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Weekly

# June 26, 2009 / Vol. 58 / No. 24

# National HIV Testing Day – June 27, 2009

June 27 is National HIV Testing Day, which promotes testing as an important strategy to prevent and control transmission of human immunodeficiency virus (HIV) in the United States. Knowing HIV status at an early stage of infection allows persons to receive appropriate monitoring, treatment, and supportive health care that can extend their lives. Early diagnosis of HIV infection can delay progression to acquired immunodeficiency syndrome (AIDS) and reduce transmission of HIV to others. Nonetheless, in 2006, an estimated 232,700 persons, 21% of those living with HIV infection in the United States, were not aware of their HIV infection status (1).

To enable earlier diagnosis of HIV infection, CDC recommends that all persons aged 13–64 years be offered voluntary HIV testing routinely during health-care visits and that persons at greater risk for HIV be tested more frequently (e.g., at least annually for sexually active men who have sex with men) (2). CDC has increased HIV testing opportunities nationwide, notably in areas with the largest number of AIDS cases among African Americans, to reach those at highest risk for acquiring HIV (3). Additional information on HIV testing resources is available at http://www.hivtest.org.

#### References

- 1. CDC. HIV prevalence estimates—United States, 2006. MMWR 2008;57:1073–6.
- 2. CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. MMWR 2006;55(No. RR-14).
- 3. CDC. A heightened national response to the HIV/AIDS crisis among African Americans. Available at http://www.cdc.gov/hiv/topics/aa/ resources/reports/heightendresponse.htm.

# Late HIV Testing – 34 States, 1996–2005

Without effective antiretroviral therapy, most persons infected with human immunodeficiency virus (HIV) will progress to acquired immunodeficiency syndrome (AIDS) in approximately 10 years (1). Testing, diagnosis, and medical care soon after HIV infection and before developing AIDS can prevent unnecessary morbidity and mortality and reduce further HIV transmission. Persons who receive an AIDS diagnosis concurrently or soon after receiving their initial HIV diagnosis (e.g.,  $\leq 3$  years) represent missed opportunities for prevention and treatment (2). A Healthy People 2010 developmental objective is to increase the proportion of new HIV infections diagnosed before progression to AIDS.\* To characterize late HIV testing, CDC examined data from 1996-2005 from 34 states<sup>†</sup> with confidential namebased HIV and AIDS reporting (the most recent data available) to determine the percentage of persons who received an AIDS diagnosis  $\leq 3$  years after receiving their initial HIV diagnosis. The results indicated that, within 1 year of their HIV diagnosis, 38.3% of patients had received an AIDS diagnosis; another 6.7%

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<sup>\*</sup> Objective 13-15. Available at http://www.healthypeople.gov/data/midcourse/pdf/fa13.pdf.

<sup>&</sup>lt;sup>†</sup> Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming

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].

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received an AIDS diagnosis from 1 to 3 years after their HIV diagnosis. Compared with whites, greater percentages of persons of all other racial/ethnic populations received an AIDS diagnosis ≤3 years after their initial HIV diagnosis. These findings underscore the need for comprehensive HIV testing programs that include both routine screening of persons aged 13–64 years and more frequent testing for persons at increased risk and, therefore, in greater need of periodic HIV testing.

HIV infection and AIDS are notifiable health conditions in all 50 states, the District of Columbia, and five U.S. territories. Although all states have had AIDS reporting since the early 1980s, states have implemented HIV infection reporting over time; national HIV surveillance<sup>§</sup> with uniform reporting was not implemented fully until 2008. CDC regards data from states with confidential, name-based, HIV surveillance systems sufficient to monitor trends and estimate risk behaviors for HIV infection after 4 years of reporting (*3*). The HIV and AIDS diagnosis data in this report were obtained from the 34 states with such reporting since December 2003.

A standardized Kaplan-Meier method was used to examine time from initial HIV diagnosis to AIDS diagnosis for persons receiving HIV diagnoses in the 34 states during 1996-2005. Patients were included in the analysis if the diagnoses of HIV and AIDS they received met the 1999 case definitions (4). Patients were followed up through 2006, and cases were reported to CDC by June 2008. Completeness of AIDS reporting is estimated to be >85%, and duplicate reports are estimated to be <5%(3,5). Estimates of the percentage of persons with HIV who had an AIDS diagnosis at 1 year and 3 years after their initial HIV diagnosis were calculated overall and by age group at HIV diagnosis, race/ethnicity, sex, HIV transmission category, and year of HIV diagnosis. Certain patients did not have a full 3 years of follow-up, but all had the minimum 1 year of follow-up. In time-to-event analyses, persons are followed starting at different times, but the results are analyzed at a single point in time. This analysis results in persons with varying lengths of follow-up but enables use of all available data. In this report, persons identified as Hispanic or Latino might be of any race. Persons identified as American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or other Pacific Islander, white, or of multiple or unknown race all were non-Hispanic. Persons aged ≥13 years were classified according to CDC's standard HIV transmission categories.<sup>9</sup>

<sup>&</sup>lt;sup>§</sup> Additional information available at http://www.cdc.gov/hiv/topics/surveillance/ resources/reports/2007report/technicalnotes.htm.

<sup>9</sup> HIV transmission categories: 1) male-to-male sexual contact (e.g., men who have sex with men), 2) injection-drug use, 3) both male-to-male sexual contact and injection-drug use, 4) high-risk heterosexual contact (i.e., with a person known to have HIV or an HIV risk factor [e.g., male-to-male sexual contact or injection-drug use], and 5) other modes of infection (e.g., receipt of blood transfusion or tissue transplant).

Of the 281,421 persons receiving diagnoses of HIV infection during 1996–2005, 45.0% had an AIDS diagnosis by 3 years after their initial HIV diagnosis (Table). At 3 years after HIV diagnosis, the percentage of persons with an AIDS diagnosis was greater among those who were older (63.2% for those aged  $\geq$ 60 years and 57.5% for those aged 50–59 years) when they received their initial HIV diagnosis than among those who were younger (31.6% for those aged 20-29 years and 22.7% for those aged 13-19 years). Whites were least likely to have an AIDS diagnosis 3 years after their initial HIV diagnosis (42.6%), followed by persons identified as of multiple or unknown race (42.9%), persons identified as black or African American (46.1%), American Indian or Alaska Native (47.2%), Hispanic or Latino (48.4%), and Asian (50.4%). Percentages of those with AIDS 3 years after their HIV diagnosis could not be calculated for Native Hawaiians or other Pacific Islanders because of small case numbers (Table).

At 3 years after their initial HIV diagnosis, 46.9% of men had an AIDS diagnosis compared with 41.5% of women. A similar pattern was observed by HIV transmission category. A greater percentage of male injection-drug users (IDUs) (49.9%) had an AIDS diagnosis at 3 years than female IDUs (41.9%) and a greater percentage of men with high-risk heterosexual contact (50.2%) than women with high-risk heterosexual contact (40.9%). Among those who had male-to-male sexual contact, 47.8% had an AIDS diagnosis after 3 years and among those who had both male-to-male sexual contact and injection-drug use, 47.2% had an AIDS diagnosis.

Persons who received an HIV diagnosis in 2003 were less likely (44.5%) to have an AIDS diagnosis 3 years later than persons diagnosed with HIV in 1996 (49.1%). In addition, persons who received an HIV diagnosis in 2005 were less likely (36.4%) to have an AIDS diagnosis 1 year later than persons diagnosed with HIV in 1996 (43.2%).

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**Editorial Note:** Current estimates suggest that 21% of HIV infections in the United States are undiagnosed (6). To identify all HIV infections and to initiate early intervention effectively, CDC recommends routine screening for persons aged 13–64 years and pregnant women and retesting at least annually for all persons likely to be at high risk\*\* for HIV (7). The prognosis for a patient diagnosed with AIDS has improved substantially since introduction of highly active antiretroviral medications

(8); however, persons who receive a diagnosis late in their course of HIV infection often are more severely immunosuppressed and more likely to experience increased morbidity and short-term mortality than persons with earlier diagnoses in addition to being more likely to transmit HIV when unaware of their infection (7,9).

These findings suggest that from 1996 to 2005 a substantial percentage of persons were diagnosed late in their HIV infection; 38.3% of persons with HIV diagnoses had an AIDS diagnosis within 1 year, and 45.0% had an AIDS diagnosis within 3 years. Because the probability of progression to AIDS following HIV infection in the absence of therapy is approximately 2% in the first 2 years and increases to approximately 50% at 10 years, a diagnosis of AIDS within 1 year of the initial HIV diagnosis suggests late testing for HIV infection and not more rapid advancement to AIDS (1). A diagnosis of AIDS within 3 years from initial HIV diagnosis suggests late testing but also might reflect limited access to medical care, suboptimal treatment, failure to adhere to treatment, or treatment failure. To optimize clinical management and selection and timing of therapy, the U.S. Department of Health and Human Services issued guidelines for use of antiretroviral agents in April 1998, with the most recent update in November 2008.<sup>††</sup>

Understanding how factors such as late testing contribute to the high rates of HIV infection among minorities is important to reduce HIV transmission and morbidity and mortality in these populations. This analysis showed that, compared with whites, greater percentages of persons in other racial/ethnic populations had an AIDS diagnosis within 3 years of their initial HIV diagnosis. This finding follows recent reports that HIV incidence and prevalence are higher among minorities (especially blacks or African Americans and Hispanics or Latinos) and provides another facet of the disproportionate effects of HIV infection on these populations (3,6). Additional findings in this report showed that men (overall and within transmission categories including both sexes) were more likely than women and older persons were more likely than younger persons to receive a diagnosis of AIDS at 3 years after their HIV diagnosis. Women might receive testing for HIV infection more regularly than men because of more frequent health-care visits and being offered HIV testing as part of routine reproductive health care (e.g., family planning visits).

The findings in this report are subject to at least three limitations. First, the data used to examine time to AIDS diagnosis after initial HIV diagnosis only include data from the 34 states with confidential, name-based HIV surveillance since December 2003. The data from these 34 states account for approximately 66% of the nation's AIDS diagnoses but

<sup>\*\*</sup> Includes 1) injection-drug users and their sex partners, 2) persons who exchange sex for money or drugs, 3) sex partners of HIV-infected persons, and 4) men who have sex with men or heterosexual persons who have had more than one sex partner since their most recent HIV test or whose sex partners have had more than one sex partner since their most recent HIV test.

<sup>&</sup>lt;sup>††</sup> Available at http://www.aidsinfo.nih.gov/contentfiles/adultandadolescentgl.pdf.

TABLE. Percentages of persons who received a diagnosis of acquired immunodeficiency syndrome (AIDS) 1 year and 3 years after receiving their initial diagnosis of human immunodeficiency virus (HIV) infection,\* by selected characteristics — 34 states,† 1996–2005

	No. with HIV			diagnosis <sup>·</sup> HIV diagnosis		diagnosis r HIV diagnosis
Characteristic	diagnosis	%	%	(95% Cl§)	%	(95% CI)
Age group at HIV diagnosis (yrs)						
<13	2,100	0.7	19.0	(18.8–19.2)	NA¶	NA
13–19	8,303	3.0	16.1	(15.8–16.4)	22.7	(22.3-23.0)
20–29	60,089	21.4	24.7	(24.4–25.0)	31.6	(31.3–31.9)
30–39	99.657	35.4	38.5		45.3	(45.1–45.5)
40–49	74,934	26.6	45.3	(45.0–45.6)	51.9	(51.7–52.2)
50-59	26,989	9.6	51.3	(50.9–51.8)	57.5	(57.3–57.8)
≥60	9,349	3.3	57.0	(56.4–57.6)	63.2	(63.0–63.5)
Race/Ethnicity**	-,			()		()
American Indian or Alaska Native	1.463	0.5	39.0	(38.6-39.4)	47.2	(46.9–47.4)
Asian	1,598	0.6		(44.2–44.9)	50.4	tt
Black or African American	148,146	52.6		(38.5–39.0)	46.1	(45.9–46.3)
Hispanic or Latino	42,098	15.0	42.0	(41.6–42.3)	48.4	(48.2–48.6)
Native Hawaiian or other Pacific Islander	144	0.1	39.1	( /	NA	(40.2 40.0) NA
White	85,149	30.3	37.1	(36.9–37.4)	42.6	(42.4–42.8)
Multiple or unknown race	2,823	1.0	34.9	(34.4–35.4)	42.9	(42.6–43.2)
Sex	2,020	1.0	04.0	(04.4 00.4)	42.5	(42.0 40.2)
Male	200,882	71.4	10.2	(40.1–40.4)	46.9	(46.8–47.1)
Female	80,539	28.6		(34.6–34.9)	41.5	(40.0–47.1)
	00,009	20.0	04.0	(04.0-04.9)	41.5	(41.4-41.0)
IIV transmission category Male-to-male sexual contact	100,231	35.6	40.9	(40.6–41.2)	47.8	(47.5–48.1)
	100,231	35.0	40.9	(40.0–41.2)	47.0	(47.5–40.1)
Injection-drug use	00.070	7.5	40.0	(41.4.40.6)	40.0	(40 = 50 0)
Male	20,970		42.0	(41.4–42.6)	49.9	(49.5–50.2)
Female	11,184	4.0	32.9	()	41.9	(41.5–42.3)
Male-to-male sexual contact and injection-drug use High-risk heterosexual contact <sup>§§</sup>	9,494	3.4	38.2	(37.5–38.8)	47.2	(46.7–47.7)
Male	21,883	7.8	43.1	(42.6–43.6)	50.2	
Female	21,003 39,218	7.8 13.9		( )	40.9	(49.9–50.5)
Other <sup>¶</sup> or unknown	,		34.0	( /		(40.6–41.2)
	78,441	27.9	37.7	(37.3–38.0)	42.7	(42.4–42.9)
<b>/ear of HIV diagnosis</b> 1996	18,016	6.4	43.0	(42.6–43.7)	49.1	(48.7–49.6)
1997	16,882	6.0	41.5	(41.0–42.0)	47.1	(46.6–47.6)
1997	15,429	6.0 5.5		( )	47.1	(46.9–47.9)
	,		41.6	(41.0-42.1)		( )
1999	23,295	8.3	40.6	(40.1–41.1)	46.9	(46.5–47.4)
2000	28,842	10.2	39.5	()	46.0	(45.5–46.4)
2001	38,818	13.8		(36.0–36.8)	43.8	(43.4–44.2)
2002	36,244	12.9	36.7	(36.3–37.2)	44.4	(44.0–44.8)
2003	33,826	12.0	37.7	(37.2–38.1)	44.5	(44.1–44.9)
2004	35,645	12.7	37.6	(37.2–38.1)	NA	NA
2005	34,424	12.2	36.4	(36.0–36.9)	NA	NA
Total	281,421	100.0	38.3	(38.2–38.5)	45.0	(44.9–45.1)

\* Data were not adjusted for reporting delays and reflect estimates of the probablity that persons will have AIDS 1 year and 3 years after their initial HIV diagnosis, as determined by the Kaplan-Meier method.

<sup>†</sup> Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

§ Confidence interval.

<sup>¶</sup> Not available.

\*\* Hispanic or Latino persons might be of any race; persons in all other categories are non-Hispanic.

<sup>††</sup> CI not presented because the variance for this estimate is zero.

§ Heterosexual contact with a person known to have HIV infection or an HIV risk factor (e.g., male-to-male sexual contact or injection-drug use).

<sup>¶¶</sup> For example, receipt of blood or tissue transplant.

might not be nationally representative. Data from additional states are expected to be added in the future, including states (e.g., California) with high HIV prevalence and heavy concentrations of certain populations (e.g., Hispanics). Second, misclassification of the HIV diagnosis date might have occurred in certain cases. For example, some persons might have had positive results from anonymous, unreported HIV tests before they had a confidential HIV test which was reported to a health department, making the time from initial HIV diagnosis to AIDS diagnosis appear shorter than was actually the case. Finally, the reasons for late HIV testing cannot be discerned from the results of this study; therefore, in addition to promoting early testing, comprehensive strategies to improve medical care access, enhance compliance, and ensure appropriate timing and selection of effective therapy also should be considered.

To reduce late testing for HIV infection, health-care providers should fully implement both routine and risk-based HIV testing, and local public health officials should continue educational efforts regarding the importance of early HIV testing. In 2003, CDC launched an initiative, Advancing HIV Prevention: New Strategies for a Changing Epidemic. Priority strategies included making HIV testing part of routine medical care and implementing new models to diagnose HIV infection outside of clinical settings. From this initiative, CDC sponsored multiple projects that demonstrated the feasibility and yield of HIV screening programs in health-care, corrections, and community settings (10). Achieving earlier diagnosis and reducing HIV transmission will require providers, health departments, and community organizations to promote screening in healthcare settings and periodically retest persons with ongoing risk behaviors. Additionally, expansion of efforts within the social networks of persons who receive an HIV diagnosis can result in testing of others who are likely infected.

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# HIV Testing Among High School Students – United States, 2007

In the United States, an estimated 1.1 million persons were living with human immunodeficiency virus (HIV) infection in 2006, of whom an estimated 232,700 were undiagnosed and unaware they were HIV infected (1). Adolescents and young adults aged 13-24 years represented 4.4% of the total but disproportionately comprised an estimated 9.9% of the undiagnosed cases (1). Early diagnosis of HIV infection facilitates medical interventions and enables infected persons to reduce high-risk behavior and the likelihood of further HIV transmission. To determine the extent to which adolescents are being tested for HIV, data from the 2007 Youth Risk Behavior Survey (YRBS) (the most recent data available) were analyzed. The results indicated that nationwide, 12.9% of all high school students had ever been tested for HIV. The prevalence of HIV testing increased with increasing grade and decreased with increasing age at first sexual intercourse. Prevalence of HIV testing was higher among female students (14.8%) than male students (11.1%), higher among non-Hispanic black students (22.4%) than Hispanic (12.7%) and non-Hispanic white students (10.7%), was higher among students who had ever had sexual intercourse (22.3%) than those who had never had sexual intercourse (4.0%), and among students who had ever had sexual intercourse. To decrease the number of undiagnosed HIV infections among adolescents and promote HIV prevention, CDC recommends that health-care providers offer HIV screening as part of routine medical care. High schools can support those screening efforts by including information on obtaining HIV testing in their HIV curricula.

YRBS, a component of CDC's Youth Risk Behavior Surveillance System,\* estimates the prevalence of health risk behaviors among high school students through biennial national, state, and local surveys. The 2007 national survey obtained cross-sectional data representative of public- and private-school students in grades 9–12 in the 50 states and

<sup>\*</sup>Additional information available at http://www.cdc.gov/yrbss.

the District of Columbia. Students completed an anonymous, self-administered questionnaire that included a question about HIV testing.<sup>†</sup> Students from 157 schools completed 14,103 questionnaires. The school response rate was 81%, the student response rate was 84%, and the overall response rate was 68%.<sup>§</sup> After quality control measures, data from 14,041 students were available for analysis; 12,120 (86.3%) students answered the HIV testing question. A more detailed description of YRBS methods has been published (*2*).

For this analysis, data were weighted to adjust for nonresponse and oversampling of black and Hispanic students. Analyses were conducted on weighted data using statistical software to account for the complex sample design (2). T-tests were used to determine statistically significant differences in HIV testing by sex, race/ethnicity, whether students had been taught in school about acquired immunodeficiency syndrome (AIDS) or HIV infection,<sup>¶</sup> and whether students had ever had sexual intercourse.\*\* The Cochran-Mantel-Haenszel trend test was used to determine statistically significant differences in HIV testing by grade and age when students had first sexual intercourse.<sup>††</sup> Race/ethnicity data are presented only for non-Hispanic black, non-Hispanic white, and Hispanic students (who might be of any race).

The analysis showed that, nationwide, 12.9% of students had ever been tested for HIV (excluding tests for blood donation) (Table 1). Overall, the prevalence of HIV testing was higher among female students (14.8%) than male students (11.1%; p<0.001), higher among non-Hispanic black students (22.4%) than Hispanic students (12.7%; p<0.001) and non-Hispanic white students (10.7%; p<0.001), and increased by grade from 9.1% among 9th-grade students to 18.9% among 12th-grade students (p<0.001). HIV testing also was more common among students who had ever been taught in school about AIDS or HIV infection (13.2%) than among those who had not (9.7%; p<0.001), and higher among students who ever had sexual intercourse (22.3%) than among students who had not (4.0%; p<0.001). Among students who had ever had sexual intercourse, the prevalence of HIV testing decreased by age at TABLE 1. Percentage of high school students who were tested for human immunodeficiency virus (HIV),\* by demographic, behavioral, and other characteristics — United States, Youth Risk Behavior Survey, 2007

Characteristic	%	(95% CI <sup>†</sup> )
Total	12.9	(11.6–14.4)
Sex		
Female	14.8	(13.0–16.8)
Male	11.1	(9.9–12.4)
Race/Ethnicity		
White, non-Hispanic	10.7	(9.4–12.3)
Black, non-Hispanic	22.4	(19.1–25.9)
Hispanic	12.7	(11.0–14.5)
Grade		
9	9.1	(7.5–10.9)
10	11.0	(9.7-12.4)
11	13.9	(11.3–16.9)
12	18.9	(16.4–21.8)
Taught in school about acquired immuno- deficiency syndrome (AIDS) or HIV <sup>§</sup>		
Yes	13.2	(11.9–14.7)
No	9.7	(7.9–11.9)
Ever had sexual intercourse <sup>1</sup>		. ,
Yes	22.3	(20.6-24.1)
No	4.0	(3.1–5.0)
Age when first had sexual intercourse (yrs)**		
<13	30.7	(27.0-34.7)
13	29.5	(25.3-34.0)
14	23.3	(20.6–26.3)
15	20.7	(17.5–24.4)
16	15.9	(13.7–18.3)
<u>≥</u> 17	12.6	(9.2–16.9)

\* Determined from 12,120 valid responses to the question, "Have you ever been tested for HIV, the virus that causes AIDS [acquired immunodeficiency syndrome]? (Do not count tests done if you donated blood.)."

<sup>†</sup> Confidence interval.

§ Determined by response to the question, "Have you ever been taught about AIDS or HIV infection in school?"

<sup>¶</sup> Determined by response to the question, "Have you ever had sexual intercourse?"

\*\* Among students who had ever had sexual intercourse; determined by response to the question, "How old were you when you had sexual intercourse for the first time?"

first sexual intercourse, from 30.7% among students who first had sexual intercourse before age 13 years to 12.6% among students who first had sexual intercourse at age 17 years or older (p<0.001). The prevalence of HIV testing increased with increasing grade among non-Hispanic white female students (p<0.001), non-Hispanic black female students (p<0.001), Hispanic female students (p=0.02), and non-Hispanic black male students (p=0.002) (Table 2). Among students who ever had sexual intercourse, the prevalence of HIV testing increased with increasing grade among non-Hispanic white female students (p=0.02), non-Hispanic black female students (p=0.003), Hispanic female students (p=0.01), and non-Hispanic black male students (p=0.002). The prevalence of HIV testing was

<sup>&</sup>lt;sup>†</sup> Determined by response to the question, "Have you ever been tested for HIV, the virus that causes AIDS [acquired immunodeficiency syndrome]? (Do not count tests done if you donated blood.)."

<sup>&</sup>lt;sup>§</sup> Overall response rate = (number of participating schools / number of eligible sampled schools) × (number of useable questionnaires / number of eligible students sampled).

<sup>&</sup>lt;sup>9</sup> Determined by response to the question, "Have you ever been taught about AIDS or HIV infection in school?"

<sup>\*\*</sup> Determined by response to the question, "Have you ever had sexual intercourse?"

<sup>&</sup>lt;sup>††</sup> Determined by response to the question, "How old were you when you had sexual intercourse for the first time?"

		All high schoo	l student	S	High school students who ever had sexual intercour						
	Fe	emale		Male	Fe	emale	Ма	ale			
Race/Ethnicity and grade	%	(95% Cl <sup>†</sup> )	%	(95% CI)	%	(95% CI)	%	(95% CI)			
White, non-Hispanic	12.0	(10.2–14.2)	9.4	(8.1–11.0)	23.8	(20.9–26.9)	16.3	(14.3–18.6)			
9	7.6	(5.0–11.3)	7.9	(5.1–12.0)	20.5	(12.4–32.0)	17.5	(10.5–27.7)			
10	8.8	(6.8–11.2)	8.6	(6.1–12.1)	18.4	(14.2–23.4)	16.9	(11.5–24.2)			
11	12.7	(8.6–18.3)	10.3	(7.6–13.9)	23.1	(16.5–31.3)	16.6	(12.3-22.0)			
12	19.8	(15.8–24.6)	11.3§	(8.7–14.5)	29.5	(24.3–35.3)	15.1 <sup>§</sup>	(11.3–19.7)			
Black, non-Hispanic	27.2	(22.1–32.9)	17.3	(14.6–20.5)	38.7	(32.8–44.9)	21.4	(18.4–24.9)			
9	17.2	(11.5–24.9)	9.9	(5.9–16.2)	30.9	(21.7-42.0)	10.8	(5.7–19.6)			
10	24.7	(20.1–29.9)	18.5	(11.5-28.4)	35.4	(27.2-44.6)	23.0	(14.8–34.0)			
11	30.7	(22.6-40.2)	18.1	(13.4–24.1)	37.4	(27.6-48.3)	20.6	(14.5-28.5)			
12	41.4	(34.2–48.9)	27.9	(22.0–34.6)	49.4	(42.1–56.7)	33.4	(26.5–41.0)			
Hispanic	13.8	(11.5–16.4)	11.5	(9.4–14.0)	21.3	(17.4–25.9)	17.1	(13.7–21.2)			
9	11.8	(8.6–16.1)	8.9	(5.2–14.9)	15.3	(9.7–23.3)	15.7	(8.2–28.1)			
10	9.1	(5.4–14.8)	11.2	(8.5–14.5)	15.9	(9.5-25.3)	17.5	(12.8–23.3)			
11	15.4	(10.2–22.4)	12.0	(8.3–17.1)	27.2	(17.9–38.9)	16.5	(10.9–24.1)			
12	20.5	(14.0–28.9)	16.1 <sup>§</sup>	(11.2–22.5)	24.9	(18.2–33.2)	18.8 <sup>§</sup>	(13.7–25.3)			
Total	14.8	(13.0–16.8)	11.1	(9.9–12.4)	26.9	(24.4–29.6)	18.0	(16.5–19.6)			

TABLE 2. Percentage of all high school students and high school students who had ever had sexual intercourse who were tested for human immunodeficiency virus,\* by race/ethnicity, sex, and grade — United States, Youth Risk Behavior Survey, 2007

\* Determined from 12,120 valid responses to the question, "Have you ever been tested for HIV, the virus that causes AIDS [acquired immunodeficiency syndrome]? (Do not count tests done if you donated blood.)."

<sup>†</sup> Confidence interval.

§ Nonsignificant (p≥0.05) trend by grade using Cochran-Mantel-Haenszel trend test.

highest among 12th-grade non-Hispanic black students who had ever had sexual intercourse; 49.4% of female and 33.4% of male students in this group had been tested for HIV.

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Editorial Note: At the end of 2006, an estimated 48% of adolescents and young adults infected with HIV were unaware of their infection (1), representing missed opportunities for diagnosis, treatment, and reduction in the number of new HIV transmissions. The findings from this analysis indicate that in 2007, 12.9% of high school students overall and 22.3% of students who ever had sexual intercourse had been tested for HIV. These results are similar to those of the 2000 National Survey of Teens on HIV/AIDS that determined that 10% of adolescents overall and 27% of sexually active adolescents aged 15–17 years reported ever being tested for HIV (3).<sup>§§</sup> The results for non-Hispanic black students are especially relevant, because, as of 2007, non-Hispanic blacks accounted for 72% of HIV diagnoses among adolescents aged 13–19 years (4). This analysis indicated that non-Hispanic black students

had the highest overall race/ethnicity-specific percentage of students tested (22%), and among all students who had sexual intercourse, non-Hispanic black students in 12th grade had the highest testing prevalence. These findings suggest that, with respect to race/ethnicity, students with the highest group risk are getting tested at higher rates.

Visits to health-care providers are opportunities for HIV testing. Data collected during 1994–1996 for the National Longitudinal Study of Adolescent Health reveal that two thirds of adolescents aged 15–17 years had a physical examination in the preceding 12 months (*5*). In the 2000 National Survey of Teens, two thirds of the adolescents who reported being tested for HIV had asked to be tested, and most had been tested in health-care settings, including general health clinics (50%), private physician offices (31%), and HIV clinics (9%) (*3*).

In 2006, CDC recommended routine HIV screening for all patients aged 13–64 years (6). Certain persons at high risk for HIV should be tested at least annually: 1) injection-drug users and their sex partners, 2) persons who exchange sex for money or drugs, 3) sex partners of HIV-infected persons, and 4) men who have sex with men or heterosexual persons who have had more than one sex partner since their most recent HIV test or whose sex partners have had more than one sex partner since their most recent HIV test. In addition, all patients seeking treatment for STDs and those attending STD clinics should be

<sup>&</sup>lt;sup>§§</sup> The Kaiser survey asked, "Have you ever been tested for HIV?" Of those tested overall, approximately 90% were tested at a clinic or doctor's office and 1% were tested as part of a blood drive or donation.

screened routinely for HIV during each visit for a new health concern, regardless of known or suspected risk behaviors for HIV infection.

The Society for Adolescent Medicine recommends offering testing and effective risk-reduction counseling and assistance as part of routine care of sexually active adolescents, especially those who live in high HIV prevalence areas (7). The American College of Obstetricians and Gynecologists also recommends HIV screening for sexually active women aged <19 years (8). Although the results of this report show that the prevalence of HIV testing was higher among female than male students and increased with increasing grade, 73% of female students who had sexual intercourse had never been tested for HIV.

Routine HIV screening in health-care settings, as recommended, could increase the proportion of adolescents who are tested for HIV among those who receive medical care. Adolescents who have had sexual intercourse or are considering having sexual intercourse should know their HIV status and the HIV status of their sex partners (6). Previously published YRBS data for 2007 showed that 15% of high school students had had sexual intercourse with four or more persons during their lifetime (2). Such students and adolescents at high risk for HIV infection should be tested at least annually (6).

The findings in this report are subject to at least three limitations. First, these results apply only to adolescents who attend school and therefore are not representative of all adolescents. In 2005, of persons aged 16–17 years in the United States, approximately 4% were not enrolled in a high school program and had not completed high school (9). Second, the extent of YRBS underreporting or overreporting of behaviors such as HIV testing or age at first sexual intercourse has not been determined. Third, rates of HIV infection and sexual behaviors vary geographically, and this national analysis cannot be applied to regions, states or cities.

HIV testing among sexually active adolescents is an important strategy to reduce the incidence of HIV infection (6). The results of this analysis showed that students who had been taught about AIDS or HIV in school were more likely to have had an HIV test than were those who had not been taught about AIDS or HIV. Although approximately 90% of high school students have been taught about AIDS or HIV (2), only 12.9% have had an HIV test. High schools can enhance their HIV prevention curricula by including information on locations and procedures for obtaining free, confidential HIV testing.<sup>¶</sup> In accordance with state and local policies, school health professionals could refer at-risk students for HIV prevention, counseling, and testing services. Many schools collaborate with local health centers and community-based organizations to help students receive screenings and some school-based health clinics offer HIV testing on-site.\*\*\* Health-care providers, educators, and parents or guardians play critical roles in providing support and guidance to adolescents in making decisions about the timing and frequency of HIV testing. Because adolescents might be sexually active but unwilling to discuss this information, health-care providers should provide HIV testing routinely to all patients aged ≥13 years in accordance with CDC recommendations.

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<sup>&</sup>lt;sup>55</sup> National HIV and STD testing resources, including locations of testing sites, are available at http://www.hivtest.org, and information about youth-friendly HIV testing, counseling, and care is available at http://www.adolescent aids.org.

<sup>\*\*\*</sup> Some examples are available at http://www.cdc.gov/healthyyouth/sexual behaviors/pdf/hivtesting\_adolescents.pdf.

# Progress Toward the 2012 Measles Elimination Goal – Western Pacific Region, 1990–2008

In 2003, the World Health Organization (WHO) Regional Committee of the Western Pacific Region (WPR) formally declared a measles elimination goal\* (1), and in 2005, the committee established a target date of 2012 for regional measles elimination (2). Key strategies recommended by WHO for achievement of measles elimination include 1) very high (≥95%) vaccination coverage with 2 doses of measles-containing vaccine (MCV1 and MCV2) through routine vaccination and/or supplemental immunization activities (SIAs)<sup>†</sup>; 2) highquality case-based<sup>§</sup> measles surveillance; and 3) access to an accredited measles laboratory network for testing of suspected measles cases and identification of measles virus genotypes. This report describes progress toward measles elimination in the WPR through 2008. Measles likely has been eliminated or nearly eliminated in 24 of the 37 countries and areas in the WPR (referred to in this report as countries). However, large numbers of measles cases continue to be reported from several countries. During 2008, a total of 131,441 confirmed measles cases (98.4 per million population) were reported from China and 11,015 cases (86.1 per million population) from Japan, two countries that account for 82% of the region's population and >97% of its confirmed measles cases. Intensified efforts by WPR countries, particularly China and Japan, will be required to achieve the 2012 goal.

## **Routine Vaccination**

Among the 37 countries in the WPR,<sup>¶</sup> 36 report administrative and, if available, survey data and their estimates of vaccination coverage among infants annually to WHO and the United Nations Children's Fund (UNICEF). The other country, Pitcairn Islands (with a population of approximately 50 persons), does not report data to WHO/UNICEF and is not included in this report. Based on these and other data available from published literature, WHO/UNICEF make their estimates of actual vaccination coverage for WHO member states (*3*). Regional MCV1 coverage by year was determined using WHO/UNICEF estimates of vaccination coverage and, when these estimates were not available (such as in certain areas of member states), coverage was determined using country estimates and weighting by country population size. Because China includes 75% of the region's population, its data are reported separately.

The history of measles elimination in the WPR can be divided into three periods: the period of measles control (1990-1995), the period of accelerated measles control (1996-2002), and the period of measles elimination (from 2003 to the present).\*\* This report uses these three periods to describe progress toward measles elimination. Among the 35 WPR countries reporting (i.e., all WPR countries except China and Pitcairn Islands), mean regional MCV1 coverage was 80.8% during the period of measles control (1990–1995), increased to 89.0% during the period of accelerated control (1996–2002), and reached 91.6% during the period of measles elimination (2003-2008) (Figure). The WHO-estimated mean MCV1 coverage in China was 85.5%, 84.4%, and 88.8% during the same periods, but increased from 85% in 2003 to 94% in 2007 (data were not available for 2008). Among 36 countries (including China) reporting dose schedules in 2008, MCV1 was scheduled for administration at age <9 months in two (5.6%) countries, age 9 months in five (13.9%) countries,<sup>††</sup> age 12 months in 26 (72.2%) countries, and age 15 months in three (8.3%) countries (Table 1).

Before 2003, few countries reported MCV2 coverage to WHO/UNICEF. During 2003–2008 (the period of measles elimination), the number of reporting countries varied annually from 16 to 24. These country estimates were used to determine the regional weighted MCV2 coverage by year. Mean MCV2 coverage (excluding China) during 2003–2008 was 84.2%. China's reported MCV2 coverage ranged from 84.1% to 96.4% during 2003–2007, with a mean of 92.5%. As of 2008, among the 30 countries that had scheduled

<sup>\*</sup>Measles elimination is defined as the absence of endemic measles virus transmission.

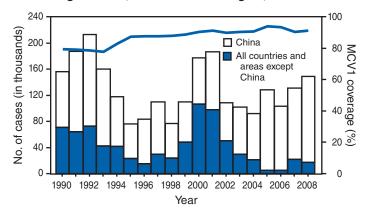
<sup>&</sup>lt;sup>†</sup> SIAs generally are carried out in two stages: 1) an initial nationwide catch-up SIA usually targets all children aged 9 months–14 years, followed by 2) periodic follow-up SIAs targeting all children born since the last SIA.

<sup>&</sup>lt;sup>§</sup> Data collected and reported on individual cases rather than in aggregate form.
<sup>§</sup> The WPR includes 37 countries and areas: Australia, Brunei Darussalam, Cambodia, China, Hong Kong (China, Special Administrative Region [SAR]), Macau (China, SAR), Japan, Malaysia, Mongolia, New Zealand, Lao People's Democratic Republic, Papua New Guinea, Philippines, Republic of Korea, Singapore, Vietnam, and 21 Pacific island countries and areas including American Samoa, Commonwealth of the Northern Marianas Islands, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, New Caledonia, Niue, Nauru, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna.

<sup>\*\*</sup> Measles control aims to reduce the number of measles cases and deaths by 1) high (≥90%) coverage with a single dose of measles vaccine; 2) measles surveillance in every district with aggregate data reporting; and 3) case management with vitamin A and treatment for measles complications. Accelerated measles control aims to prevent measles outbreaks by providing a second dose of measles vaccine, often through campaigns, and conducting active measles surveillance with laboratory confirmation of suspected outbreaks. Measles elimination aims to interrupt transmission of measles by 1) very high (≥95%) coverage with 2 doses of measles vaccine through routine vaccination systems or SIAs; 2) high-quality case-based surveillance; and 3) access to an accredited measles laboratory network for confirmation of suspected measles cases and identification of measles genotypes.

<sup>&</sup>lt;sup>††</sup> Papua New Guinea also provides a supplementary dose of MCV at age 6 months.

FIGURE. Number of reported measles cases and coverage with first dose of measles-containing vaccine (MCV1) — World Health Organization, Western Pacific Region, 1990–2008\*



\* The history of measles elimination in the Western Pacific Region can be divided into three periods: the period of measles control (1990-1995), the period of accelerated measles control (1996-2002), and the period of measles elimination (from 2003 to the present). Measles control aims to reduce the number of measles cases and deaths by 1) high ( $\geq$ 90%) coverage with a single dose of measles vaccine; 2) measles surveillance in every district with aggregate data reporting; and 3) case management with vitamin A and treatment for measles complications. Accelerated measles control aims to prevent measles outbreaks by providing a second dose of measles vaccine, often through campaigns, and conducting active measles surveillance with laboratory confirmation of suspected outbreaks. Measles elimination aims to interrupt transmission of measles by 1) very high (≥95%) coverage with 2 doses of measles vaccine through routine vaccination systems or SIAs; 2) high-quality case-based surveillance; and 3) access to an accredited measles laboratory network for confirmation of suspected measles cases and identification of measles genotypes.

administration of MCV2, 12 countries (40%) administered MCV2 at age 13–23 months, three (10%) at age 2 years, eight (26.7%) at age 4 years, one (3.3%) at age 5 years, five (16.7%) at age 6 years, and one (3.3%) at age 7 years.

## **Supplemental Immunization Activities**

During the periods of measles accelerated control (1996-2002) and elimination (2003-2008), many countries conducted SIAs. Approximately 94.4 million children and adolescents in 28 WPR countries (excluding China) were vaccinated through SIAs. In China, SIAs during 2003-2008 reached approximately 101 million children and adolescents in 14 provinces (Table 2). SIA coverage generally has been higher since the region established an elimination goal. Excluding China, SIAs reached 87% of the target population in 25 countries during the period of measles accelerated control (1996-2002) and increased to 94% of the target population in 28 countries during the period of measles elimination (2003–2008). In China, SIA coverage by year during 2003–2008 was 95%–99%, with the exception of 2005. SIAs in the WPR were frequently used to provide vitamin A, oral polio vaccine, and anti-helminthics in addition to MCV.

## **Surveillance Activities**

By 2008, all countries in WPR conducted case-based measles surveillance, supported by the measles and rubella laboratory network (LabNet), a network of 382 laboratories. Standard indicators for high-quality measles surveillance include 1) two or more suspected measles cases per 100,000 discarded as nonmeasles; 2)  $\geq$ 80% of suspected measles cases with adequate investigations (i.e., investigations within 48 hours of rash onset that include all essential data elements); 3)  $\geq$ 80% of suspected measles cases with clinical specimens collected within 28 days of rash onset; and 4)  $\geq$ 80% of specimens with laboratory results available within 7 days after receipt in the laboratory (4,5). In 2008, the region's indicator achievements were 1.6, 47%, 62%, and 76%, respectively (6).

Genotypes of endemic measles virus identified among measles patients in the WPR since 2007 include D5 in Japan, D9 in Lao People's Democratic Republic, Malaysia, and New Zealand, and H1 in China, Hong Kong (China, Special Administrative Region [SAR]), and Vietnam. In addition, genotypes B3, D4, D8, and G3 were identified among measles patients; some of these genotypes were imported from other regions.

# **Monitoring Measles Incidence**

Suspected measles cases can be confirmed by the laboratory (e.g., presence of anti-measles immunoglobulin M (IgM) antibodies in clinical specimens), by epidemiologic linkage to another confirmed case, and by clinical criteria (i.e., cases that satisfy the measles clinical case definition<sup>§§</sup> and cannot be discarded as nonmeasles by laboratory or other criteria). Since 1990, the largest annual number of measles cases reported from the WPR (excluding China) was 106,172 (255.6 per million population) in 2000. In 2008, excluding China, 14,724 cases (32.6 per million) were reported, a decrease of 86%. (Figure). China reported 131,441 measles cases (98.4 per million) in 2008. A large outbreak in Japan resulted in over 18,000 (140.7 per million) reported cases in 2007 and 11,015 (86.1 per million) in 2008 (7). Excluding China and Japan, 3,564 measles cases (11.8 per million) were reported from the rest of the region in 2008. In descending order, the majority of these were from Cambodia (1,765), Philippines (880), Malaysia (333), Vietnam (258), and Lao People's Democratic Republic (117) (6).

<sup>&</sup>lt;sup>§§</sup> The WHO-recommended clinical case definition of measles is illness in a person of any age with fever, rash, and at least one of the following: cough, coryza, or conjunctivitis.

TABLE 1. Coverage with first dose of measles-containing vaccine (MCV1), by country/area — World Health Organization, Western Pacific Region, 2003–2008

	Age at 1st	Age at 2nd _	MCV1 coverage (%)*									
Country/Area	dose (MCV1)		2003	2004	2005	2006	2007	2008				
Australia	12 mos	4 yrs	94	93	94	94	94	94				
Brunei Darussalam	15 mos	4 yrs	99	99	97	97	97	100				
Cambodia	9 mos	None	65	80	79	78	79	89				
China	8 mos	18–24 mos	85	86	86	93	94	NA <sup>†</sup>				
Hong Kong (China)	12 mos	6 yrs	83	95	95	95	95	95				
Japan	1 yr	5–7 yrs	99	99	99	99	98	97				
Lao People's Democratic Republic	9 mos	None	42	36	41	48	40	52				
Macau (China)	12 mos	18 mos	90	91	91	90	90	90				
Malaysia	12 mos	7 yrs	94	71	90	90	90	94				
Mongolia	8–11 mos	14–21 mos	95	96	99	99	98	97				
New Zealand	15 mos	4 yrs	84	83	82	82	79	NA				
Papua New Guinea	9 mos§	None	42	37	49	55	47	54				
Philippines	9 mos	None	80	80	93	92	92	86				
Republic of Korea	12–15 mos	4–6 yrs	96	99	99	99	92	92				
Singapore	1–2 yrs	6–7 yrs	93	95	96	93	95	95				
Vietnam	9 mos	6 yrs	93	97	95	93	83	92				
Pacific island countries		,										
American Samoa	12 mos	4–6 yrs	89	NA	80	90	89	86				
Cook Islands	12 mos	15 mos	99	99	99	99	98	95				
Federated States of Micronesia	12 mos	13 mos	91	85	96	83	92	NA				
Fiji	12 mos	6 yrs	91	62	70	99	81	94				
French Polynesia	12 mos	2 yrs	NA	NA	99	96	99	NA				
Guam	12 mos	4–6 yrs	84	82	81	85	NA	NA				
Kiribati	12 mos	6 yrs	72	56	85	61	93	72				
Marshall Islands	12 mos	13 mos	90	70	86	96	94	NA				
Nauru	12 mos	15 mos	53	67	80	99	99	100				
New Caledonia	12 mos	2 yrs	NA	NA	NA	99	99	99				
Niue	15 mos	4 yrs	86	99	99	99	99	100				
Northern Mariana Islands	12 mos	4 yrs	92	82	84	84	71	100				
Palau	12 mos	15 mos	99	99	98	98	91	97				
Samoa	12 mos	13 mos	99	25	57	54	63	45				
Solomon Islands	12 mos	None	70	72	70	84	78	60				
Tokelau	12 mos	15 mos	41	82	100	100	100	92				
Tonga	12 mos	18 mos	99	99	99	99	99	100				
Tuvalu	12 mos	18 mos	95	97	62	84	95	93				
Vanuatu	12 mos	None	48	59	70	99	65	100				
Wallis and Futuna	12 mos	24 mos	100	NA	NA	NA	86	NA				

\* World Health Organization estimates were used for member states through 2007. National estimates were used for areas and jurisdictions of member states and for Papua New Guinea through 2007, and for all countries and areas in 2008. Vaccination schedule as of 2008.

<sup>†</sup>Not available.

<sup>§</sup> Papua New Guinea also administers a dose at age 6 months that is considered supplementary to MCV1 administered at age 9 months.

## **Country Measles Elimination Status**

Several WPR countries have achieved or nearly achieved the indicator targets suggesting substantial progress toward measles elimination. In 2006, Republic of Korea declared measles eliminated after having successfully implemented WHO-recommended strategies (8). In Australia, measles incidence has ranged from 0.5 to 6.1 per million since 2002; case investigations and genotype analysis indicated that the majority of these cases were imported or import-related (9). Reported routine vaccination coverage in Australia is high; however, sensitivity of suspected measles reporting is uncertain because surveillance performance is not monitored nationally. In Macau (China, SAR), fewer than five cases per year have been reported since 2001, corresponding to an annual incidence of zero to 8.3 per million; case investigations and genotype analysis of specimens during this period indicate that most of these cases were imported. In 2008, surveillance performance in Macau (China, SAR) satisfied all key indicator targets. All 21 Pacific island countries have reported zero measles cases in 2007 and 2008.

**Reported by:** Unit of Expanded Programme on Immunization, World Health Organization Regional Office of the Western Pacific, Manila, Philippines. Vaccines and Biologicals Dept, World Health Organization, Geneva, Switzerland. Global Immunization Div, Div of Viral Diseases, National Center for Immunization and Respiratory Diseases, CDC.

# TABLE 2. Supplementary immunization activities, by country/area, target age group, type of vaccine, and year — World Health Organization, Western Pacific Region, 1996–2008

				Persons vac	cinated
Country/Area	Year	Target age group	Type of vaccine	No.	(%)
Australia	1998	5–12 yrs	M*	1,335,000	(75)
Cambodia	2002-2004	9 mos–14 yrs	M	2,439,029	(100)
	2007	9–59 mos	M	1,530,097	(105)
China	2003		M	, ,	. ,
Jillina		8 mos–12 yrs		819,732	(99)
	2004	8 mos–12 yrs	M	7,791,796	(98)
	2005	8 mos–14 yrs	M	19,826,098	(75)
	2006	8 mos–14 yrs	M	5,900,000	(95)
	2007	8 mos–14 yrs	Μ	20,100,000	(99)
	2008	8 mos–14 yrs	Μ	46,554,324	(98)
Hong Kong (China)	1997	1–19 yrs	M	873,000	(97)
	2008–2012		MR <sup>†</sup>	NA§	NA
Japan		13 yrs, 18 yrs			
ao People's Democratic Republic	2000-2001	9–59 mos	M	602,662	(86)
	2007	9 mos–14 yrs	M	2,088,328	(96)
Vlalaysia	2004	7–15 yrs	M	4,457,862	(93)
<i>I</i> ongolia	1996	9 mos–10 yrs	Μ	543,869	(98)
0	2000	9 mos–8 yrs	Μ	352,740	(96)
	2007	2–10 yrs	M	401,263	(97)
Jow Zoolond					
New Zealand	1997	2–10 yrs	M	300,000	(75)
Papua New Guinea	1997	9–59 mos	M	514,366	(76)
	2003–2005	6 mos–10 yrs	M	1,533,815	(76)
	2008-2009	6 mos–6 yrs	Μ	NA	NA
Philippines	1998	9 mos–14 yrs	М	22,950,000	(85)
	2004	9 mos–7 yrs	M	17,475,136	(95)
	2004	9–48 mos	M	8,216,421	
					(95)
Republic of Korea	2001	8–16 yrs	MR	5,614,327	(96)
/ietnam	2002–2003	9 mos–10 yrs	M	15,326,103	(99)
	2004	12–18 yrs	M	1,544,001	(95)
	2007	1–20 yrs	Μ	3,729,848	(97)
	2008	7–20 yrs	Μ	1,008,690	(97)
Pacific island countries	2000	0,.0		.,,	(01)
Cook Islands	1998	9 mos–14 yrs	M	5,545	(85)
	2006	1-14 (mos)/35 (females)	MR	7,458¶	NA
Fiji	1997	9 mos–14 yrs	М	203,398	(81)
	2001	9 mos–5 yrs	M	103,200	(86)
					. ,
	2006	6 mos–4 yrs	MR	89,763	(98)
Federated States of Micronesia	2004	12–59 mos (Chuuk)	MMR	19,000†	NA
French Polynesia	1998	8–12 yrs	M	19,250	(77)
Guam	2003	12 mos–4 yrs	MMR**	19,000†	NA
Kiribati	1998	9 mos–14 yrs	Μ	23,475	(86)
1 (Index)	2006	1–14 yrs (males)/19 yrs (females)	MR	39,715	(93)
Manala all Ialanala					
Marshall Islands	1998	NA	M	NA	NA
	2003	6 mos–40 yrs	MMR	37,111	(83)
	2004	13 mos–18 yrs	MMR	NA	NA
Nauru	1997	9 mos–14 yrs	Μ	2,540	(100)
	2003	9 mos–19 yrs	M	3,350 <sup>¶</sup>	NA
New Caledonia	1997	6–10 yrs	M	18,023	(90)
Niue	1997	9 mos–15 yrs	M	788	(99)
	2003	5–11 yrs	MMR	101	(36)
Palau	1998	NA	M	NA	NA
Samoa	1998	9 mos–15 yrs	M	72,236	(97)
	2003	1–18 yrs	MR	47,489	(88)
	2005	9–35 mos	MR	11,610 <sup>¶</sup>	NA
	2008	12–69 mos	MR	20,806	(91)
Solomon Islands	1998	9 mos–14 yrs	M	124,543	(81)
	2003	9 mos–2 yrs	M	44,407	(92)
	2006	1–4 yrs	Μ	60,002	(97)
Tokelau	1998	9 mos–16 yrs	M	568	(100)
	2003	\$	§	837	(100)
Tanga					
Tonga	1998	9 mos–14 yrs	M	33,331	(94)
Tuvalu	1998	1–14 yrs	M	3,033	(100)
	2005	12 mos–34 yrs	MR	5,508 <sup>¶</sup>	NA
Vanuatu	1998	9 mos–14 yrs	М	73,958	(95)
	2002	8 mos–5 yrs	M	NA	(70)

\* Measles. † Measles and rubella. § Not available. ¶ Estimated number vaccinated. \*\* Measles, mumps, and rubella.

Editorial Note: The WPR has made progress toward the 2012 regional goal of measles elimination as evidenced by increasing routine and SIA measles vaccination coverage and declining measles incidence in the presence of improving case-based, laboratory-supported measles surveillance systems. Nevertheless, in the region overall and in many countries, surveillance does not yet meet elimination standards, leading to underreporting or misclassification of cases. Moreover, countries such as Cambodia, Lao People's Democratic Republic, Papua New Guinea, and others face challenges to achieving the 2012 goal because of general weaknesses of public health services that result in low routine vaccination coverage. In such countries, continuing periodic SIAs to attain high MCV coverage while working to strengthen routine vaccination systems will be critical to achieve the goal. Ensuring that all suspected measles cases are identified, reported and fully investigated by providing training, adequate operational costs, and laboratory support is urgently needed to monitor progress toward and ultimately validate achievement of measles elimination. Monitoring of circulating measles genotypes also is needed to validate interruption of endemic measles virus transmission.

Challenges also exist in China and Japan, which together accounted for 82% of the region's population and more than 97% of its reported measles cases in 2008. Both countries have made renewed commitments and plans for achieving the 2012 regional goal. China has strengthened routine measles vaccination by scheduling earlier administration of MCV2 (at age 18–24 months instead of 7 years), providing incentives to health-care workers for immunizing children, and requiring proof of receiving 2 doses of measles vaccine at school entry. Japan is implementing a national measles elimination plan established in December 2007 (7).

Efforts to eliminate measles help strengthen health systems and reduce child mortality from pneumonia, diarrhea, and micronutrient deficiencies that occur after measles infection, thereby helping to achieve the United Nations' Millennium Development Goal No. 4 (to reduce by two thirds, from 1990 to 2015, the mortality rate in children aged <5 years).<sup>9</sup> To achieve measles elimination and Millennium Development Goal No. 4, intensified and innovative efforts will be required by WPR countries and measles elimination partners\*\*\* to implement recommended strategies and target potentially new high-risk groups (e.g., young adults) revealed by epidemiologic analysis of surveillance data.

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# Updated Recommendations for Use of Haemophilus influenzae Type b (Hib) Vaccine: Reinstatement of the Booster Dose at Ages 12–15 Months

On December 13, 2007, certain lots of *Haemophilus influenzae* type b (Hib) vaccine marketed as PedvaxHIB (monovalent Hib vaccine) and Comvax (Hib-HepB vaccine), and manufactured by Merck & Co., Inc., were recalled voluntarily, and the company temporarily suspended production of these vaccines. To conserve the limited supply of Hib-containing vaccines, CDC, in consultation with the Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics (AAP), on December 18, 2007, recommended that vaccination providers temporarily defer the routine Hib

<sup>&</sup>quot; Additional information available at http://www.un.org/millenniumgoals.

<sup>\*\*\*</sup> Current partners providing financial and technical support for measles elimination in the WPR include American Red Cross, Australian Agency for International Development, Government of Korea, Government of Japan, New Zealand Agency for International Development, CDC (United States), UNICEF, United Nations Foundation, and WHO.

vaccine booster dose administered to most healthy children at age 12–15 months (*1–5*).

Production of Merck Hib vaccine products is still suspended. However, two other Hib-containing vaccines manufactured by Sanofi Pasteur have been available for use in the United States during this shortage: monovalent Hib vaccine (ActHIB) and DTaP-IPV/Hib (Pentacel). Beginning in July 2009, the manufacturer of these two vaccines will increase the number of doses of these two products available for use in the United States, which will result in the supply being sufficient to reinstate the Hib vaccine booster dose.

## **Reinstatement of Hib Booster Dose**

Effective immediately, CDC, in consultation with ACIP, AAFP, and AAP, is recommending reinstatement of the booster dose of Hib vaccine for children aged 12–15 months who have completed the primary 3-dose series. Infants should continue to receive the primary Hib vaccine series at ages 2, 4, and 6 months. Children aged 12–15 months should receive the booster dose on time. Older children for whom the booster dose was deferred should receive their Hib booster dose at the next routinely scheduled visit or medical encounter. Although supply is sufficient to reinstate the booster dose and begin catch-up vaccination, supply is not yet ample enough to support a mass notification process to contact all children with deferred Hib booster doses.

Sufficient vaccine will be available to administer the primary series at ages 2, 4, and 6 months and a booster dose on time to children aged 12–15 months. As part of delivering the booster dose to those children for whom it was deferred at the next routinely scheduled appointment or medical encounter, practices should discuss with parents the reasons for the change in recommendation and might consider 1) reviewing electronic or paper medical records or immunization information system records to identify children in need of a booster dose before physician encounters, 2) evaluating children's vaccination status during their scheduled visit, and 3) sharing immunization schedules with parents to make them aware of this plan.

## **Use of Combination Vaccines**

During the Hib shortage, children received protection from certain vaccine preventable diseases in their primary vaccination series through various permutations of available combination vaccines (e.g., DTaP-IPV/Hib [Pentacel] and DTaP-IPV-HepB [Pediarix]) and monovalent vaccines (e.g., ActHib, HepB, and IPV). Therefore, a mismatch might exist between patient vaccination needs and the available stock of different vaccine formulations (e.g., combination products versus single-antigen vaccines) in local provider offices. This situation presents a challenge for providers to administer vaccines to ensure appropriate coverage while minimizing extra doses of unneeded vaccine. For example, if a provider is using DTaP-IPV/Hib (Pentacel) vaccine to protect infants against Hib disease, the provider should ensure that adequate stock of monovalent HepB vaccine is available to complete the HepB vaccine series.\* Children who need the Hib booster and who already have received 4 doses of DTaP should receive monovalent Hib vaccine (ActHIB) as their Hib booster dose. However, if DTaP-IPV/Hib is the only Hib-containing vaccine available, this combination product can be used to complete the series of Hib vaccination, even if the child already has received all the necessary doses of DTaP and IPV.

# Information Regarding ActHIB or Pentacel

Vaccination providers with questions about their supplies of monovalent Hib vaccine (ActHIB) or DTaP-IPV/Hib (Pentacel) purchased with nonpublic funds should contact Sanofi Pasteur's customer service department (telephone, 800-822-2463). Sanofi Pasteur will work directly with physicians to increase allotments of Hib-containing vaccines on the basis of previous purchasing patterns or practice birth cohort and estimates of additional vaccine doses needed. For public vaccine supplies, including Vaccines for Children Program vaccine, providers should contact their state/local immunization program to obtain vaccine.

This recommendation reflects CDC's assessment of the existing national Hib vaccine supply and will be updated if the supply changes. Updated information about the national Hib vaccine supply is available at http://www.cdc.gov/vaccines/vac-gen/ shortages/default.htm.

Details about the routine Hib schedule are available at http:// www.cdc.gov/vaccines/recs/schedules/default.htm#child. Adverse events following receipt of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) at http://vaers.hhs.gov.

#### References

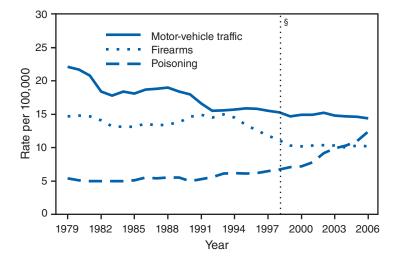
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<sup>\*</sup>Additional information available at http://www.cdc.gov/vaccines/vac-gen/ shortages/downloads/eo-hib-hepb-cov.pdf.

# **QuickStats**

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Age-Adjusted Death Rates Per 100,000 Population\* for the Three Leading Causes of Injury<sup>†</sup> Death — United States, 1979–2006



\* Age-adjusted to the 2000 U.S. standard population.

<sup>†</sup> Injuries are from all manners, including unintentional, suicide, homicide, undetermined intent, legal intervention, and operations of war. Poisoning deaths include those resulting from drug overdose, those resulting from other misuse of drugs, and those associated with solid or liquid biologic substances, gases or vapors, or other substances such as pesticides or unspecified chemicals.

<sup>§</sup> In 1999, International Classification of Diseases, 10th Revision (ICD-10) replaced the previous revision of the ICD (ICD-9). This resulted in approximately 5% fewer deaths being classified as motor-vehicle traffic-related deaths and 2% more deaths being classified as poisoning-related deaths. Therefore, death rates for 1998 and earlier are not directly comparable with those computed after 1998. Little change was observed in the classification of firearm-related deaths from ICD-9 to ICD-10.

Motor-vehicle traffic, poisoning, and firearms were the three leading causes of injury deaths in the United States in 2006. Age-adjusted death rates for motor-vehicle traffic–related deaths and deaths from firearms decreased from 1979 to 2006, whereas the rate for poisoning more than doubled during the same period. From 2005 to 2006, the age-adjusted poisoning death rate increased 13%, whereas motor-vehicle traffic and firearm death rates remained unchanged.

**SOURCES:** National Vital Statistics System, mortality data, available at http://www.cdc.gov/nchs/deaths.htm (for 2006 rates); and CDC WONDER, compressed mortality file, underlying cause-of-death, available at http://wonder.cdc.gov/mortsql.html (for 1979–2005 rates).

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 20, 2009 (24th week)\*

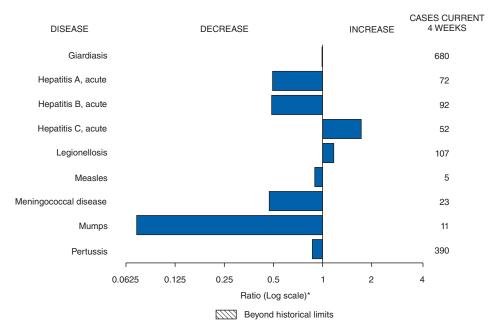
	Current	Cum	5-year weekly			ases revious	eported years	1	States reporting cases
Disease	week	2009	average <sup>†</sup>	2008	2007	2006	2005	2004	during current week (No.)
Anthrax	_	_	_		1	1	_	_	
Botulism:		_							
foodborne	1	9	0	17	32	20	19	16	NC (1)
infant	_	25 12	2 1	109	85	97	85	87	
other (wound and unspecified) Brucellosis	_	37	2	19 80	27 131	48 121	31 120	30 114	
Chancroid	_	18	0	25	23	33	17	30	
Cholera	_	2	õ	3	7	9	8	6	
Cyclosporiasis§	_	36	12	139	93	137	543	160	
Diphtheria	_	—	—	—	_	_	_	—	
Domestic arboviral diseases <sup>§</sup> , <sup>¶</sup> :									
California serogroup	—	_	2	62	55	67	80	112	
eastern equine	_	_	0	4	4	8	21	6	
Powassan St. Louis	_	_	0 0	2 13	7 9	1 10	1 13	1 12	
western equine		_		- 15	- 9	10	15	12	
Ehrlichiosis/Anaplasmosis <sup>§</sup> ,**:									
Ehrlichia chaffeensis	7	121	18	1,137	828	578	506	338	NY (3), VA (1), NC (2), TN (1)
Ehrlichia ewingii	_	_	0	9	_	_	_	_	
Anaplasma phagocytophilum	5	52	21	1,026	834	646	786	537	NH (1), NY (4)
undetermined	1	26	9	180	337	231	112	59	TN (1)
Haemophilus influenzae, <sup>††</sup>									
invasive disease (age <5 yrs):		10	0	20	00	00	9	10	
serotype b nonserotype b	_	13 91	0 3	30 244	22 199	29 175	9 135	19 135	
unknown serotype	2	99	3	163	180	179	217	177	OK (1), AK (1)
Hansen disease§	_	29	2	80	101	66	87	105	
Hantavirus pulmonary syndrome§	_	3	1	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	1	62	6	330	292	288	221	200	GA (1)
Hepatitis C viral, acute	14	391	15	880	845	766	652	720	NY (2), PA (2), IA (5), NE (1), VA (1), TN (1), OK (2
HIV infection, pediatric (age <13 years)§§	_		3	_			380	436	
Influenza-associated pediatric mortality <sup>§</sup> , <sup>¶¶</sup>	5	77	1	85	77	43	45		CA (1), CT (1), IN (1), MN (1), WI (1)
Listeriosis Measles***	4	216 25	14 3	759 140	808 43	884 55	896 66	753 37	OH (2), NC (2)
Meningococcal disease, invasive <sup>+++</sup> :		20	5	140	43	55	00	57	
A, C, Y, and W-135	_	137	6	330	325	318	297	_	
serogroup B	1	69	4	188	167	193	156	_	TX (1)
other serogroup	—	13	1	38	35	32	27	—	
unknown serogroup	3	234	13	616	550	651	765	—	PA (1), OH (1), CO (1)
Mumps	2	167	29	454	800	6,584	314	258	NY (1), CO (1)
Novel influenza A virus infections <sup>§§§</sup>	_	21,449		2	4	N	N	N	
Plague Poliomyelitis, paralytic	_	_	0	1	7	17	8 1	3	
Polio virus infection, nonparalytic <sup>§</sup>	_	_	_	_	_	N	N	N	
Psittacosis§	_	6	0	8	12	21	16	12	
Q fever total <sup>§</sup> , <sup>¶¶¶</sup> :	_	28	4	124	171	169	136	70	
acute	—	26	2	110	_	_	_	—	
chronic	—	2	0	14	_	_	—	—	
Rabies, human	—	_	0	1	1	3	2	7	
Rubella****	_	1	0	16	12	11	11	10	
Rubella, congenital syndrome SARS-CoV <sup>§</sup> , <sup>††††</sup>	_	1		_	_	1	1	_	
Smallpox§	_	_	_	_	_	_	_	_	
Streptococcal toxic-shock syndrome§	4	78	2	157	132	125	129	132	NY (2), OH (1), NC (1)
Syphilis, congenital (age <1 yr)	_	71	9	420	430	349	329	353	$\langle n \rangle = \langle n \rangle = \langle n \rangle$
Tetanus	—	4	1	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	_	38	2	71	92	101	90	95	
Trichinellosis		9	0	39	5	15	16	5	
Tularemia	1	15	5	123	137	95	154	134	AK (1)
Typhoid fever	3	150 27	6 0	447	434 37	353 6	324 2	322	CO (1), CA (2)
Vancomycin-intermediate Staphylococcus aureus Vancomycin-resistant Staphylococcus aureus <sup>§</sup>	So —	27	0	63	37	ь 1	2	1	
Vibriosis (noncholera Vibrio species infections)§	4	97	4	493	2 549	N	N	N	TN (2), MS (1), WA (1)
Yellow fever	•	0.	•		5.5				( <i>n</i> ,

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 June 20, 2009 (24th 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.
- <sup>†</sup> 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/dhpsi/phs/files/5yearweeklyaverage.pdf.
  <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 information arboviral diseases and information arboviral diseases. The total sum of incident cases is then divided by 25 weeks. Additional information is available at http://www.cdc.gov/epo/dhpsi/phs/files/5yearweeklyaverage.pdf.
- influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm. <sup>1</sup> Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
- \*\* The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).
- <sup>++</sup> Data for *H. influenzae* (all ages, all serotypes) are available in Table II.
- <sup>§§</sup> 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.
- 11 Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Seventy-six influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.
- \*\*\* No measles cases were reported for the current week.
- <sup>+++</sup> Data for meningococcal disease (all serogroups) are available in Table II.
- SSS These cases were obtained from state and territorial health departments in response to the pandemic influenza A (H1N1) virus infections and include both confirmed and probable cases in addition to those reported to the National Notifiable Diseases Surveillance System (NNDSS). Because of the volume of cases and the method by which they are being collected, a 5-year weekly average for this disease is not calculated.
- 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 June 20, 2009, with historical data



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

Notifiable Disease Data Team and	1 122 Cities Mortality Data Team
Patsy A. 1	Hall
Deborah A. Adams Willie J. Anderson Lenee Blanton	Rosaline Dhara Michael S. Wodajo Pearl C. Sharp

(24th week)^			Chlamydi	a <sup>†</sup>			Cocc	idiodomy	cosis		Cryptosporidiosis					
		Prev		-			Prev					Prev	ious			
Descertises area	Current	52 W		Cum	Cum	Current	52 w		Cum	Cum	Current	52 w		Cum	Cum	
Reporting area United States	8,223	Med 22,755	Max 25,700	2009 488.139	<b>2008</b> 537,362	242	Med 134	Max 352	2009 3,922	2008 3,075		Med 110	Max 482	2,030	<b>2008</b> 1,919	
New England Connecticut Maine <sup>§</sup> Massachusetts New Hampshire Rhode Island <sup>§</sup> Vermont <sup>§</sup>	869 	772 243 48 326 32 55 21	1,655 1,306 72 949 63 244 53	18,261 5,195 1,164 9,219 591 1,543 549	16,059 4,302 1,142 7,812 926 1,347 530	N N N N		1 0 0 1 0 0	1 N N 1 -	1 N N 1 - N	1   - 1	5 0 1 2 1 0 1	23 13 6 13 4 3 7	106 13 13 35 17 2 26	152 41 10 44 31 3 23	
<b>Mid. Atlantic</b> New Jersey New York (Upstate) New York City Pennsylvania	1,994  1,148 	2,852 425 563 1,077 793	6,734 879 4,563 3,130 1,072	70,488 10,184 13,628 28,089 18,587	69,108 10,555 12,417 26,723 19,413		0 0 0 0	0 0 0 0	N N N	N N N	9 3 6	13 0 4 1 7	35 4 17 8 15	246 1 61 29 155	229 16 66 45 102	
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	1,149 1 362 616 81 89	3,437 1,104 398 835 775 385	4,382 1,356 713 1,321 1,300 494	73,020 22,254 10,519 21,016 11,696 7,535	89,825 26,712 10,099 21,767 21,254 9,993	1 N 1 N	0 0 0 0 0	3 0 3 2 0	17 N 7 10 N	26 N 19 7 N	12 — — 11 1	24 2 3 5 8 8	126 13 17 13 59 46	480 38 78 92 161 111	476 46 65 90 106 169	
W.N. Central Iowa Kansas Minnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota	503 53 324 60 66	1,324 192 182 264 498 98 25 56	1,547 257 401 316 583 254 60 85	29,535 4,277 4,160 5,155 12,060 2,160 324 1,399	30,473 3,971 4,151 6,747 11,202 2,280 839 1,283	N N     N N N N N	0 0 0 0 0 0 0	1 0 0 1 0 0 0	2 N 2 N N N	N     N N N N N N N	11 2 9 	17 4 1 4 3 2 0 2	68 30 14 13 8 10 9	305 66 34 76 53 30 1 45	280 62 23 69 63 40 1 22	
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	910 107 2  33 746 22	4,424 73 129 1,384 725 436 618 534 609 68	5,730 180 228 1,596 1,909 772 1,814 887 903 101	82,650 2,224 3,124 31,560 10,703 9,498 	105,305 1,644 3,151 33,490 18,795 10,665 9,921 12,068 14,078 1,493	Z Z   Z Z Z Z	0 0 0 0 0 0 0 0 0 0	1 0 0 1 0 0 0 0	4 1 N 8 N N N N	2  -   N   N   N   N   N   N	8  -   6   2   	21 0 8 6 1 1 1 1	49 1 2 35 19 5 16 6 4 3	397 1 121 169 15 47 18 21 5	329 6 7 143 101 10 11 15 26 10	
E.S. Central Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	627  184  443	1,695 473 238 440 564	2,166 600 380 841 796	39,333 9,862 4,770 10,917 13,784	37,532 11,585 5,057 8,375 12,515	N N N N N	0 0 0 0 0	0 0 0 0 0	N N N N	N N N N	 	3 1 1 0 1	9 6 4 2 5	59 17 16 4 22	50 19 10 6 15	
<b>W.S. Central</b> Arkansas <sup>§</sup> Louisiana Oklahoma Texas <sup>§</sup>	353 138 190 25	2,851 284 401 184 1,963	3,985 419 1,114 1,753 2,509	63,511 6,661 8,137 2,716 45,997	68,281 6,438 9,332 5,978 46,533	         	0 0 0 0	1 0 1 0 0	N N N	2 N 2 N N	2  2	8 1 1 2 3	271 10 5 16 258	68 12 7 35 14	89 16 19 16 38	
Mountain Arizona Colorado Idaho <sup>§</sup> Montana <sup>§</sup> Nevada <sup>§</sup> New Mexico <sup>§</sup> Utah Wyoming <sup>§</sup>	656 97 336 184 39 — — —	1,359 434 331 69 59 174 159 85 32	2,145 627 1,109 314 88 365 540 251 97	27,730 6,780 8,688 1,766 1,431 4,103 2,846 1,175 941	33,696 11,248 8,299 1,559 1,414 4,612 3,151 2,745 668	206 206 N N 	93 91 0 0 1 0 0 0	295 294 0 0 3 2 1 1	2,871 2,836 N N 28 2 5 	2,110 2,052 N N 30 18 8 2	9 3 6       	8 1 2 1 0 2 0 0	38 10 12 5 4 23 6 2	139 16 45 17 14 6 27 1 13	159 22 30 20 6 31 10 10	
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	1,162 90 577  251 244	3,660 93 2,867 114 199 400	4,607 199 3,584 247 631 557	83,611 2,138 66,082 2,442 4,433 8,516	87,083 2,157 67,649 2,657 4,711 9,909	35 N 35 N N N	38 0 38 0 0 0	172 0 172 0 0	1,027 N 1,027 N N N	934 N 934 N N N	5 1  4	9 0 6 0 1 2	42 1 14 1 40 7	230 2 121 1 74 32	155 1 85 1 33 35	
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	 202 	0 4 130 9	8 9 269 22	3,479 173	62 86 3,245 322	N  N	0 0 0 0	0 0 0 0	N  N	N  N	N  N	0 0 0 0	0 0 0 0	N  N	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 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).

			Giardiasi	s				Gonorrhe	a		на		s <i>influenz</i> s, all sero		ve
			vious veeks	_	_	_		vious veeks	_	_	_		vious veeks	_	_
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	139	319	641	6,472	6,862	1,583	5,765	7,164	113,836	150,376	17	50	124	1,269	1,484
New England	6	27	64	424	583	85	98	301	2,195	2,235	_	3	16	78	82
Connecticut Maine <sup>§</sup>	5	5 4	14 12	76 85	137 50	2	49 2	275 9	960 64	946 44	_	0	12 2	24 12	18 8
Massachusetts	_	10	27	150	250	82	38	112	959	1,013	—	1	5	32	41
New Hampshire Rhode Island <sup>§</sup>	_	2 1	10 8	38 23	54 37	1	1 5	6 16	51 138	57 157	_	0	2 7	5 2	6 3
Vermont§	1	3	15	52	55	_	1	4	23	18	_	0	1	3	6
Mid. Atlantic New Jersev	41	60	116	1,204	1,339	352	595	1,138	13,690	14,936	7	11	25 7	270	264
New York (Upstate)	22	8 23	21 81	85 502	217 437	69	92 114	127 664	2,056 2,390	2,483 2,798	5	1 2	20	31 65	43 74
New York City	6	15	30	321	385 300	228	208	577	5,190	4,580	2	2	11	65	46
Pennsylvania E.N. Central	13 19	17 47	46 90	296 921	1,058	55 287	185 1,157	267 1.627	4,054 22,231	5,075 31.804	2	4 7	10 27	109 164	101 238
Illinois	19	10	90 32	156	281	207	370	499	6,624	9,040		2	9	63	230 74
Indiana Michigan	N 2	0 12	11 22	N 256	N 236	96 158	154 294	256 493	3,450 6,674	4,076 7,941	_	1 0	22 3	28 12	41 14
Ohio	14	16	31	346	352	8	245	493	3,515	7,791	2	1	6	52	77
Wisconsin	3	10	19	163	189	24	101	149	1,968	2,956	_	1	5	9	32
W.N. Central lowa	15 7	26 6	143 18	600 122	676 118	141	299 32	393 53	6,331 695	7,617 692	1	3 0	15 0	75	108 2
Kansas	1	3	11	54	51	28	40	83	972	1,008	_	0	2	10	14
Minnesota Missouri	_	0 8	106 22	137 183	191 184	86	47 142	78 184	841 2,991	1,497 3,626	_	0 1	10 4	18 31	23 47
Nebraska <sup>§</sup>	7	3	10	67	90	17	27	51	626	630	1	0	2	13	15
North Dakota South Dakota	_	0 2	16 11	4 33	10 32	10	2 8	7 20	21 185	50 114	_	0 0	4 0	3	7
S. Atlantic	23	66	108	1,579	1.140	211	1,470	2,142	23,177	36,513	1	13	27	368	378
Delaware	_	1	3	13	18	32	<sup>′</sup> 16	35	399	529	_	0	2	3	3
District of Columbia Florida	_	0 31	5 57	783	26 509	_	54 415	89 507	1,294 9,054	1,125 11,325	_	0 5	2 10	135	3 95
Georgia	20	14	67	465	256	_	261	876	3,576	6,832	1	2	9	75	77
Maryland§ North Carolina	N	5 0	10 0	95 N	107 N	_	121 261	212 647	2,468	2,790 4,662	_	1	6 17	41 44	61 38
South Carolina§	—	2	8	41	57	11	169	316	3,034	4,461	—	1	5	24	35
Virginia <sup>§</sup> West Virginia	3	8 1	31 5	164 18	137 30	165 3	156 11	308 26	3,114 238	4,434 355	_	1 0	6 3	28 18	53 13
E.S. Central	1	8	22	140	186	190	525	771	11,283	13,607	_	3	6	74	83
Alabama§	_	4	12	59	102	_	158	216	2,794	4,620	—	0	4	19	13
Kentucky Mississippi	N N	0	0	N N	N N	57	80 143	153 253	1,404 3,331	1,973 3,110	_	0	2 1	8	6 11
Tennessee§	1	4	13	81	84	133	159	301	3,754	3,904	—	2	5	47	53
W.S. Central	7	8	22	139	127	94	924	1,307	18,122	23,327	2	2	22	56	71
Arkansas <sup>§</sup> Louisiana	3	2 2	8 10	51 40	49 46	37 50	86 146	167 421	2,006 2,429	2,013 4,273	_	0 0	2 1	8 8	6 7
Oklahoma Texas <sup>§</sup>	4 N	3 0	18 0	48 N	32 N	7	71 577	437 725	1,322	2,189	2	1 0	20 1	40	52 6
Mountain	9	26	62	458	545	46	190	374	12,365 3,551	14,852 5,589	3	4	11	120	175
Arizona	_	3	10	85	51	22	55	82	796	1,658	_	1	7	46	72
Colorado Idaho <sup>§</sup>	9	9 3	27 14	156 44	206 60	19 4	62 3	293 13	1,411 46	1,719 72	3	1 0	5 2	35 2	32 8
Montana§	_	2	9	40	28	1	2	6	38	53	_	0	1	1	1
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	2 2	8 8	33 33	47 41	_	32 23	86 52	752 414	1,154 627	_	0 1	2 3	10 15	10 27
Utah	_	7	18	47	94	_	5	15	63	264	_	Ó	2	11	25
Wyoming§		1	4	20	18	_	2	8	31	42	_	0	2		
Pacific Alaska	18 6	54 2	130 10	1,007 33	1,208 30	177 11	566 14	755 24	13,256 338	14,748 232	1 1	2 0	17 3	64 8	85 11
California	7	35	59	712	849	121	476	657	11,265	12,121	_	0	3	12	31
Hawaii Oregon <sup>§</sup>	_	0 7	4 73	5 131	14 199	 19	13 22	19 48	265 462	270 588	_	0	2 16	13 28	9 32
Washington	5	9	74	126	116	26	50	81	926	1,537	_	0	2	3	2
American Samoa	_	0	0	_	_	_	0	1	_	2	_	0	0	_	_
C.N.M.I. Guam	_		0	_	_	_	2	 15	_	25	_	0	0	_	_
Puerto Rico	_	3	15	25	72	4	4	16	101	130	_	0	1	_	
U.S. Virgin Islands	—	0	0	—	—	—	2	7	54	60	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: Me \* 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). Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

### **MMWR**

				Hepat	itis (viral,	acute), by	type†								
			Α					В				Le	gionellosi	is	
	Current	52 w	vious veeks	Cum	Cum	Current	52 w	vious veeks	Cum	Cum	Current	52 w	vious veeks	Cum	Cum
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008	week	Med	Max	2009	2008
United States New England	15	37 2	89 8	764 32	1,243 60	6	68 1	196 4	1,396 16	1,742 40	34	49 2	152 18	692 20	894 45
Connecticut	_	0	4	10	11	_	0	3	6	13	_	0	5	10	8
Maine <sup>§</sup> Massachusetts	_	0 1	5 3	1 14	3 30	_	0 0	2 2	7 1	8 12	_	0 1	2 7	6	1 17
New Hampshire	_	Ó	2	3	5	—	0	2	2	3	_	0	5	1	6
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	0	2 1	3 1	10 1	_	0 0	1	_	3 1	_	0 0	14 1	2 1	9 4
Mid. Atlantic	4	5	13	85	137	4	6	17	134	222	13	13	60	180	215
New Jersey New York (Upstate)	2	1 1	5 4	5 24	31 31	2	1 1	5 11	22 33	64 32	7	1 5	14 24	11 69	27 57
New York City	1	2	6	26	41	_	1	4	27	48	_	2	12	20	26
Pennsylvania	1	1	4	30	34	2	2	8	52	78	6	5	35	80	105
E.N. Central Illinois	_	4 1	12 5	86 19	184 67	1	10 2	21 7	185 24	227 87	5	9 2	41 13	118 8	178 25
Indiana	—	0	3	7	10	_	1	18	34	14	_	1	6	8	15
Michigan Ohio	_	1 1	5 4	31 24	68 21	1	2 2	8 13	58 53	68 47	1 4	2 4	16 18	24 73	49 80
Wisconsin	—	0	3	5	18	—	0	3	16	11	—	0	6	5	9
W.N. Central lowa	1	2 1	16 5	54 12	157 76	_	2 0	16 3	68 10	35 11	1	2 0	8 2	25 8	42 8
Kansas	_	0	1	5	9	_	0	2	4	6	_	0	1	2	1
Minnesota Missouri	_	0	12 3	12 14	16 18	_	0	11 5	11 33	3 13	1	0	4 7	2 9	4 19
Nebraska§	1	0	2	10	36	_	Ó	2	9	2	_	Ó	3	3	9
North Dakota South Dakota	_	0 0	2 1	1	2	_	0 0	1 1	1	_	_	0 0	3 1	1	1
S. Atlantic	4	7	15	184	149	1	19	32	450	449	2	8	22	157	180
Delaware District of Columbia	 U	0	1 0	2 U	3 U	1	0	2	15 U	11 U	_	0	1	1	5 7
Florida	_	4	8	93	67	U	7	11	144	153	_	3	2 7	66	62
Georgia Maryland§	3	1 0	4 4	29 16	26 18	_	3 2	9 6	63 39	80 40	1	1 2	5 9	23 24	16 44
North Carolina	_	1	9	20	9	_	0	19	115	47	_	0	7	29	8
South Carolina <sup>§</sup> Virginia <sup>§</sup>	1	0 1	3 6	11 13	6 17	_	1 2	5 10	17 34	33 47	1	0 1	1 5	2 12	4 21
West Virginia	_	Ó	1		3	_	1	6	23	38	_	0	3		13
E.S. Central	—	1	5	18	37	—	8	13	139	172	1	2	5	38	57
Alabama <sup>ş</sup> Kentucky	_	0	2 2	6 3	5 14	_	2 2	7 7	43 39	46 48	_	0 1	2 3	5 17	7 27
Mississippi	—	0 0	2 4	5 4	2	_	1 2	3 8	6	16	1	0 0	1 4	1	1
Tennessee <sup>§</sup> W.S. Central	_	4	43	4 73	16 125	_	2 11	8 98	51 197	62 358	5	2	4 21	15 40	22 32
Arkansas§	_	0	1	4	3	_	1	5	14	23	_	0	2	2	5
Louisiana Oklahoma	_	0	2 6	2 1	7 3	_	1 2	4 17	17 48	50 38	_	0	2 6	1 3	3 3
Texas§	—	3	37	66	112	_	6	75	118	247	5	1	19	34	21
Mountain Arizona	2 1	3 1	31 28	65 37	98 41	_	3 1	10 5	57 25	85 33	_	2 0	8 3	36 19	37 9
Colorado	1	Ó	20	11	19	_	Ó	3	9	12	_	0	2	19	3
Idaho <sup>§</sup> Montana <sup>§</sup>	_	0 0	1 1	3	13	_	0 0	2 1	2	3	_	0	1 2	4	2 3
Nevada§	_	0	3	6	3	_	0	3	12	20	_	0	2	6	6
New Mexico <sup>§</sup> Utah	_	0 0	1	5 3	14 5	_	0 0	2 3	4 3	7 6	_	0	2 2	5	3 11
Wyoming§	—	Ő	ō	_	3	—	ŏ	1	2	4	_	ŏ	ī	1	_
Pacific	4	8	25	167	296	_	7	36	150	154	7	3 0	9	78	108
Alaska California	2	0 6	1 25	3 126	2 238	_	0 5	1 28	3 112	5 109	3	3	1 9	2 59	1 82
Hawaii Oregon§	_	0 0	2 5	3 10	6 20	_	0 0	1 9	3 16	3 19	_	0 0	1 3	1 6	4 10
Washington	2	1	4	25	30	_	1	8	16	18	4	0	3	10	11
American Samoa C.N.M.I.	_		0	_	Ξ	_			_	Ξ	<u>N</u>			N	<u>N</u>
Guam Puerto Rico	_	0 0	0 2	7	14	_	0 0	0 5	2	 25	_	0 0	0 0	_	_
U.S. Virgin Islands	_	0	0			_	0	0		25	_	0	0	_	_

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending June 20, 2009, and June 14, 2008 (24th week)\*

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).

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		L	yme disea	se				Malaria					cal diseas All groups		C'
			vious veeks				Prev 52 w	ious					vious veeks		
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	223	486	1,915	4,051	6,912	4	23	46	392	410	4	18	48	453	671
New England	18	86	837	491	2,598	1	0	5	10	22	—	0	4	15	17
Connecticut Maine <sup>§</sup>	9	21 5	264 73	86	1,121 54	_	0	4	1	5 1	_	0	1	1 2	1 3
Massachusetts	_	20	403	117	985		0	4	6	11	_	0	3	9	12
New Hampshire Rhode Island <sup>§</sup>	2	14 0	145 78	217 13	309 105	1	0	1	1	2 1	_	0	1	1	1
Vermont§	7	5	41	58	24	_	õ	1	1	2	—	ŏ	1	i	_
Mid. Atlantic	191	210	1,401	2,409	2,589	_	5 0	17	94	107 19	1	2 0	5 1	49 2	74 9
New Jersey New York (Upstate)	16 87	30 96	231 1,368	509 830	1,248 493	_	0	4 10	19	13	_	0	2	11	9 19
New York City		6	54	_	154	_	3	11	58	61	_	0	2	9	13
Pennsylvania	88	51	338	1,070	694	_	1	3	17	14	1	1	4	27	33
E.N. Central Illinois	_	10 0	205 13	99 4	437 27	_	3 1	7 5	48 15	67 33	1	3 1	8 6	77 17	112 41
Indiana	—	0	8	9	2	—	0	1	7	3	—	0	4	19	15
Michigan Ohio	_	1 0	10 6	10 7	1 7	_	0	3 2	9 14	9 16	1	0	3 3	12 23	14 26
Wisconsin	_	10	187	69	400	—	Ő	3	3	6	_	Õ	1	6	16
W.N. Central	—	6	336	56	118	—	1	10	25	20	—	1	9	38	59
lowa Kansas	_	1 0	9 4	14 8	45 4	_	0 0	3 2	5 2	2 3	_	0	1 2	4 7	11 2
Minnesota	_	2	326	28	66	_	0	8	10	6	_	0	4	8	17
Missouri Nebraska <sup>§</sup>	_	0 0	1	2 3	1	_	0	2 1	5 2	5 4	_	0	2 1	13 4	18 9
North Dakota	_	0	10	_	_	_	0	0	_	_	_	0	3	_	1
South Dakota	_	0	1	1	1	_	0	1	1	_	_	0	1	2	1
S. Atlantic Delaware	13 3	63 11	223 36	887 234	1,069 324	3	6 0	16 1	138 1	99 1	_	3 0	9 1	88 2	89 1
District of Columbia	_	0	7	_	17	—	0	2	—	—	—	0	0	—	—
Florida Georgia	1	1 0	6 6	16 18	13 14	1	1	7 4	36 30	22 26	_	1 0	4 2	32 16	32 12
Maryland§	_	27	163	393	511	_	1	8	34	30	_	0	1	4	11
North Carolina South Carolina <sup>§</sup>	6	1 0	6 3	23 11	2 10	1	1 0	7 1	18 1	2 3	_	0	5 1	15 6	3 14
Virginia§	3	14	61	158	133	1	1	4	17	14	_	0	2	9	13
West Virginia	_	1	17	34	45	_	0	1	1	1	—	0	2	4	3
E.S. Central Alabama <sup>§</sup>	_	0 0	5 1	8 1	16 6	_	0	2 1	12 3	8 3	_	0	3 1	16 4	36 3
Kentucky	_	0	2	1	1	_	0	2	5	3	_	0	1	3	7
Mississippi Tennessee <sup>§</sup>	_	0 0	1 3	6	9	_	0	1 2	4	2	—	0	1	1 8	9 17
W.S. Central		2	21	11	35	_	1	10	11	22	1	1	12	40	70
Arkansas§	_	0	0	—		_	Ó	1	_	_	_	0	2	5	10
Louisiana Oklahoma	_	0 0	1 2	_	_	_	0 0	1 2	1	2 2	_	0	3 3	9 2	17 9
Texas <sup>§</sup>	_	2	21	11	35	_	1	10	9	18	1	1	9	24	34
Mountain	_	1	13	14	13	_	0	3	4	12	1	1	4	37	38
Arizona Colorado	_	0 0	2 1	1 2	2 2	_	0 0	2	1	4 3	1	0	2 2	7 11	5 8
Idaho§	_	0	2	5	2	_	0	1	1	_	_	0	1	4	4
Montana <sup>§</sup> Nevada <sup>§</sup>	_	0 0	13 2	1 5	1 2	_	0	0 1	_	4	_	0	2 2	4 3	4 7
New Mexico§	_	Ő	2		3	_	ŏ	1	_	1	_	Ő	1	3	4
Utah Wyoming <sup>§</sup>	—	0 0	1	_	- 1	—	0 0	1 0	1	_	_	0 0	1 2	1 4	4 2
Pacific	1	3	13	76	37		3	10	50	53		4	14	93	176
Alaska	_	0	2	1	1	_	0	1	1	2	_	0	2	2	3
California Hawaii	N	2 0	6 0	67 N	26 N	_	2 0	8 1	38 1	41 2	_	2 0	8 1	58 3	137 1
Oregon§	_	0	4	5	10	_	0	3	5	4	_	0	10	21	20
Washington	1	0	12	3	—	—	0	3	5	4	—	0	6	9	15
American Samoa	Ν	0	0	Ν	Ν	_	0	0	_	_	_	0	0	_	_
C.N.M.I. Guam	_	0	0	_	_	_	0	2	_	1	_	0	0	_	_
Puerto Rico	Ν	0	Ō	Ν	Ν	_	0	1	1	2	_	0	1	_	2
U.S. Virgin Islands	N	0	0	N	Ν	—	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).

(24th week)*															
			Pertussis	6				bies, anin	nal		R		untain spo	tted fever	
			vious veeks	•	•		Prev 52 w	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	64	242	1,697	5,037	3,429	37	70	120	1,477	1,804	9	36	179	440	356
New England	1	18	35	215	392	2	8	15	140	176	—	0	2	4	1
Connecticut Maine <sup>†</sup>	1	0 1	4 10	12 54	30 14	_	3 1	10 5	59 20	86 28	_	0 0	0 2	4	_
Massachusetts	_	12	30	105	307 10	1	0	0 7	17	17	—	0 0	1	—	_
New Hampshire Rhode Island <sup>†</sup>	_	1	5 6	32 5	25	_	0	3	17	14	_	0	2	_	1
Vermont <sup>†</sup>	—	0	2	7	6	1	1	6	27	31	—	0	0	—	—
Mid. Atlantic New Jersey	7	24 4	64 12	450 56	399 71	9	17 0	30 0	284	360	_	1 0	29 6	14	43 32
New York (Upstate)	5	6	41	84	122	9	8	20	166	183	_	0	29	1	3
New York City Pennsylvania	2	0 11	21 33	44 266	42 164	_	0 7	2 17	118	10 167	_	0	3 2	10 3	5 3
E.N. Central	28	44	238	1.075	668	2	2	28	42	53	_	1	15	18	23
Illinois	—	14	45	234	72	_	1	20	6	23	_	1	10	9	18
Indiana Michigan	4	2 9	158 21	87 227	21 89	2	0 1	6 9	6 19	1 19	_	0 0	3 1	1 2	1 2
Ohio	24	14	57	485	444	—	0	7	11	10	—	0	4	6	2
Wisconsin W.N. Central	-	4	10 872	42 893	42	N	0 5	0	N 100	N	—	0	0		
lowa	1 1	31 4	21	68	281 40	3	5 0	17 5	120 9	120 10	_	4 0	33 1	58 1	82 5
Kansas Minnesota	_	2 2	12 808	83 165	28 63	3	1 0	6 11	51 20	39 18	_	0 0	1 0	1	_
Missouri	_	14	51	479	112	_	1	8	17	12	_	3	32	52	73
Nebraska† North Dakota	—	4 0	32 24	86 1	26 1	_	0	2 9	4	17 13	_	0 0	4 1	4	1
South Dakota	_	0	10	11	11	_	0	9 4	19	11	_	0	0	_	3
S. Atlantic	1	26	71	661	321	19	26	90	669	862	6	18	72	239	89
Delaware District of Columbia	_	0 0	3 2	6	5 1	_	0 0	0	_	_	_	0 0	5 1	3	5 2
Florida	_	8	34	240	79	_	0	74	74	138		0	3	4	3
Georgia Maryland†	_	3 3	9 10	79 37	26 46	_	5 6	52 13	154 130	185 214	2	1	9 7	13 18	20 16
North Carolina		0	65	174	61	Ν	4	4	N	N	4	10	55	166	11
South Carolina <sup>†</sup> Virginia <sup>†</sup>	1	2 3	10 24	61 59	46 52	16	0 11	0 24	258	270	_	1 2	9 15	12 22	9 18
West Virginia	—	Ő	2	5	5	3	1	6	53	55	—	ō	1	1	5
E.S. Central	9	12	33	306	112	_	3	7	59	80	3	4	23	71	63
Alabama <sup>†</sup> Kentucky	_	3 5	19 15	111 101	19 19	_	0 1	0 4	 25	13	_	1 0	8 0	12	15 1
Mississippi	1	1	5	18 76	49 25	—	0	2	34	2 65	3	0	3	4	3
Tennessee <sup>†</sup> W.S. Central	8 4	2 40	14 389	76	∠5 354	_	2 0	6 9	34 26	65 51	3	3 2	19 161	55 28	44 42
Arkansas <sup>†</sup>	_	2	38	33	37	_	Ō	5	20	33	_	0	61	13	1
Louisiana Oklahoma	_	2 0	7 45	36 13	17 12	_	0 0	0 9	4	16	_	0	2 98	5	3 28
Texas <sup>†</sup>	4	35	304	670	288	_	Ő	1	1	2	_	ĩ	6	10	10
Mountain	8	15	31	370	436		2	9	45	27	_	1	3	7	12
Arizona Colorado	7	3 4	10 12	83 133	122 68	N	0 0	0 0	N	N	_	0 0	2 1	_2	4
Idaho† Montano†	1	1 0	5 4	38	20	—	0 0	2 4	12	1	—	0	1		
Montana <sup>†</sup> Nevada <sup>†</sup>	_	0	3	9 6	58 16	_	0	5	13	1	_	0 0	1 2	3	1
New Mexico <sup>†</sup> Utah	_	1 3	10 19	30 70	24 121	_	0	2 6	14 1	17 1	_	0 0	1 1	1	1 2
Wyoming <sup>†</sup>	_	0	2	1	7	_	0	4	17	6	_	0	2	1	4
Pacific	5	22	98	315	466	2	4	13	92	75		0	1	1	1
Alaska California	_	3 5	21 23	28 41	38 243	2	0 4	2 12	9 83	12 61	N	0	0 1	N 1	N
Hawaii	_	0	3	13	5	_	0	0		_	Ν	0	0	Ň	Ν
Oregon <sup>†</sup> Washington	5	3 6	48 76	99 134	72 108	_	0	2 0	_	_2	_	0 0	1 0	_	1
American Samoa	_	0	0	—		Ν	0	0	Ν	Ν	Ν	0	0	Ν	Ν
C.N.M.I. Guam	_	0	0	_	_	_	0	0	_	_	N	0	0	N	N
Puerto Rico	_	0	0	1	_	_	1	5	15	27	N	0	0	N	N
U.S. Virgin Islands	_	0	0	—	_	Ν	0	0	Ν	Ν	Ν	0	0	Ν	Ν

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).

<u>.</u>		s	almonello	sis		Shig	ja toxin-pi	oducing	E. coli (S1	EC)†	Shigellosis						
	Previous 52 wooks			EQ wooko							Previous 52 weeks Cum Cum						
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	52 w Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008		
United States	375	881	2,318	13,917	15,232	36	75	255	1,184	1,411	145	430	1,268	6,450	7,709		
New England Connecticut	1	31 0	189 163	673 163	1,068 491	_	3 0	27 27	70 27	106 47	_	3 0	13 8	61 8	104 40		
Maine <sup>§</sup>	1	2	8	45	59	_	0	3	9	3	_	0	6	2	3		
Massachusetts New Hampshire	_	21 3	51 33	263 129	399 57	_	1	11 3	15 15	35 10	_	2 0	9 1	40 1	51 2		
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	2 1	9 7	50 23	33 29	_	0 0	1 6	4	7 4	_	0 0	1 2	7 3	7 1		
Mid. Atlantic	39	84	201	1,599	1,905	_	6	27	86	144	8	54	93	1,180	949		
New Jersey New York (Upstate)	21	14 29	55 65	122 439	447 448	_	1 3	12 12	14 36	53 39	6	19 7	38 23	249 94	234 283		
New York City Pennsylvania	2 16	20 29	49 78	418 620	458 552	_	1 0	5 8	30 6	20 32	2	10 18	23 38	196 641	383 49		
E.N. Central	45	90	194	1,807	1,911	7	12	74	195	193	25	86	132	1,278	1,353		
Illinois Indiana	1	26 7	50 53	459 121	591 166	_	1 1	10 14	29 19	34 16	_	16 3	34 39	276 27	449 357		
Michigan Ohio	6 35	18 27	38 49	389 595	343 523	6	3 3	43 17	54 48	41 45	1 17	5 42	24 80	113 659	42 356		
Wisconsin	2	14	30	243	288	1	3	16	45	57	7	9	42	203	149		
W.N. Central lowa	30 6	52 7	148 16	1,092 170	1,008 173	14 3	12 3	58 21	186 48	214 51	5	14 3	49 12	348 41	410 73		
Kansas Minnesota	4 15	7 11	29 69	140 263	131 260	1 8	1 2	7 21	16 52	15 38	3 2	3 3	11 25	111 33	6 104		
Missouri Nebraska <sup>§</sup>		12 5	48 41	209 188	269 101	2	2	11 30	41 26	64 29	_	3 0	33 3	151 9	126		
North Dakota		0	30	14	18	—	0	28	_	1	_	0	9	1	27		
South Dakota S. Atlantic	141	3 252	22 457	108 3,688	56 3,645	5	0 14	4 48	3 251	16 255	39	0 47	1 85	2 985	74 1,588		
Delaware District of Columbia	—	2	9 2	29	58 34	_	0	2	5	7	1	0	8	38	6		
Florida	_	102	174	1,597	1,591	_	3	10	75	66	_	11	26	201	432		
Georgia Maryland§	34	37 16	96 36	640 226	627 284	_	1 2	8 11	25 28	24 39	7	13 4	30 12	268 119	653 29		
North Carolina South Carolina§	89 5	23 17	106 57	609 230	345 317		2 1	21 3	62 9	24 17	27 2	5 4	27 22	207 63	47 323		
Virginia <sup>§</sup> West Virginia	13	20 4	88 10	290 67	298 91	1	3 0	27 3	39 8	53 21	2	4	59 3	84 5	71 19		
E.S. Central	10	54	140	829	938	1	5	12	79	102	10	26	58	441	984		
Alabama <sup>§</sup> Kentucky	_	16 10	49 18	234 161	253 155	_	1 1	3 7	17 21	35 20	_	5 2	12 25	73 113	232 173		
Mississippi Tennessee <sup>§</sup>	 10	13 14	57 62	197 237	265 265	1	0 2	1 6	6 35	3 44	 10	1 14	6 48	14 241	226 353		
W.S. Central	31	133	1,328	948	1,623	1	5	139	49	134	40	92	967	1,206	1,520		
Arkansas <sup>§</sup> Louisiana	12	13 11	39 54	186 126	162 313	_	0 0	5 1	7	23 4	9	10 7	27 26	158 60	168 287		
Oklahoma Texas <sup>§</sup>	19	14 91	102 1,199	217 419	196 952	1	0 4	82 55	7 35	12 95	6 25	4 63	61 889	93 895	44 1,021		
Mountain	28	55	110	1,011	1,263	3	10	40	135	170	10	27	54	465	280		
Arizona Colorado	9 18	20 12	43 20	389 225	342 350	1	1 3	4 18	18 60	25 48	9 1	17 3	35 11	340 41	124 30		
Idaho <sup>§</sup> Montana <sup>§</sup>	1	3 2	12 7	66 49	66 42	2	2 0	15 3	20 6	33 17	_	0	2 5	3 11	5 1		
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	4 6	14 25	104 83	86 223	_	0	3 4	8 15	8 19	_	2 3	13 12	30 37	87 21		
Utah	_	6	19	73	121	_	1	9	7	15	—	0	3	3	9		
Wyoming <sup>§</sup> Pacific	 50	1 119	5 537	22 2,270	33 1,871	5	0 11	2 31	1 133	5 93	8	0 30	1 82	486	3 521		
Alaska California	1 22	1 88	4 516	25 1,722	18 1,388	-	0 5	1 15	80	3 51	7	0 25	1 75	2 386	447		
Hawaii Oregon <sup>§</sup>		5	15 73	103	91 156		0	2	2	3 11	<i>.</i>	0	3 10	8	18 25		
Oregon <sup>s</sup> Washington	27	11	73 85	156 264	156 218	4	1 3	8 16	11 40	11 25	1	1	10	16 74	25 31		
American Samoa C.N.M.I.	_	0	1	_	1	_	0	0	_	_	_	0	2	3	1		
Guam Puerto Rico	2	1 12	2 40	 78	5 247	_	0	0 0	_	_	_	0	2 4	1	11 8		
U.S. Virgin Islands		0	40			_	0	0	_	_	_	0	4	_	_		

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		•	-	asive, group A		Streptococc	Streptococcus pneumoniae, invasive disease, nondrug resist Age <5 years Previous							
	Current	Prev 52 w	eeks	Cum	Cum	Current	52 w	eeks	Cum	Cum				
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008				
United States	63	96	239	2,877	3,197	6	33	122	872	999				
New England Connecticut	1	5 0	28 21	155 43	234 66	_	1 0	12 11	23	51				
Maine <sup>§</sup>	—	0	3	10	17	—	0	1	1	1				
Massachusetts New Hampshire	_	2 0	10 4	60 26	115 16	_	1 0	2 1	15 5	39 7				
Rhode Island <sup>§</sup>	_	0	8	4	10	_	0	2	_	4				
Vermont§	1	0	3	12	10	_	0	1	2	—				
Mid. Atlantic New Jersey	18	18 1	38 6	561 5	670 121	1	4 1	33 4	129 14	125 35				
New York (Upstate)	8	6	25	210	210	1	2	17	68	55				
New York City		4	12	117	129		0	31	47	35				
Pennsylvania	10	6	18	229	210	N	0	2	N	N				
E.N. Central Illinois		17 5	42 12	581 160	638 175	1	6 1	18 5	130 15	184 53				
Indiana	—	3	23	96	81	_	0 0	13	15	20				
Michigan	_	3	11	96	112		1	5	42	51				
Ohio Wisconsin	1	4 2	13 10	153 76	174 96	1	1	6 4	43 15	33 27				
W.N. Central	24	6	37	254	238	_	2	11	68	47				
Iowa	—	0	0	_	_	_	0	0	_	_				
Kansas	1 21	1 0	5 34	36	26	N	0 0	1 7	N 31	N				
Minnesota Missouri	21	2	34 8	105 61	109 60	_	1	4	26	11 21				
Nebraska§	1	1	3	29	23	_	Ó	1	3	5				
North Dakota South Dakota	1	0 0	4 3	7 16	8 12	_	0	3	4	5 5				
							0	2	4					
S. Atlantic Delaware	10	22 0	46 1	627 8	629 6	_	6 0	16 0	177	194				
District of Columbia	—	0	2	_	7	N	0	0	Ν	Ν				
Florida Georgia	3	5 5	12 13	154 146	143 141	_	1 2	6 6	43 47	36 52				
Maryland§		3	10	86	115	_	1	3	36	38				
North Carolina	3	2	12	67	77	N	0	0	Ν	Ν				
South Carolina <sup>§</sup> Virginia <sup>§</sup>	2 2	1 3	5 9	40 100	39 77	_	1 0	6 4	28 15	32 31				
West Virginia		1	4	26	24	_	0	2	8	5				
E.S. Central	1	4	10	112	110	_	1	6	34	53				
Alabama§	N	0	0	N	N	N	0	0	N	N				
Kentucky Mississippi	N	1 0	5 0	20 N	22 N	<u>N</u>	0 0	0 2	N	N 7				
Tennessee§	1	3	8	92	88	_	1	6	34	46				
W.S. Central	2	9	79	257	260	2	6	46	162	148				
Arkansas§ Louisiana	_	0 0	2 3	9 9	7	_	0	4	16	9 7				
Oklahoma	1	3	20	89	11 62	1	0 1	3 7	13 31	45				
Texas§	1	6	59	150	180	1	4	34	102	87				
Mountain	4	9	22 7	259	353	1	4	16	131	169				
Arizona Colorado	1 3	3 3	7 10	79 107	120 88	1	2	10 4	76 25	77 39				
Idaho§	_	Ő	2	3	10	_	Ó	2	6	2				
Montana <sup>§</sup>	N	0	0	N	N	N	0	0	N	N				
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	0 2	1 7	4 44	6 90	_	0 0	1 4	13	2 25				
Utah	_	1	6	21	34	_	ő	4	11	23				
Wyoming§	_	0	1	1	5	—	0	1	_	1				
Pacific Alaska	1 1	3 0	9 4	71 10	65 15	1	1 0	3 3	18 13	28 17				
California	N	0	4	N	N	N	0	0	N N	N N				
Hawaii	_	3	8	61	50	—	0	2	5	11				
Oregon <sup>§</sup> Washington	N N	0 0	0 0	N N	N N	N N	0	0 0	N N	N N				
Washington	IN			IN			0							
American Samoa C.N.M.I.	_	0	8	_	22	<u>N</u>	0	0	<u>N</u>	N				
Guam		0	0				0	0						
Puerto Rico	N	0	0	N	N	N	0	0	N	N				
U.S. Virgin Islands		0	0	_		N	0	0	N	N				

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(24th week)*	Streptococcus pneumoniae, invasive disease, drug resistant <sup>+</sup>																		
	All ages							ged <5 yea			Syphilis, primary and secondary								
	Previous 52 weeks		Cum	Cum	Current		vious veeks	Cum	Cum	Previous Current 52 weeks			Cum	Cum					
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	week	Med	Max	Cum 2009	Cum 2008	week	Med	Max	Cum 2009	2008				
United States	13	56	276	1,636	1,879	5	9	21	252	273	68	260	452	5,615	5,592				
New England Connecticut	_	1 0	48 48	29	38	_	0 0	5 5	1	4	3	5 1	15 5	144 29	144 10				
Maine <sup>§</sup> Massachusetts	_	0 0	2 1	7 1	12	_	0 0	1 1	1	_	3	0 4	2 11	1 100	5 112				
New Hampshire Rhode Island <sup>§</sup>	_	0 0	3 6	5 7	 13	_	0 0	0 1	_	2	_	0	2 5	10 4	6 6				
Vermont <sup>§</sup>	_	0 4	1	9	13	_	0 0	0 3	-	2		0	2		5				
Mid. Atlantic New Jersey	1	0	14 0	95  40	195 — 37	1	0	0	19  10	16 5	26 	33 4	51 13 8	843 101 50	782 94				
New York (Upstate) New York City	_	1	10 4	2	81	_	0	2	_	_	17	2 22	36	529	60 489				
Pennsylvania E.N. Central	1 6	1 10	8 41	53 356	77 408	1 1	0 1	2 7	9 50	11 56	6 6	5 24	12 44	163 456	139 498				
Illinois Indiana	N	0 2	0 32	N 108	N 144	N	0 0	0 6	N 16	N 17	_	9 2	19 10	119 73	185 65				
Michigan Ohio	6	0 7	2 18	16 232	14 250	1	0 1	1 4	2 32	2 37	4	4	18 28	113 128	94 132				
Wisconsin	_	0	0	_	_	_	0	0	_		2	1	4	23	22				
W.N. Central Iowa	_	3 0	161 0	85	135	_	1 0	4 0	20	24	2	6 0	14 2	135 10	187 8				
Kansas Minnesota	_	1 0	5 156	37	56 16	_	0	2 4	13	3 16	_2	0	3 6	13 29	16 44				
Missouri Nebraska <sup>§</sup>	_	1 0	5 0	37	58	_	0 0	1 0	5	_2	_	3 0	10 2	69 11	113 6				
North Dakota South Dakota	_	0 0	3 2	9 2	2 3	_	0 0	0 2	2	3	_	0 0	1 1	2 1	_				
S. Atlantic Delaware	3	25 0	53 2	785 10	746 2	1	4 0	14 0	114	114	15	62 0	262 3	1,331 14	1,186 6				
District of Columbia Florida	N	0 15	0 36	N 481	N 398	N	0 3	0 13	N 79	N 70	_	3 20	9 31	81 428	61 456				
Georgia Maryland <sup>§</sup>	3	8	25 1	217	264 4	1	1 0	5	28	37 1	_	14 6	227 16	252 125	208 144				
North Carolina South Carolina <sup>§</sup>	N	0	0	Ň	Ň	N	0	0	Ν	N	14 1	8 2	19 6	248 47	136 41				
Virginia§	Ν	0	0 13	N 73	 N 78	Ν	0	03	N 7	N 6		2 5 0	16	134 2	129 5				
West Virginia E.S. Central	3	2 5	25	177	210	2	1	3	26	38	6	22	1 36	491	472				
Alabama <sup>§</sup> Kentucky	<u>N</u>	0 1	0 5	N 48	N 49	<u>N</u>	0 0	0 2	N 7	N 9	_	8 1	17 10	179 24	205 44				
Mississippi Tennessee§	3	0 3	3 22	129	24 137	2	0 0	1 3	 19	8 21	6	3 8	18 19	87 201	59 164				
W.S. Central Arkansas <sup>§</sup>	_	1 0	6 5	52 33	70 12	_	0	3 3	10 7	12 3	6	48 4	80 35	1,072 91	919 54				
Louisiana	 N	1	5 5 0	19	58	_	0	1 0	3	9	6	14 1	40 7	223 27	217				
Oklahoma Texas <sup>§</sup>		Ō	0		<u>N</u>		Ō	0		<u>N</u>	_	30	44	731	40 608				
<b>Mountain</b> Arizona	_	2 0	7 0	55	76	_	0 0	3 0	11	8	_	9 3	18 11	136 21	302 154				
Colorado Idaho <sup>§</sup>	N	0 0	0 1	N	N	N	0 0	0 1	N	N	_	2 0	5 2	42 3	84 1				
Montana <sup>§</sup> Nevada <sup>§</sup>	_	0 1	1 4	 26	 36	_	0 0	0 2	6	3	_	0 1	7 7	 49	 35				
New Mexico <sup>§</sup> Utah	_	0 1	0 6			_	0 0	0 3	4	5	_	1 0	5 2	20	13 13				
Wyoming§	—	0	2	7	_	—	0	1	1	—	—	0	1	1	2				
Pacific Alaska		0	1 0	2	1		0	1 0	1	1	4	47 0	66 1	1,007	1,102				
California Hawaii	N	0	0	N 2	N 1	N	0	0	N 1	N 1	2	43 0	60 3	922 14	1,001 11				
Oregon <sup>§</sup> Washington	N N	0 0	0 0	N N	N N	N N	0 0	0 0	N N	N N	1 1	0 3	3 9	16 55	5 85				
American Samoa C.N.M.I.	N	0	0	N	N	N	0	0	<u>N</u>	N	_	0	0	_	_				
Guam Puerto Rico	_	0 0	0 0	_	_	_	0 0	0 0	_	_	6	0 3	0 11	102	 75				
U.S. Virgin Islands		0	0			_	0	0	_			0	0						

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

Channel Wealth of Normer Martana 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).

(24th week)						West Nile virus disease <sup>†</sup>										
		Varice	ella (chicke	enpox)		Neuroinvasive Nonneuroinvasive <sup>§</sup>										
	_		/ious /eeks	_	_	_	Prev 52 w	ious eeks			_		vious veeks	_	_	
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	51	350	711	7,791	18,007	_	0	75	_	12	_	0	77	1	27	
New England Connecticut	_	15 9	46 21	148	922 458	_	0	2 2	_	_	_	0	1	_	1 1	
Maine <sup>¶</sup>	_	0	11	_	153	_	Ō	0	_	_	_	0	Ó	_	_	
Massachusetts New Hampshire	_	0 4	1 11	105	153	_	0 0	1 0	_	_	_	0 0	0	_	_	
Rhode Island <sup>¶</sup> Vermont <sup>¶</sup>	_	0 3	0 17	43	158	_	0	1	_	_	_	0	0	_	—	
Mid. Atlantic	17	38	58	43 883	1,414	_	0	8	_	_	_	0	4	_	_	
New Jersey New York (Upstate)	N N	0 0	0	N N	N	_	0	2 5	_	_	_	0 0	1 2	_	_	
New York City	_	Ō	Õ	_	_	_	Ō	2	—	_	_	0	2	_	_	
Pennsylvania E.N. Central	17 27	38 151	58 254	883 3,814	1,414 4.443	_	0 0	2 8	_	_	_	0 0	1 3	—	—	
Illinois		33	73	822	620	_	0	4	_	_	_	0	2	_	_	
Indiana Michigan	8	0 49	19 90	151 1,196	1,871	_	0 0	1 4	_	_	_	0 0	1 2	_	_	
Ohio	9	42	91	1,326	1,466	_	0	3	_	—	_	0	1	_	_	
Wisconsin W.N. Central	10	13 22	51 114	319 609	486 723	_	0	2 6	_	1	_	0	1 21	1	4	
Iowa	Ν	0	0	N	N	_	Ō	2	—	—	_	Ō	1	—	_	
Kansas Minnesota	_	6 0	22 0	171	293	_	0 0	2 2	_	1	_	0 0	3 4	_	1	
Missouri		11	51	400	405	—	0	3	—	—	—	0	1	—	—	
Nebraska <sup>¶</sup> North Dakota		0 0	0 108	N 38		_	0 0	1 2	_	_	_	0 0	6 11	_	3	
South Dakota	_	0	4		25	—	0	5	—	_	_	0	6	1	—	
S. Atlantic Delaware	1	57 0	136 5	1,166 2	2,790 15	_	0	4 0	_	_2	_	0	4 1	_	_	
District of Columbia Florida	_	0 28	3 67	818	17 1,032	_	0	2 2	_	_	_	0 0	1 0	_	_	
Georgia	Ν	0	0	N	Ń	_	0	1	—	_	_	0	1	_	_	
Maryland¶ North Carolina	N N	0 0	0	N N	N N	_	0	2 1	_	1	_	0 0	3 1	_	_	
South Carolina <sup>¶</sup>	_	6	39	82	538	—	Õ	0	—	_	—	0	1	—	—	
Virginia <sup>¶</sup> West Virginia	1	8 10	60 32	28 236	778 410	_	0 0	0 0	_	1	_	0 0	1 0	_	_	
E.S. Central	_	4 4	28	17	783	_	0 0	7	_	1	_	0	9	_	6	
Alabama <sup>¶</sup> Kentucky	N	4	28 0	16 N	775 N	_	0	3 1	_	_	_	0	2 0	_	1	
Mississippi Tennessee <sup>¶</sup>	N	0 0	1 0	1 N	8 N	_	0 0	4 2	_	1	_	0 0	8 3	_	3 2	
W.S. Central	_	56	308	489	5,532	_	0	8	_	6	_	0	7	_	7	
Arkansas¶ Louisiana	_	3 1	47 4	19 35	408 47	_	0 0	1 3	_	2	_	0 0	1 5	_	_	
Oklahoma	Ν	0	0	N	N	—	0	1	—	2	_	0	1	—	3	
Texas <sup>¶</sup> Mountain	5	47 24	282 83	435 605	5,077 1,340	_	0	6 12	_	2 2	_	0 0	4 22	_	4 6	
Arizona	—	0	0	_	<i>′</i> —	—	Ō	10	—	ī	_	Ō	8	—	_	
Colorado Idaho¶	5 N	11 0	44 0	297 N	545 N	_	0 0	4 1	_	1	_	0 0	10 6	_	4 1	
Montana <sup>¶</sup> Nevada <sup>¶</sup>	N	2 0	27 0	70 N	180 N	_	0 0	0 2	_	_	_	0 0	2 3	_	_	
New Mexico <sup>¶</sup>		2	10	67	135	_	0	1	_	_	_	0	1	_	_	
Utah Wyoming <sup>¶</sup>	_	10 0	31 1	171	471 9	_	0 0	2 0	_	_	_	0 0	5 2	_	1	
Pacific	1	3	7	60	60	_	0	38	_	_	_	0	23	_	3	
Alaska California	1	2 0	6 0	40	23	_	0 0	0 37	_	_	_	0	0 20	_	3	
Hawaii		1	4	20	37		0	0	—	_	_	0	0	—	_	
Oregon <sup>¶</sup> Washington	N N	0 0	0 0	N N	N N	_	0 0	2 1	_	_	_	0 0	4 1	_	_	
American Samoa	N	0	0	N	N	_	0	0	—	_	—	0	0	_	—	
C.N.M.I. Guam	_	0	3	_	55	_	0	0	_	_	_	0	0	_	_	
Puerto Rico	_	7	17	114	326	_	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. <sup>1</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

#### TABLE III. Deaths in 122 U.S. cities,\* week ending June 20, 2009 (24th week)

	All causes, by age (years)						All causes, by age (years)								
Reporting area	All Ages	<u>&gt;</u> 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	501	329	122	35	9	6	53	S. Atlantic	1,237	715	346	85	47	44	75
Boston, MA	148	82	51	10	3	2	12	Atlanta, GA	174	97	45	14	6	12	1
Bridgeport, CT	27	21	3	2	1	—	4	Baltimore, MD	167	91	46	18	5	7	16
Cambridge, MA	14	12	1	1	_	—	4	Charlotte, NC	109	70	24	8	4	3	9
Fall River, MA	24	18	5	1	_	—	1	Jacksonville, FL	162	84	57	11	5	5	9
Hartford, CT	45	29 13	8 2	7	1	_	7	Miami, FL	110	67	30	8 2	5	4	6
Lowell, MA Lynn, MA	17 7	4	2	2	2	_	1	Norfolk, VA Richmond, VA	55 61	34 27	15 18	∠ 3	8	4 5	2 7
New Bedford, MA	21	16	4	1	_	_	1	Savannah, GA	39	27	8	2	1	1	2
New Haven, CT	25	17	6	_	_	2	8	St. Petersburg, FL	58	33	18	3	2	2	2
Providence, RI	56	36	15	2	1	2	2	Tampa, FL	188	119	52	10	5	2	16
Somerville, MA	2	1	1	_	_	_	_	Washington, D.C.	103	57	32	5	6	3	3
Springfield, MA	28	21	5	1	1	_	3	Wilmington, DE	11	9	1	1	_	_	2
Waterbury, CT	28	19	5	4	_	—	4	E.S. Central	857	523	233	56	24	21	66
Worcester, MA	59	40	15	4	—	—	6	Birmingham, AL	155	89	43	16	5	2	13
Mid. Atlantic	2,178	1,468	479	144	39	47	93	Chattanooga, TN	90	70	16	1	1	2	4
Albany, NY	41	27	10	3	1	—	_	Knoxville, TN	108	63	33	7	4	1	16
Allentown, PA	26	21	3	1	1	_	1	Lexington, KY	59	36	15	4	_	4	3
Buffalo, NY	45	32	8	3	1	1	7	Memphis, TN	182	103	57	12	6	4	15
Camden, NJ	U	U	U	U	U	U	U	Mobile, AL	92	56	28	6	2	—	2
Elizabeth, NJ	21	14	5	2	_	1	3	Montgomery, AL	37	27	6	4	6	8	3
Erie, PA	43	37	3	2				Nashville, TN	134	79	35	6			10
Jersey City, NJ	9	6 771	1 264	1 78	1 15	 13		W.S. Central Austin, TX	1,331 99	830 61	305 20	114 12	38 2	44 4	67 11
New York City, NY Newark, NJ	1,142 34	12	204 11	78 6	3	2	40	Baton Rouge, LA	99 56	49	20	3	2	4	
Paterson, NJ	10	7	1	1		1	_	Corpus Christi, TX	73	49 43	17	5	4	4	3
Philadelphia, PA	461	284	108	32	14	23	15	Dallas, TX	170	102	42	10	7	9	14
Pittsburgh, PA§	35	17	15	2		1	2	El Paso, TX	67	42	14	9	1	1	2
Reading, PA	29	25	4		_	_	2	Fort Worth, TX	Ű	Ű	Ŭ	Ŭ	Ů	Ů	Ű
Rochester, NY	123	90	22	6	1	4	8	Houston, TX	359	208	96	30	12	13	12
Schenectady, NY	22	16	6	_	_	_	1	Little Rock, AR	69	41	12	9	2	5	1
Scranton, PA	27	22	4	1	_	_	3	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	55	44	8	3	_	_	4	San Antonio, TX	247	150	69	16	7	5	14
Trenton, NJ	24	20	1	1	2	—	—	Shreveport, LA	63	46	11	4	_	2	5
Utica, NY	11	9	2	—	—	_	1	Tulsa, OK	128	88	21	16	2	1	5
Yonkers, NY	20	14	3	2	—	1	—	Mountain	875	576	197	66	24	10	63
E.N. Central	1,832	1,215	420	103	45	46	121	Albuquerque, NM	U	U	U	U	U	U	U
Akron, OH	44	29	13	1	_	1	_	Boise, ID	47	33	9	4	_	1	2
Canton, OH	36	25	6	1	2	2	3	Colorado Springs, CO	69	52	13	4	_		1
Chicago, IL	309	171	93	28	7	7	27	Denver, CO	88	57	18	8	3	2	8
Cincinnati, OH Cleveland, OH	80 205	53 145	14 45	5 4	5 6	3 5	9 9	Las Vegas, NV	237 30	159 21	47 7	21 2	10	_	20 2
Columbus, OH	189	145	43	12	4	3	11	Ogden, UT Phoenix, AZ	149	75	46	16	4	6	11
Dayton, OH	123	86	26	5	4	2	6	Pueblo, CO	24	15	-40		_	1	
Detroit, MI	156	84	43	11	6	12	16	Salt Lake City, UT	119	86	19	9	5	_	13
Evansville, IN	46	37	.0	_	_		2	Tucson, AZ	112	78	30	2	2	_	6
Fort Wayne, IN	73	58	11	1	2	1	3	Pacific	1,567	1,074	347	90	35	21	148
Gary, IN	12	6	5	1	_	_	_	Berkeley, CA	13	11	2	_		_	3
Grand Rapids, MI	42	35	5	1	1	_	6	Fresno, CA	U	U	U	U	U	U	U
Indianapolis, IN	167	101	45	14	2	5	13	Glendale, CA	30	19	9	1	_	1	4
Lansing, MI	21	17	4	—	—	_	1	Honolulu, HI	84	60	18	3	2	1	8
Milwaukee, WI	68	46	11	6	2	3	5	Long Beach, CA	59	35	20	2	1	1	9
Peoria, IL	U	U	U	U	U	U	U	Los Angeles, CA	228	144	57	17	6	4	25
Rockford, IL	63	48	9	4	2		3	Pasadena, CA	24	16	4	1	2	1	2
South Bend, IN	47	37	6	1	2	1	2	Portland, OR	124	81	28	12	2	1	5
Toledo, OH	86	57	22	7	_	_	2	Sacramento, CA	206	139	46	12	7	2	27
Youngstown, OH	65	58	5	1		1	3	San Diego, CA	192	127	40	18	3	4	15
W.N. Central	609	389	133	44	27	16	46	San Francisco, CA	129	87	32	5	3	2	15
Des Moines, IA	73	51	15	4	2	1	5	San Jose, CA	182	139	32	8	1	2	18
Duluth, MN	34	26	6	1	1	1	5	Santa Cruz, CA	35	28	6 14	1	_	-	5
Kansas City, KS Kansas City, MO	19	11	2	4	1 4	1	10	Seattle, WA Spokane, WA	91 62	69 45	14	7	3	1	5 5
Lincoln, NE	97 38	59 30	27 3	6 4	4	1	10	Tacoma, WA	63 107	45 74	13 26	1 2	3 5	1	5
Minneapolis, MN	38 72	30 51	10	4	6	2	6	Total <sup>¶</sup>	10,987	7,4 7,119	20 2,582	<b>73</b> 7	о 288	255	- 732
Omaha, NE	/2 U	51 U	U	U	U	Ű	Ŭ		10,307	7,119	2,302	131	200	200	132
St. Louis, MO	116	63	25	12	10	6	9								
St. Paul, MN	59	36	14	5	2	2	9 4								
Wichita, KS	101	62	31	5	1	2	7	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>5</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. <sup>1</sup> Total includes unknown ages.

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☆ U.S. Government Printing Office: 2009-523-019/41183 Region IV ISSN: 0149-2195