 4	80 35	1,377 123	1,199 90			
Louisiana Oklahoma	 N	1 0	5 0	27 N	60 N	N	0	1 0	4 N	9 N	_	13 1	40 7	298 33	316 45			
Texas§	_	0	0		_	_	0	0	_	_	_	31	46	923	748			
Mountain	1	2	7 0	77	87	_	0	3 0	16	11	3	8 3	18	167	379			
Arizona Colorado	_	0 0	0	_	=	_	0	0	_	_		1	8 5	22 53	195 97			
Idaho <sup>§</sup> Montana <sup>§</sup>	N	0	1 1	N	<u>N</u>	N	0 0	1 0	N	N	_	0	2 7	3	2			
Nevada <sup>§</sup>	1	1	4	28	42	_	0	2	6	5	1	1	7	59	45			
New Mexico <sup>§</sup> Utah	_	0 1	0 6	<u>-</u>	<u>-</u>	_	0 0	0 3	9	<u> </u>	1	1 0	5 2	28	23 15			
Wyoming§	_	0	2	9	1	_	0	1	1	_	_	0	1	2	2			
Pacific Alaska	_	0	1 0	_2	1	_	0	1 0	1	1	3	46 0	67 0	1,257	1,389 1			
California	N	0	0	N	N	N	0	0	N	N	2	41	59	1,158	1,262			
Hawaii Oregon§	N	0 0	1 0	2 N	1 N	N	0	1 0	1 N	1 N	_	0 1	3 4	17 24	14 8			
Washington	N	0	0	N	N	Ν	0	0	Ν	N	1	2	9	58	104			
American Samoa C.N.M.I.	N	0	0	N	<u>N</u>	N	0	0	<u>N</u>	N	_	0	0	_	_			
Guam	_	0	0	_	_	_	0	0	_	_	_	0	0		_			
Puerto Rico U.S. Virgin Islands	_	0 0	0 0	_	_	_	0 0	0	_	_	2	3 0	11 0	120	88			
C.S. Virgin Islands																		

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

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

† Incidence data for reporting year 2008 and 2009 are provisional.

† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 1, 2009, and July 26, 2008

						West Nile virus disease <sup>†</sup>											
		Varice	ella (chick	enpox)			Ne	uroinvasi	ve		Nonneuroinvasive§						
	Current		vious veeks	Cum	Cum	Current	Prev 52 w		Cum	Cum	Current		rious reeks	Cum	Cum		
Reporting area	week	Med	Max	Cum 2009	Cum 2008	week	Med	Max	Cum 2009	Cum 2008	week	Med	Max	Cum 2009	Cum 2008		
United States	49	490	1,035	13,741	19,683	_	1	75	23	116		0	77	11	148		
New England	5	11	46	181	1,054	_	0	2	_	_	_	0	1	_	2		
Connecticut	_	0	21	_	533	_	0	2	_	_	_	0	1	_			
Maine <sup>¶</sup> Massachusetts	_	0	11 0	_	166	_	0	0 1	_	_	_	0	0	_	_		
New Hampshire	5	4	11	134	169	_	Ö	Ö	_	_	_	Ö	Ö	_	_		
Rhode Island <sup>¶</sup>	_	0	1	4	_	_	0	1	_	_	_	0	0	_	_		
Vermont <sup>¶</sup> Mid. Atlantic	— 5	3 38	17 58	43 977	186 1.559	_	0 0	0 8	_ 1	3	_	0 0	0 4	_	_		
New Jersev	N N	0	0	977 N	1,559 N	_	0	2		_	_	0	1	_	_		
New York (Upstate)	N	0	0	N	N	_	0	5	1	1	_	0	2	_	_		
New York City	_	0	0	977	1 550	_	0	2	_	1	_	0	2	_	_		
Pennsylvania E.N. Central	5 9	38 157	58 254	977 4,194	1,559 4,795	_	0	2 8	_	1 3	_	0	1 3	_	3		
Illinois	<del>-</del>	33	73	835	4,795	_	0	4	_	1	_	0	2	_	2		
Indiana	_	0	35	332	_	_	0	1	_	i	_	0	1	_	_		
Michigan	6	48	90	1,282	2,041	_	0	4	_	_	_	0	2	_	_		
Ohio Wisconsin	3	42 13	91 55	1,373 372	1,545 544	_	0 0	3 2	_	1	_	0 0	1	_	_ 1		
W.N. Central	4	22	114	648	780	_	0	6	2	10	_	0	21	3	34		
lowa	Ń	0	0	N	N	_	Ö	1	_	2	_	0	1	_	1		
Kansas	_	6	22	176	307	_	0	2	_	4	_	0	3	_	6		
Minnesota Missouri	4	0 10	0 51	417	445	_	0 0	2 3	1	_ 1	_	0 0	2 1	_	5		
Nebraska <sup>¶</sup>	Ň	0	0	417 N	445 N	_	0	1		1	_	0	6	1	 5		
North Dakota	_	0	108	55	_	_	0	2	_	_	_	0	11	_	10		
South Dakota	_	0	4	_	28	_	0	5	1	2	_	0	6	2	7		
S. Atlantic Delaware	22	56 0	146 4	1,362 8	3,161 26	_	0	4 0	=	3	_	0 0	4 1	_	1		
District of Columbia		0	3	_	18	_	0	2	_	_	_	0	i	_			
Florida	11	28	67	897	1,128	_	0	2	_	_	_	0	Ô	_	_		
Georgia Mandand <sup>¶</sup>	N N	0	0	N N	N N	_	0 0	1	_	_	_	0	1 3	_	1		
Maryland <sup>¶</sup> North Carolina	N	0	0	N N	N	_	0	2 1	_	1 1	_	0	ა 1	_	_		
South Carolina®		4	54	154	570	_	Ö	Ö	_	<u>.</u>	_	ŏ	i	_	_		
Virginia <sup>¶</sup>	_	3	119	28	968	_	0	0	_	_	_	0	1	_	_		
West Virginia	11	9	32	275	451	_	0	0	_	1	_	0	0 7	_	_		
E.S. Central Alabama <sup>¶</sup>	_	14 14	28 28	372 370	827 817	_	0 0	7 3	6	10	_	0 0	2	_	20 1		
Kentucky	N	0	0	N	N	_	Ö	1	_	_	_	ő	0	_			
Mississippi		0	1	2	10	_	0	4	5	6	_	0	7	_	15		
Tennessee <sup>¶</sup>	N	0	0	N	N	_	0	2	1	4	_	0	3	_	4		
W.S. Central Arkansas <sup>¶</sup>	_	122 4	747 47	4,988 96	5,992 466	_	0	8 1	3 1	17 4	_	0	6 1	_	21 1		
Louisiana	_	1	6	55	52	_	0	3		2	_	0	5	_	6		
Oklahoma	N	0	0	N	N	_	0	1	_	2	_	0	1	_	4		
Texas <sup>¶</sup>	_	115	721	4,837	5,474	_	0	6	2	9	_	0	4	_	10		
Mountain Arizona	4	33 0	83 0	914	1,435	_	0 0	12 10	8 4	11 5	_	0 0	22 8	6 1	39 1		
Colorado	4	13	44	345	573	_	Ö	4	_	2	_	0	10	2	16		
Idaho¶	N	0	0	N	N	_	0	1	1	2	_	0	6	_	12		
Montana <sup>¶</sup> Nevada <sup>¶</sup>	N	2 0	20 0	105 N	216 N	_	0 0	1 2	1 2		_	0 0	2 3	3	2		
New Mexico <sup>¶</sup>	_	3	20	134	152	_	0	1	_	_	_	0	1	_	_		
Utah	_	12	31	330	484	_	0	2	_	_	_	0	5	_	6		
Wyoming <sup>¶</sup>	_	0	1		10	_	0	0	_	_	_	0	2	_	2		
Pacific Alaska	_	3 2	12 11	105 83	80 39	_	0 0	38 0	3	59 —	_	0	23 0	2	28		
California	_	0	0	- 63 		_	0	37	3	<u> </u>	_	0	20		26		
Hawaii	_	1	4	22	41	_	0	0	_	_	_	0	0	_	_		
Oregon¶ Weshington	N	0	0	N	N	_	0	2	_	_	_	0	4	_	2		
Washington	N	0 0	0	N	N	_	0	1	_	_	_	0	1	_	_		
American Samoa C.N.M.I.	N —		0	N	N	_	0	0	_	_	_	0	0	_	_		
Guam	_	1	3	_	55	_	0	0	_	_	_	0	0	_	_		
Puerto Rico	_	9	23	274	380	_	0	0	_	_	_	0	0	_	_		
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_		

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

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

\* Incidence data for reporting year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† 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.

<sup>§</sup> Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/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 August 1, 2009 (30th week)

All causes, by age (years)							All cau	uses, by	age (yea	rs)					
Reporting area	All Ages	≥65	45–64	25–44	1–24	<1	P&I <sup>†</sup> Total	Reporting area	All Ages	≥65	45–64	25–44	1–24	<1	P&I <sup>†</sup> Total
New England	435	299	91	26	10	9	34	S. Atlantic	1,133	650	321	93	35	34	71
Boston, MA	123	69	34	10	5	5	14	Atlanta, GA	112	47	42	10	4	9	5
Bridgeport, CT	31	24	5	1	1	_	_	Baltimore, MD	146	74	47	15	3	7	12
Cambridge, MA	19	14	3	1	_	1	4	Charlotte, NC	130	84	36	8	1	1	10
Fall River, MA	22 51	18 34	4 13	1	3	_	2 4	Jacksonville, FL Miami, FL	171 90	103 52	46 23	13 9	5 4	4 2	7 7
Hartford, CT Lowell, MA	15	34 14	13		_	_	1	Norfolk, VA	90 44	52 24	23 11	9 4	3	2	2
Lynn, MA	6	4	1	1		_		Richmond, VA	59	26	23	5	3	2	5
New Bedford, MA	25	18	4	3	_	_	1	Savannah, GA	48	29	14	1	1	3	4
New Haven, CT	Ü	Ü	Ü	Ŭ	U	U	Ú	St. Petersburg, FL	58	34	17	4	2	1	6
Providence, RI	57	44	10	3	_	_	2	Tampa, FL	206	136	42	20	5	3	11
Somerville, MA	2	2	_	_	_	_	_	Washington, D.C.	60	36	18	2	4	_	1
Springfield, MA	31	22	5	1	1	2	1	Wilmington, DE	9	5	2	2	_	_	1
Waterbury, CT	16	12	2	2	_	_	2	E.S. Central	847	518	232	61	16	20	59
Worcester, MA	37	24	9	3	_	1	3	Birmingham, AL	182	116	43	14	3	6	9
Mid. Atlantic	2,214	1,446	551	123	53	41	107	Chattanooga, TN	77	50	21	5	_	1	3
Albany, NY	53	36	14	2	<del>_</del>	1	3	Knoxville, TN	76	48	19	6	_	3	10
Allentown, PA	24	18	5	_	1	_	7	Lexington, KY	48	27	19	2	_	_	5
Buffalo, NY	73 36	46	21 11	3 2	1 4	2 1		Memphis, TN	162	94	42	15 7	5 3	6	17 4
Camden, NJ Elizabeth, NJ	36 13	18 10	2	1	4	_	_ 1	Mobile, AL Montgomery, AL	116 53	68 29	38 18	6	_	_	3
Erie, PA	41	23	11	5	1	1	1	Nashville, TN	133	86	32	6	5	4	8
Jersey City, NJ	9	5	4	_			2	W.S. Central	1,447	883	381	97	42	44	57
New York City, NY		679	249	55	24	18	37	Austin, TX	80	49	19	6	3	3	4
Newark, NJ	27	19	6	1	_	1	1	Baton Rouge, LA	67	42	15	7	_	3	_
Paterson, NJ	10	4	6		_		1	Corpus Christi, TX	63	46	13		2	2	2
Philadelphia, PA	564	337	162	36	16	13	28	Dallas, TX	182	99	53	15	8	7	9
Pittsburgh, PA§	26	21	3	2	_	_	3	El Paso, TX	95	53	28	7	3	4	2
Reading, PA	25	17	6	1	1	_	3	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	102	78	15	6	2	1	5	Houston, TX	418	246	107	28	20	17	12
Schenectady, NY	17	13	2	2	_	_	1	Little Rock, AR	74	46	22	3	2	1	3
Scranton, PA	22	15	3	2	1	1	1	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	87	66	15	2	2	2	8	San Antonio, TX	237	148	68	16	1	4	10
Trenton, NJ	22	12	9	1	_	_	2	Shreveport, LA	79	50	23	2	2	2	6
Utica, NY	16	11	4	1	_	_	1	Tulsa, OK	152	104	33	13	1	1	9
Yonkers, NY	22	18	3	1			2	Mountain	1,051	704	213	80	31 3	23	47 4
E.N. Central Akron, OH	1,840 36	1,191 26	441 8	94	56 —	55 2	104	Albuquerque, NM Boise, ID	112 52	75 39	25 5	7 6	1	2 1	3
Canton, OH	24	21	3			_	1	Colorado Springs, CO	60	41	9	5	3	2	1
Chicago, IL	328	171	104	20	15	15	33	Denver, CO	68	42	17	7	1	1	5
Cincinnati, OH	71	44	19	2	1	5	9	Las Vegas, NV	263	184	62	15	i	i	14
Cleveland, OH	221	159	47	6	4	5	3	Ogden, UT	56	39	12	4	_	1	5
Columbus, OH	175	127	32	11	2	3	13	Phoenix, AZ	171	98	37	16	11	9	5
Dayton, OH	105	66	30	6	3	_	2	Pueblo, CO	25	18	6	_	1	_	1
Detroit, MI	166	84	47	14	14	7	7	Salt Lake City, UT	136	85	28	12	7	4	7
Evansville, IN	35	28	.5	1	1	_	2	Tucson, AZ	108	83	12	8	3	2	2
Fort Wayne, IN	70	54	10	3	1	2	_	Pacific	1,557	990	381	118	39	29	135
Gary, IN	13	11	_	_	1	1	_	Berkeley, CA	12	8	3	1	_	_	3
Grand Rapids, MI	48	38	8 57	2	<u> </u>	10	 15	Fresno, CA	130 29	87 25	30	7	3	3	11
Indianapolis, IN Lansing, MI	186 37	102 29	5/ 5	12 3	<u> </u>	_	3	Glendale, CA Honolulu, HI	29 76	∠5 51	2 17	2 5	1	_	6 5
Milwaukee, WI	72	46	17	3 1	3	2	2	Long Beach, CA	45	24	17	3	3	_	6
Peoria, IL	41	32	8	_	1	_	4	Los Angeles, CA	259	156	62	26	8	7	33
Rockford, IL	43	32	7	_	2	_	2	Pasadena, CA	18	12	2	_	3	1	1
South Bend, IN	47	35	8	3	1	_	3	Portland. OR	112	80	25	6	_	i	5
Toledo, OH	75	50	18	3	1	3	3	Sacramento, CA	203	137	44	13	7	2	18
Youngstown, OH	47	36	8	2	1	_	2	San Diego, CA	130	86	35	6	1	2	8
W.N. Central	488	304	124	33	16	11	37	San Francisco, CA	106	58	32	12	1	3	14
Des Moines, IA	U	U	U	U	U	U	U	San Jose, CA	165	109	39	8	5	4	13
Duluth, MN	34	25	8	1	_	_	_	Santa Cruz, CA	32	20	6	5	1	_	3
Kansas City, KS	14	7	6	1	_	_	_	Seattle, WA	113	58	35	14	3	3	5
Kansas City, MO	98	61	29	3	2	3	6	Spokane, WA	49	29	15	3	1	1	2
Lincoln, NE	44	34	6	2	2	_	3	Tacoma, WA	78	50	19	7	2		2
Minneapolis, MN	53	32	14	3	2	2	7	Total <sup>1</sup>	11,012	6,985	2,735	725	298	266	651
Omaha, NE	90	59	22	4	1	4	7								
St. Louis, MO	37	18	13	5	1		5								
St. Paul, MN	59 50	33	14	7 7	4	1	9								
Wichita, KS	59	35	12		4	1_		<u> </u>							

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.

<sup>§</sup> Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks. ¶ Total includes unknown ages.

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

Data 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 mmwq@cdc.gov.

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

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

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

☆ U.S. Government Printing Office: 2009-523-019/41193 Region IV ISSN: 0149-2195