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National HIV Testing Day — June 27, 2008

June 27 is National HIV Testing Day, which focuses on the importance of knowing one's current human immunodeficiency virus (HIV) infection status. In 2003, approximately 25% of the estimated 1 million persons in the United States infected with HIV were unaware of their infection (*1*). CDC encourages learning one's HIV status through HIV testing (*2*) and has recommended that voluntary HIV testing be offered routinely in health-care settings to all persons aged 13–64 years (*3*). Persons at higher risk for HIV should get tested more frequently (e.g., men who have sex with men should get tested at least annually). To address the disproportionately high rate of HIV infection among blacks, CDC has increased HIV testing opportunities in 23 geographic areas with the largest number of HIV cases, so that more blacks can know their HIV status (*4*).

Persons who learn that they are infected with HIV at an earlier stage of infection can survive longer by receiving appropriate care and can prevent transmitting HIV to others. Additional information, including a list of testing sites, is available at http://www.hivtest.org.

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Trends in HIV/AIDS Diagnoses Among Men Who Have Sex with Men — 33 States, 2001–2006

In 2008, CDC conducted an analysis of trends in diagnoses of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) among men who have sex with men (MSM) in the 33 states* that have had confidential, name-based HIV case reporting since at least 2001. This report summarizes the results of that analysis, which indicated that the number of HIV/AIDS diagnoses among MSM overall during 2001–2006 increased 8.6% (estimated annual percentage change [EAPC] = 1.5). During 2001–2006, an estimated 214,379 persons had HIV/AIDS diagnosed in the 33 states. Of these diagnoses, 46% were in MSM, and 4% were in MSM who engaged in illicit injection-drug use (IDU) (i.e., MSM and IDU). To reduce the impact of HIV/AIDS in the United States, HIV prevention services that aim to reduce the risk for acquiring and transmitting infection among MSM and link infected MSM to treatment must be expanded.

* Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, 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.

INSIDE

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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In this report, HIV/AIDS refers to three categories of diagnoses collectively: 1) a diagnosis of HIV infection (not AIDS), 2) a diagnosis of HIV infection with subsequent AIDS diagnosis, and 3) concurrent diagnoses of HIV infection and AIDS. Reporting cases of HIV infection (not AIDS) and AIDS is now legally mandated in all U.S. states, the District of Columbia, and five U.S. territories. The CDC case definition for HIV infection (not AIDS) requires a positive test result from an assay approved by the Food and Drug Administration that demonstrates evidence of HIV infection; the case definition for AIDS requires meeting the HIV infection (not AIDS) case definition, plus diagnosis of at least one AIDS-defining illness or a CD4+ T-lymphocyte count of <200 cells/μL.[†] Using the HIV/AIDS Reporting System (HARS), case report data were collected by local and state health department staff members and then transmitted to CDC devoid of patient names. The findings in this report are based on HIV/AIDS diagnoses made during 2001–2006 and reported to CDC as of June 30, 2007 (*1*).

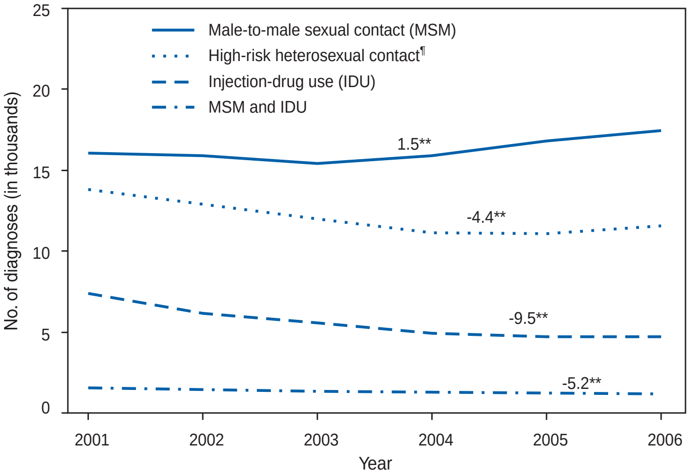
Numbers of diagnoses were adjusted for reporting delays and for redistribution of cases with missing risk factor information, using a standard method that has been described previously (*2*). This method does not include statistical adjustments for diagnosed but unreported cases or for cases yet to be diagnosed. To facilitate comparisons between the estimated number of diagnoses occurring in 2001 and the number occurring in 2006, 95% confidence intervals (CIs) were calculated. To examine trends, EAPCs with corresponding CIs were calculated. EAPC measures the differences between adjacent years under examination and then averages these inter-year differences. In this report, transmission categories[§] are discrete (e.g., "MSM" is distinct from "MSM and IDU" and "IDU" is distinct from "MSM and IDU"). Accordingly, MSM who were also injection-drug users (MSM and IDU) were excluded from analysis of MSM.

Of 214,379 HIV/AIDS diagnoses in 33 states during 2001–2006, a total of 97,577 (46%) were among MSM. Decreases in diagnoses were observed in all transmission categories except MSM (excluding MSM and IDU) (Figure 1). Among males, MSM accounted for 97,577 (63%) of cases. Men aged 25–44 years accounted for 64% of cases among MSM (Table). Among MSM, the number of diagnoses increased from 16,081

[†] The AIDS case definition immunologic criteria may be satisfied alternatively by a CD4+ T-lymphocyte percentage of total lymphocytes of less than 14%.

[§] Transmission categories are 1) male-to-male sexual contact (i.e., MSM), 2) IDU, 3) MSM and IDU, 4) high-risk heterosexual contact (i.e., with a person of the opposite sex known to be HIV infected or at high risk for HIV/AIDS [e.g., an MSM or injection-drug user]), and 5) other (e.g., hemophilia or blood transfusion) and all risk factors not reported or not identified.

FIGURE 1. Estimated* number and estimated annual percentage change (EAPC) of HIV/AIDS diagnoses,† by HIV transmission category and year of diagnosis — 33 states,§ 2001–2006



* Adjusted for reporting delays and missing risk factors for HIV.
† Diagnosis of HIV infection, regardless of whether or when AIDS was also diagnosed.
§ Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, 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.
¶ Heterosexual contact with a sex partner known to be HIV-infected or at high risk (e.g., male-to-male sexual contact and injection-drug use).
** EAPC.

(CI = 15,784–16,377) in 2001 to 17,465 (CI = 16,938–17,992) in 2006; (EAPC = 1.5) (Figure 1).

From 2001 to 2006, a 12.4% (EAPC = 1.9) increase in the number of HIV/AIDS diagnoses among all black MSM was observed; however, an increase of 93.1% (EAPC = 14.9) was observed among black MSM aged 13–24 years (Figure 2). During 2001–2006, approximately twice as many (7,658) diagnoses occurred in black MSM aged 13–24 years as in their white counterparts (3,221). The largest proportionate increase (255.6% [EAPC = 30.8]) was among Asian/Pacific Islander MSM aged 13–24 years. Among MSM aged 13–24 years, statistically significant increases in diagnoses as measured by EAPC were observed in all racial/ethnic populations except American Indian/Alaska Natives. Among MSM of all ages, statistically significant increases as measured by EAPC were observed in blacks, Hispanics, and Asian/Pacific Islanders.¶

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¶ Because of small numbers of Asian/Pacific Islander MSM and the resultant wide CIs around point estimates, the rate of increase in this subpopulation should be interpreted with caution.

Editorial Note: During 2001–2006, male-to-male sex remained the largest HIV transmission category in the United States and the only one associated with an increasing number of HIV/AIDS diagnoses. In this analysis, statistically significant decreases in HIV/AIDS diagnoses were observed for all other transmission categories (i.e., among persons likely to have been infected through high-risk heterosexual contact, IDU, MSM and IDU, and other routes). Among MSM aged 13–24 years, statistically significant increases in diagnoses were observed in nearly all racial/ethnic populations. These findings underscore the need for continued effective testing and risk reduction interventions for MSM, particularly those aged <25 years.

The data in this report indicate when persons were diagnosed with HIV infection, rather than when they became infected. This is an important distinction because a person might have been infected with HIV for years before receiving a diagnosis of HIV infection. Determining when persons who have been diagnosed were actually infected is difficult. Although HIV diagnosis data can provide some indication of underlying trends in HIV infection, this approach has limitations. A greater number of tests for HIV infection among MSM might partially explain the observed increase in HIV/AIDS diagnoses. However, available data suggest that these increases cannot be explained by increases in testing alone; the increase could be attributed to more targeted testing, increasing incidence, or some combination of these.**

To improve the nation's ability to track new HIV infections, CDC has established a new system for measuring incident HIV infections at the population level. A novel laboratory method will be combined with standard case surveillance procedures and statistical estimations to provide a better means of estimating national HIV incidence from the number of persons who are newly diagnosed with HIV (*3*). This system will be able to distinguish between recent and long-standing HIV-1 infection on a population level. Estimates from the new system are expected to be available in 2008. The new system will provide a better tool for measuring progress in the prevention of HIV infection than data based on HIV/AIDS diagnoses alone, such as those described in this report. Nevertheless, diagnosis data will continue to play an important role in monitoring the HIV epidemic, particularly among adolescents and young adults who, because of their age, are unlikely to have been infected many years before diagnosis. Additionally,

** Prosser AT. Comparison of HIV diagnoses and HIV tests among MSM aged 15–24, 2001–2004—12 states. Presented at the 2007 National HIV Prevention Conference (session B15-5), Atlanta, GA; December 2007. Available at http://www.cdcnpin.org/2007_national_hiv_prev_conf/public/viewdocument.aspx?documentid=9f078036-e3e5-41fe-8086-f99f0b2fe3d2.

TABLE. Estimated* number and percentage† of HIV/AIDS§ diagnoses and estimated annual percentage change (EAPC) among men who have sex with men, by selected characteristics — 33 states,¶ 2001–2006

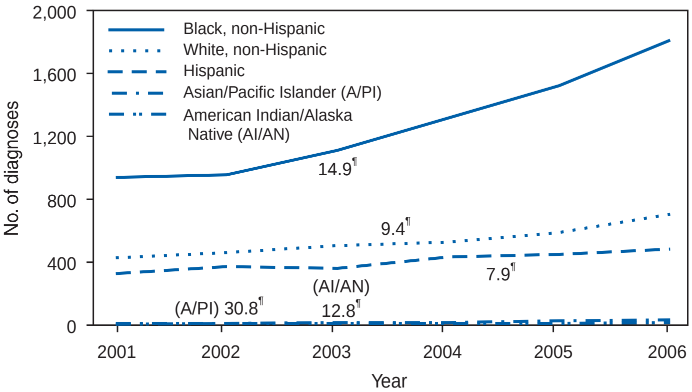
	Year of diagnosis												Total		EAPC	
	2001		2002		2003		2004		2005		2006		2001–2006		2001–2006	
Characteristic	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)		(95% CI**)
Age group (yrs)																
13–24	1,725	(11)	1,818	(11)	2,028	(13)	2,328	(15)	2,624	(16)	3,061	(18)	**13,584**	**(14)**	12.4	(10.6–14.2)
25–44	10,866	(68)	10,698	(67)	10,105	(66)	10,019	(63)	10,358	(62)	10,519	(60)	**62,565**	**(64)**	-1.1	(-1.9– -0.3)
≥45	3,489	(22)	3,394	(21)	3,276	(21)	3,532	(22)	3,850	(23)	3,885	(22)	**21,426**	**(22)**	2.7	(1.1–4.3)
Race/Ethnicity																
White, non-Hispanic	6,872	(43)	6,848	(43)	6,539	(42)	6,810	(43)	7,117	(42)	7,158	(41)	**41,344**	**(42)**	0.7	(-0.2–1.6)
Black, non-Hispanic	5,863	(36)	5,746	(36)	5,598	(36)	5,650	(36)	6,102	(36)	6,589	(38)	**35,548**	**(36)**	1.9	(0.7–3.1)
Hispanic††	3,018	(19)	3,002	(19)	2,944	(19)	3,081	(19)	3,196	(19)	3,330	(19)	**18,571**	**(19)**	1.9	(0.3–3.5)
Asian/Pacific Islander	126	(1)	137	(1)	182	(1)	170	(1)	210	(1)	220	(1)	**1,045**	**(1)**	12.1	(5.0–19.6)
American Indian/ Alaska Native	73	(<1)	76	(<1)	71	(<1)	76	(<1)	82	(<1)	91	(1)	**469**	**(<1)**	3.6	(-3.7–11.4)
Unknown	129	(1)	100	(1)	75	(<1)	92	(1)	126	(1)	77	(<1)	**599**	**(1)**	—	—
Race/Ethnicity and age group (yrs)																
White, non-Hispanic																
13–24	430	(6)	460	(7)	507	(8)	530	(8)	591	(8)	703	(10)	**3,221**	**(8)**	9.4	(6.2–12.7)
25–44	4,721	(69)	4,738	(69)	4,467	(68)	4,444	(65)	4,518	(63)	4,484	(63)	**27,372**	**(66)**	-1.4	(-2.5– -0.3)
≥45	1,721	(25)	1,650	(24)	1,564	(24)	1,836	(27)	2,008	(28)	1,971	(28)	**10,750**	**(26)**	3.8	(1.9–5.8)
Black, non-Hispanic																
13–24	938	(16)	957	(17)	1,113	(20)	1,316	(23)	1,523	(25)	1,811	(27)	**7,658**	**(22)**	14.9	(12.4–17.4)
25–44	3,726	(64)	3,591	(62)	3,347	(60)	3,198	(57)	3,339	(55)	3,443	(52)	**20,644**	**(58)**	-2.3	(-3.8– -0.8)
≥45	1,199	(20)	1,199	(21)	1,138	(20)	1,137	(20)	1,239	(20)	1,334	(20)	**7,246**	**(20)**	1.5	(-1.6–4.8)
Hispanic																
13–24	330	(11)	371	(12)	360	(12)	431	(14)	449	(14)	481	(14)	**2,422**	**(13)**	7.9	(3.8–12.0)
25–44	2,188	(72)	2,142	(71)	2,077	(71)	2,148	(70)	2,211	(69)	2,333	(70)	**13,099**	**(71)**	0.9	(-0.9–2.7)
≥45	500	(17)	489	(16)	507	(17)	502	(16)	536	(17)	516	(15)	**3,050**	**(16)**	1.3	(-3.0–5.8)
Asian/Pacific Islander																
13–24	9	(7)	9	(7)	16	(9)	16	(9)	26	(12)	32	(15)	**108**	**(10)**	30.8	(11.8–53.0)
25–44	99	(79)	109	(80)	139	(76)	127	(75)	161	(77)	157	(71)	**792**	**(76)**	10.4	(2.9–18.3)
≥45	18	(14)	19	(14)	27	(15)	28	(16)	23	(11)	31	(14)	**146**	**(14)**	8.9	(-8.5–29.5)
American Indian/ Alaska Native																
13–24	8	(11)	9	(12)	11	(15)	13	(17)	9	(11)	18	(20)	**68**	**(14)**	12.8	(-4.1–32.6)
25–44	50	(68)	53	(70)	42	(59)	54	(71)	56	(68)	56	(62)	**311**	**(66)**	2.4	(-6.1–11.6)
≥45	14	(19)	15	(20)	18	(25)	9	(12)	16	(20)	17	(19)	**89**	**(19)**	1.6	(-12.9–18.5)
Region of residence§§																
Northeast (2 states)	4,354	(27)	3,600	(23)	3,540	(23)	3,258	(21)	3,547	(21)	3,513	(20)	**21,812**	**(22)**	-4.2	(-5.7– -2.6)
Midwest (11 states)	2,092	(13)	2,100	(13)	2,185	(14)	2,373	(15)	2,554	(15)	2,988	(17)	**14,292**	**(15)**	6.7	(4.9–8.5)
South (12 states)	8,533	(53)	9,035	(57)	8,521	(55)	8,976	(57)	9,304	(55)	9,341	(53)	**53,710**	**(55)**	1.6	(0.8–2.5)
West (8 states)	1,102	(7)	1,175	(7)	1,163	(8)	1,272	(8)	1,427	(8)	1,623	(9)	**7,762**	**(8)**	7.2	(5.1–9.3)
Total¶¶	**16,081**	**(100)**	**15,910**	**(100)**	**15,409**	**(100)**	**15,880**	**(100)**	**16,833**	**(100)**	**17,465**	**(100)**	**97,577**	**(100)**	**1.5**	**(0.8–2.1)**

* Adjusted for reporting delays and missing risk factors for HIV.
† Percentages might not total to 100 because of rounding.
§ Diagnosis of HIV infection, regardless of whether or when AIDS was also diagnosed.
¶ Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, 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.
†† Persons of Hispanic ethnicity might be of any race.
§§ *Northeast*: New Jersey and New York. *Midwest*: Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. *South*: Alabama, Arkansas, Florida, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. *West*: Alaska, Arizona, Colorado, Idaho, Nevada, New Mexico, Utah, and Wyoming.
¶¶ Because column totals were calculated independently of the values for the subpopulations, the values in each column might not sum to the column total.

HIV/AIDS diagnosis data will continue to provide useful information for evaluating efforts to increase HIV testing and will allow programs that do not conduct HIV incidence surveillance to monitor the HIV epidemic in their local area.

The findings in this report are subject to at least four limitations. First, the 33-state case surveillance data are not representative of all HIV-positive persons in the United States. However, the racial/ethnic disparities described in this report are similar to those observed in AIDS cases from all 50 states (*4*). Second, since 1993, the proportion of HIV/AIDS cases reported to CDC without an identified risk factor for HIV infection has been increasing. In 2006, no risk factor was reported for 25% of HIV (not AIDS) adult and adolescent cases reported to CDC (*4*). This results in an increasing proportion of cases that are assigned to transmission categories (including male-to-male sexual contact) not based on interview with patients, but rather via statistical adjustment.

FIGURE 2. Estimated* number of HIV/AIDS† diagnoses and estimated annual percentage change (EAPC) among men who have sex with men aged 13–24 years, by race/ethnicity and year of diagnosis — 33 states,§ 2001–2006



* Adjusted for reporting delays and missing risk factors for HIV.
† Diagnosis of HIV infection, regardless of whether or when AIDS was also diagnosed.
§ Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, 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.
¶ EAPC.

Risk factor information often is missing because patients decline to disclose behaviors that might place them at risk for HIV transmission or are unaware of their sex partners' high-risk behavior. Third, methods for reporting delay adjustments have greatest uncertainty for the most recent years' estimates of HIV/AIDS diagnoses; therefore, recent trends should be interpreted with caution. Finally, a backlog of cases diagnosed earlier than recorded in the data might have exaggerated the number of diagnoses in the first 2–3 years after name-based HIV (not AIDS) case reporting was implemented (*5*). For example, retrospective ascertainment of name-based HIV case reports might have resulted in a substantial number of cases that were recorded as diagnosed during 2001–2002 but were actually diagnosed earlier. New York's implementation of name-based HIV reporting in June 2000 might have magnified the effect of this backlog on the 33-state trend analysis because New York data represented 21% of all HIV/AIDS diagnoses during 2001–2006. After exclusion of New York from this analysis, however, an even larger statistically significant increase in HIV/AIDS diagnoses among MSM was observed during 2001–2006 (EAPC = 3.1 [CI = 2.4–3.9]).

To reduce transmission of HIV among MSM of all races/ethnicities, prevention strategies should be strengthened, improved, and implemented more broadly. Testing is important in preventing HIV transmission because it provides knowledge of one's infection status; after persons become aware that they are HIV positive, most reduce their high-risk sexual behavior (*6*). In addition, an estimated 25% of HIV-infected persons have not received a diagnosis of HIV infection (*7*). These persons represent a challenge in terms of HIV prevention and case ascertainment. Moreover, testing is the first step to linking persons infected with HIV to medical care. CDC recommends at least annual testing for sexually active MSM and an "opt-out" approach for screening of all patients aged 13–64 years in clinical settings (*8*).

Ulcerative and nonulcerative sexually transmitted diseases (STDs) such as syphilis and gonorrhea facilitate HIV transmission from infected MSM and acquisition of HIV by noninfected MSM; therefore, screening for STDs in private and public clinical settings is an important component of HIV prevention in MSM (*9*). STD and HIV prevention efforts should be as fully integrated as possible. Furthermore, associations have been observed between abuse of illicit and legal drugs such as methamphetamine and alcohol, respectively, and high-risk behavior among MSM. Screening for substance abuse in private and public clinical settings is an important tool for reducing HIV transmission.†† Strengthened collaborations between STD, HIV, viral hepatitis, and substance abuse programs should result in more effective HIV prevention efforts.

CDC assists in the creation, development, and dissemination of behavioral interventions for the MSM population. Recently, in collaboration with the state health department and local organizations in North Carolina, CDC implemented a successful intervention for young black MSM (*10*). This intervention has resulted in decreases in high-risk sexual behavior and the number of sex partners with whom such behavior occurred. CDC recommends that state and local health departments allocate HIV prevention resources to ensure that program operations reflect the current state of the HIV/AIDS epidemic in the geographic areas for which each health department is responsible. In support of CDC's strategic goal of reducing the number of new HIV infections in the United States,§§ the proportion of MSM who adopt behaviors that reduce risk for HIV transmission must increase.

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Cigarette Use Among High School Students — United States, 1991–2007

Cigarette use is the leading preventable cause of death in the United States (*1*). A national health objective for 2010 is to reduce the prevalence of current cigarette use among high school students to 16% or less (27-2b) (*1*). To examine changes in cigarette use among high school students in the United States during 1991–2007, CDC analyzed data from the national Youth Risk Behavior Survey (YRBS). This report summarizes the results of that analysis, which indicated that the prevalence of lifetime cigarette use was stable during 1991–1999 and then declined from 70.4% in 1999 to 50.3% in 2007. The prevalence of current cigarette use increased from 27.5% in 1991 to 36.4% in 1997, declined to 21.9% in 2003, and remained stable from 2003 to 2007. The prevalence of current frequent cigarette use increased from 12.7% in 1991 to 16.8% in 1999 and then declined to 8.1% in 2007. To resume the declines observed in current cigarette use during 1997–2003 and achieve the 2010 objective, communitywide comprehensive tobacco-control programs that use coordinated evidence-based strategies should be implemented and revitalized.

The biennial national YRBS, a component of CDC's Youth Risk Behavior Surveillance System, used independent, three-stage cluster samples for the 1991–2007 surveys to obtain cross-sectional data representative of public and private school students in grades 9–12 in all 50 states and the District of Columbia (*2*). Sample sizes ranged from 10,904 to 16,296. For each cross-sectional national survey, students completed anonymous, self-administered questionnaires that included identically worded questions about cigarette use. School response rates ranged from 70% to 81%, and student response rates ranged from 83% to 90%; therefore, overall response rates for the surveys ranged from 60% to 70%.

For this analysis, temporal changes for three behaviors were assessed: lifetime cigarette use (i.e., ever tried cigarette smoking, even one or two puffs), current cigarette use (i.e., smoked cigarettes on at least 1 day during the 30 days before the survey), and current frequent cigarette use (i.e., smoked cigarettes on 20 or more days during the 30 days before the survey). Race/ethnicity data are presented only for non-Hispanic black, non-Hispanic white, and Hispanic students (who might be of any race); the numbers of students from other racial/ethnic groups were too small for meaningful analysis.

Data were weighted to provide national estimates, and statistical software used for all data analyses accounted for the complex sample design. Temporal changes were analyzed using logistic regression analyses, which controlled for sex, race/ethnicity, and grade and simultaneously assessed linear, quadratic, and cubic time effects ($p<0.05$).*

Significant linear and quadratic trends were detected for lifetime and current frequent cigarette use (Table 1). The prevalence of lifetime cigarette use was stable during 1991–1999 and then declined from 70.4% in 1999 to 50.3% in 2007. The prevalence of current frequent cigarette use increased from 12.7% in 1991 to 16.8% in 1999 and then declined to 8.1% in 2007.

Significant linear, quadratic, and cubic trends were detected for current cigarette use. The prevalence of current cigarette use increased from 27.5% in 1991 to 36.4% in 1997, declined to 21.9% in 2003, and remained stable from 2003 to 2007. For current cigarette use, similar patterns were detected among the sex subgroups overall, all grade subgroups, and white and Hispanic students (Table 2).

Among black students overall and black male students, significant quadratic and cubic trends were detected. The prevalence of current cigarette use among black students overall increased from 12.6% in 1991 to 22.7% in 1997, declined to 14.7% in 2001, and then declined more gradually to 11.6%

* Quadratic and cubic trends indicate a significant but nonlinear trend in the data over time (e.g., whereas a linear trend is depicted with a straight line, a quadratic trend is depicted with a curve with one bend and a cubic trend with a curve with two bends). Trends that include significant cubic or quadratic and linear components demonstrate nonlinear variation in addition to an overall increase or decrease over time.

TABLE 1. Percentage of high school students who reported lifetime cigarette use,* current cigarette use,† and current frequent cigarette use§ — Youth Risk Behavior Survey, United States, 1991–2007¶

Cigarette use	1991 % (95% CI**)	1993 % (95% CI)	1995 % (95% CI)	1997 % (95% CI)	1999 % (95% CI)	2001 % (95% CI)	2003 % (95% CI)	2005 % (95% CI)	2007 % (95% CI)
Lifetime††	70.1 (67.8–72.3)	69.5 (68.1–70.8)	71.3 (69.5–73.0)	70.2 (68.2–72.1)	70.4 (67.3–73.3)	63.9 (61.6–66.0)	58.4 (55.1–61.6)	54.3 (51.2–57.3)	50.3 (47.2–53.5)
Current§§	27.5 (24.8–30.3)	30.5 (28.6–32.4)	34.8 (32.5–37.2)	36.4 (34.1–38.7)	34.8 (32.3–37.4)	28.5 (26.4–30.6)	21.9 (19.8–24.2)	23.0 (20.7–25.5)	20.0 (17.6–22.6)
Current frequent††	12.7 (10.6–15.3)	13.8 (12.1–15.5)	16.1 (13.6–19.1)	16.7 (14.8–18.7)	16.8 (14.3–19.6)	13.8 (12.3–15.5)	9.7 (8.3–11.3)	9.4 (7.9–11.0)	8.1 (6.7–9.8)

* Ever tried cigarette smoking, even one or two puffs.
† Smoked cigarettes on at least 1 day during the 30 days before the survey.
§ Smoked cigarettes on 20 or more days during the 30 days before the survey.
¶ Linear, quadratic, and cubic trend analyses were conducted using a logistic regression model controlling for sex, race/ethnicity, and grade. These prevalence estimates are not standardized by demographic variables.
** Confidence interval.
†† Significant linear and quadratic effects only (p<0.05).
§§ Significant linear, quadratic, and cubic effects (p<0.05).

TABLE 2. Percentage of high school students who reported current cigarette use,* by sex, race/ethnicity, and grade — Youth Risk Behavior Survey, United States, 1991–2007†

Characteristic	1991 % (95% CI§)	1993 % (95% CI)	1995 % (95% CI)	1997 % (95% CI)	1999 % (95% CI)	2001 % (95% CI)	2003 % (95% CI)	2005 % (95% CI)	2007 % (95% CI)
Sex									
Female¶	27.3 (23.9–31.0)	31.2 (29.1–33.4)	34.3 (31.0–37.7)	34.7 (31.8–37.6)	34.9 (32.3–37.7)	27.7 (25.6–30.0)	21.9 (19.2–24.9)	23.0 (20.4–25.8)	18.7 (16.5–21.1)
Male¶	27.6 (24.6–30.9)	29.8 (27.4–32.3)	35.4 (32.9–37.9)	37.7 (35.0–40.6)	34.7 (31.8–37.7)	29.2 (26.7–32.0)	21.8 (19.8–24.1)	22.9 (20.7–25.3)	21.3 (18.3–24.6)
Race/Ethnicity**									
White, non-Hispanic¶	30.9 (27.6–34.5)	33.7 (31.4–36.0)	38.3 (35.6–41.1)	39.7 (37.3–42.2)	38.6 (35.5–41.9)	31.9 (29.6–34.4)	24.9 (22.4–27.5)	25.9 (22.9–29.2)	23.2 (20.4–26.2)
Female¶	31.7 (27.1–36.7)	35.3 (32.6–38.0)	39.8 (36.3–43.5)	39.9 (36.6–43.2)	39.1 (35.4–42.9)	31.2 (28.7–33.7)	26.6 (22.9–30.5)	27.0 (23.4–31.0)	22.5 (19.6–25.7)
Male¶	30.2 (26.5–34.3)	32.2 (29.4–35.0)	37.0 (33.7–40.5)	39.6 (35.8–43.5)	38.2 (34.6–41.8)	32.7 (29.7–35.9)	23.3 (20.7–26.0)	24.9 (22.2–27.7)	23.8 (20.2–27.8)
Black, non-Hispanic††	12.6 (10.2–15.5)	15.4 (12.9–18.2)	19.1 (16.1–22.6)	22.7 (19.0–26.8)	19.7 (15.8–24.3)	14.7 (12.0–17.9)	15.1 (12.4–18.2)	12.9 (11.1–14.8)	11.6 (9.5–14.1)
Female§§	11.3 (9.2–13.9)	14.4 (11.9–17.4)	12.2 (9.3–15.7)	17.4 (13.8–21.7)	17.7 (14.4–21.7)	13.3 (10.1–17.2)	10.8 (8.2–14.2)	11.9 (10.2–13.8)	8.4 (6.6–10.6)
Male††	14.1 (10.1–19.4)	16.3 (12.4–21.1)	27.8 (22.5–33.9)	28.2 (23.0–34.1)	21.8 (15.4–29.9)	16.3 (13.2–19.8)	19.3 (15.8–23.5)	14.0 (11.5–16.9)	14.9 (11.7–18.8)
Hispanic¶	25.3 (22.5–28.2)	28.7 (25.8–31.8)	34.0 (28.7–39.6)	34.0 (31.3–36.9)	32.7 (29.0–36.6)	26.6 (22.4–31.2)	18.4 (16.1–20.9)	22.0 (18.7–25.8)	16.7 (13.5–20.4)
Female¶	22.9 (19.2–27.1)	27.3 (23.5–31.5)	32.9 (27.4–39.0)	32.3 (28.6–36.2)	31.5 (26.8–36.5)	26.0 (22.3–30.0)	17.7 (15.6–19.9)	19.2 (16.4–22.5)	14.6 (11.3–18.8)
Male¶	27.8 (24.3–31.8)	30.2 (26.7–33.8)	34.9 (26.6–44.3)	35.5 (31.9–39.2)	34.0 (29.7–38.7)	27.2 (20.6–35.0)	19.1 (15.8–23.0)	24.8 (20.0–30.4)	18.7 (15.0–23.2)
School grade									
9th¶	23.2 (19.5–27.4)	27.8 (25.4–30.3)	31.2 (29.5–32.9)	33.4 (28.4–38.9)	27.6 (24.0–31.6)	23.9 (21.1–27.0)	17.4 (15.0–20.1)	19.7 (17.5–22.1)	14.3 (11.9–17.1)
10th¶	25.2 (22.5–28.1)	28.0 (24.7–31.6)	33.1 (29.3–37.1)	35.3 (31.2–39.7)	34.7 (32.2–37.2)	26.9 (23.8–30.3)	21.8 (19.0–24.9)	21.4 (18.4–24.8)	19.6 (16.7–22.8)
11th¶	31.6 (27.8–35.7)	31.1 (27.9–34.4)	35.9 (32.0–39.9)	36.6 (32.9–40.4)	36.0 (33.1–39.1)	29.8 (26.1–33.7)	23.6 (20.5–27.0)	24.3 (21.2–27.7)	21.6 (18.4–25.2)
12th¶	30.1 (25.7–34.8)	34.5 (30.7–38.5)	38.2 (34.6–41.9)	39.6 (34.7–44.6)	42.8 (37.2–48.5)	35.2 (31.1–39.5)	26.2 (23.4–29.3)	27.6 (24.0–31.5)	26.5 (22.5–30.8)

* Smoked cigarettes on at least 1 day during the 30 days before the survey.
† Linear, quadratic, and cubic trend analyses were conducted using a logistic regression model controlling for sex, race/ethnicity, and grade in school. These prevalence estimates are not standardized by demographic variables.
§ Confidence interval.
¶ Significant linear, quadratic, and cubic effects (p<0.05).
** Numbers for other racial/ethnic groups were too small for meaningful analysis.
†† Significant quadratic and cubic effects only (p<0.05).
§§ Significant linear and quadratic effects only (p<0.05).

in 2007. Among black male students, the prevalence of current cigarette use increased from 14.1% in 1991 to 28.2% in 1997, declined to 16.3% in 2001, and then remained stable from 2001 to 2007. Among black female students, a significant linear and quadratic trend was detected. The prevalence of current cigarette use increased from 11.3% in 1991 to 17.7% in 1999 and then declined to 8.4% in 2007.

Reported by: *Office on Smoking and Health, Div of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

Editorial Note: The findings in this report show that current cigarette use among high school students declined from 1997 to 2003, but rates remained stable from 2003 to 2007. This trend is consistent with 30-day cigarette use trends reported from the Monitoring the Future survey (an ongoing national study of the behaviors, attitudes, and values of 8th, 10th, and 12th grade students), which also show declines starting in the late 1990s and stable rates more recently (*3*).

The sharp increase in cigarette use during the early to mid-1990s observed in this and other surveys might have resulted from expanded tobacco company promotional efforts, including discounted prices on cigarette brands most often smoked by adolescents, product placement in movies, development of nontobacco product lines with company symbols (e.g., hats and t-shirts), and sponsorship of music concerts and other youth-focused events (*4*). Evidence suggests that exposure to pro-tobacco marketing and depictions of tobacco use in films and videos and on television more than doubles the odds of adolescents initiating tobacco use (*5*). Communitywide programs to counteract pro-tobacco marketing and resume the declines in youth tobacco use observed during 1997–2003 should include combinations of counter-advertising mass media campaigns; comprehensive school-based tobacco-use prevention policies and programs; community interventions that reduce tobacco advertising, promotions, and commercial availability of tobacco products; and higher prices for tobacco products through increases in unit prices and excise taxes (*5–7*).

The differences in current cigarette use among racial/ethnic subgroups suggest that lower rates of current cigarette use among high school students are achievable. The data in this analysis show that current cigarette use remained stable among white and Hispanic students overall from 2003 to 2007, but among black students overall, current cigarette use continued to decline. This decline can be attributed largely to declines among black female students. Whereas rates among black male students remained stable from 2001 to 2007, black female students showed a continued decline in current cigarette use from 1999 to 2007. In 2007, black female students had the lowest rate of current cigarette use among all sex and racial/ethnic subgroups.

The findings in this report are subject to at least two limitations. First, these data apply only to youths who attend school and, therefore, are not representative of all persons in this age group. Nationwide, in 2005, of persons aged 16–17 years, approximately 3% were not enrolled in a high school program and had not completed high school (*8*). Second, the extent of underreporting or overreporting of cigarette use cannot be determined, although the survey questions demonstrate good test-retest reliability (*9*), and high school students do not tend to underreport cigarette use (*10*).

The national health objective for 2010 of reducing current cigarette use among high school students to less than 16% can be achieved if the declines in current cigarette observed during 1997–2003 resume. Communitywide, comprehensive tobacco-control programs that use coordinated evidence-based strategies should be implemented and revitalized to further limit cigarette use by high school students. A better understanding of the factors responsible for the continued decline and low rate of current cigarette use among black female students can help guide and strengthen comprehensive tobacco-control efforts in the future for all use.

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Elevated Serum Aluminum Levels in Hemodialysis Patients Associated with Use of Electric Pumps — Wyoming, 2007

Aluminum toxicity can cause osteomalacia, anemia, and dementia in hemodialysis patients and has historically been associated with exposure to contaminated water or dialysate preparations or ingestion of aluminum-containing phosphate binders* (*1–4*). Since 2002, improvements in water treatment methods and use of non–aluminum-containing phosphate binders have resulted in low prevalence (<1%) of aluminum toxicity among hemodialysis patients (*1*). In the United States, reported cases of aluminum toxicosis are rare, and no outbreak has been reported since 1992 (*2*). This report describes 10 patients treated at a hemodialysis unit in a Wyoming hospital (hospital A) in 2007 who had elevated serum aluminum levels that were detected through routine serum aluminum screening. An investigation was conducted by the Wyoming Department of Health, which determined that the source of exposure was dialysate acid concentrate that became contaminated with aluminum as it passed through two electric drum pumps. The drum pumps had been used to transfer dialysate acid concentrate from 55-gallon storage drums to 1-gallon jugs for use on individual hemodialysis machines. Removal of the pumps from service resulted in a rapid reduction in patient serum aluminum levels. The findings suggest that regular assessment of machine compatibility with dialysate fluid is needed.

On December 21, 2007, hospital A notified the Wyoming Department of Health of increased serum aluminum levels among patients treated in its hemodialysis unit. Slightly elevated levels had been detected initially in three patients in June 2007 through routine serum aluminum screening, which was conducted for all hemodialysis patients every 6 months. However, after additional increased levels were detected, hospital A increased its testing frequency in September 2007, and began measuring serum aluminum levels as often as every month in certain patients. In December, Wyoming Department of Health investigators conducted a medical record review and environmental assessment. Potential exposures examined included aluminum-containing medications, dialysate preparations, hemodialysis machines, extent of hemodialysis prescription, patient home water supply, and water from the hospital A tap and reverse-osmosis system. Patient surveys and a hospital pharmacy review were conducted to assess aluminum sources in both prescribed and over-the-counter medications. All water and dialysate tests were conducted by two separate laboratories (Spectra Lab, Milpitas, California, and AmeriWater, Dayton, Ohio). Results were compared with Association for the Advancement of Medical Instrumentation aluminum standards for water, which state that levels should not exceed 0.01mg/L (10 µg/L) (*5*). Patient serum aluminum measurements were interpreted according to the National Kidney Foundation Kidney Disease Outcomes Quality Initiative (NKF-KDOQI) guidelines, which state that baseline levels of serum aluminum at the beginning of dialysis should be <20 µg/L, and toxicity can occur at levels >60 µg/L (*6*). The Wilcoxon rank-sum test was used to compare median serum aluminum levels in patients by period and extent of hemodialysis prescription.

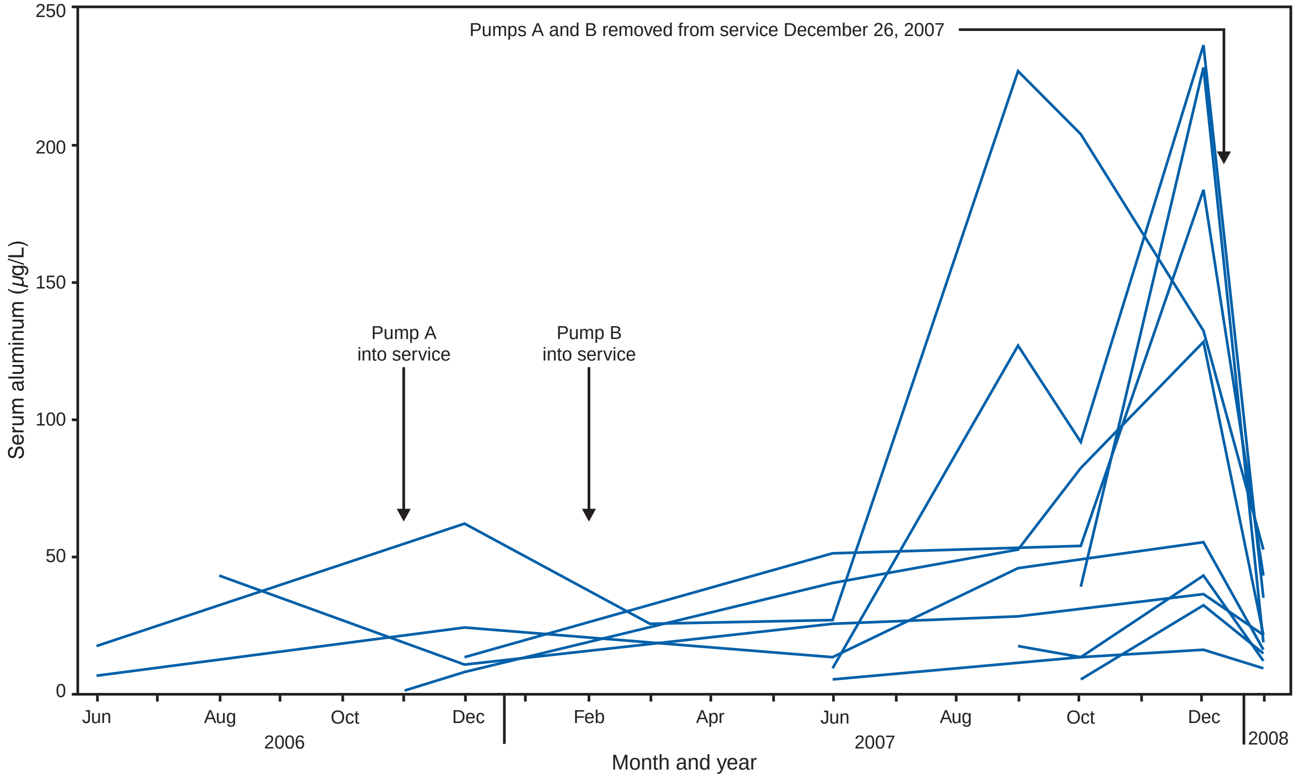
The medical record review of all patients treated in the hemodialysis unit during June 2006–January 2008 indicated a trend toward increasing serum aluminum values beginning in June–September 2007. As of December 2007, 11 patients were receiving hemodialysis at hospital A. One patient had begun hemodialysis in December and was excluded from the analysis because only one baseline serum measurement was available. The remaining 10 patients had been treated in the unit for at least 3 months, and their serum aluminum levels had been measured in December 2007 during at least one other treatment (range: 1–7 treatments) since June 2006. In December 2007, serum aluminum levels for the 10 patients ranged from 16 µg/L to 237 µg/L, and the median was 92 µg/L, compared with a June 2007 range for seven patients of 6 µg/L–41 µg/L with a median of 26 µg/L ($p=0.02$) (Figure). Abstraction of medical records and interviews with physicians and nursing staff members revealed no signs or symptoms attributable to aluminum toxicosis (e.g., bone or joint pain, erythropoietin-resistant anemia, or dementia).

The serum aluminum levels of the patients of the two nephrologists (doctor A and doctor B) working in the clinic were significantly different, likely because of different hemodialysis prescriptions. In December 2007, the six patients of doctor A had higher serum aluminum levels (range: 43 µg/L–237 µg/L; median: 158 µg/L), compared with the four patients of doctor B (range: 16 µg/L–55 µg/L; median: 34 µg/L) ($p=0.05$). Doctor A prescribed a dialysate flow rate of 800 mL/min administered over 4 hours, compared with a dialysate flow rate of 500 mL/min administered over 3.5 hours prescribed by doctor B.

No substantial sources of aluminum were found in patient medications, patient home water samples, hemodialysis machines, or water from the hospital A tap and reverse-osmosis system. Dialysate acid concentrate was stored in the original 55-gallon plastic drums and transferred to 1-gallon

* Oral medications used to bind excess serum phosphorous in patients with chronic renal failure. Some older phosphate binders contained aluminum, but such medications are uncommon today.

FIGURE. Serum aluminum measurements recorded for 10 hemodialysis patients treated at hosptial A — Wyoming, June 2006–January 2008



jugs by using electric drum pumps (Teel model 3P652, Dayton Electric Manufacturing Company, Chicago, Illinois). The jugs were then attached to individual hemodialysis machines where the acid concentrate was suctioned out of the jugs and combined with a bicarbonate and purified water mixture. The resulting fluid (dialysate) was used in the dialyzer. The pump manufacturer provided no indications that the pumps had been designed for use with hemodialysis. Instructions directed only that the pumps be used with nonflammable fluids compatible with pump components, which include some alkalies, acids, chlorines, and photographic chemicals. The same make and model of pump had been used at hospital A since August 2004. However, because of mechanical breakdown, the original pumps had been replaced by the two pumps under investigation. One pump went into service in November 2006 and the other in February 2007.

Analysis by Spectra Lab of the dialysate acid in the 55-gallon drums revealed aluminum concentrations of <8 µg/L. Measurements after the acid had been passed once through the pumps ranged from 123 µg/L to 166 µg/L. Results from AmeriWater Laboratory revealed concentrations of 53 µg/L–144 µg/L in the drums and 223 µg/L–240 µg/L after the acid had been passed through the pumps.

On December 26, 2007, both pumps in the hemodialysis unit were removed from service because they were suspected of causing aluminum contamination of the dialysate. Follow-up patient samples from January 23, 2008, showed substantially lower levels in serum aluminum levels in all 10 patients (range: 9 µg/L–53 µg/L; median: 20 µg/L). This trend was observed in patients treated by both doctor A (range: 12 µg/L–53 µg/L; median: 29 µg/L) and doctor B (range: 9 µg/L–21 µg/L; median: 16 µg/L).

In May 2008, investigators dismantled one of the two pumps in the hemodialysis unit. Five internal components suspected of containing aluminum were sent to St. Louis Testing Laboratories (St. Louis, Missouri) for metallurgic analysis by inductively coupled plasma-atomic emission spectroscopy. All five components were contained in a region of the pump that sat above the 55-gallon storage drum and did not appear to be in the direct fluid transfer pathway. However, all the components appeared to have varying degrees of corrosion, likely indicating they had come into contact with the acid concentrate. One of the five components had two severely corroded metal pieces that were composed of 76% aluminum oxides; however, the precise origin of the aluminum toxicity could not be determined.

Reported by: *TP Ryan, PhD, LL McElwain, TD Murphy, MD, Wyoming Dept of Health. MJ Arduino, DrPH, Div of Healthcare Quality Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases; SA Anderson, DVM, EIS Officer, CDC.*

Editorial Note: Worldwide, the last outbreak of aluminum toxicosis was reported in 2001 in Curaçao and was associated with a cement mortar water distribution pipe (*3*). Before the cluster of elevated serum aluminum levels described in this report, the last reported U.S. outbreak of aluminum toxicity associated with use of an electric pump in hemodialysis occurred in 1992 (*2*). Results of that investigation led to release of a Food and Drug Administration safety alert warning of the potential corrosive effects of low pH solutions on metals used in the components of hemodialysis systems. The pumps implicated in the 1992 outbreak were found to contain aluminum casings and impellers (*2,4*). Manufacturer specifications for the two pumps described in this report do not mention suitability for use in hemodialysis or that the pumps contained aluminum components. However, the presence of aluminum oxides on two pieces of one component suggests corrosion of an aluminum alloy. Although the precise origin of the contamination could not be determined, spectroscopy results showed aluminum was present, which likely contaminated the acid concentrate as it passed through each pump. As further evidence, when the two pumps were removed from service, the result was an immediate reduction in serum aluminum levels in all 10 patients.

A dose-response effect appeared likely by prescribing practice. With a higher dialysate flowrate, a larger volume of dialysate enters the dialyzer over time, causing larger amounts of solutes (e.g., electrolytes or glucose) from the dialysate to diffuse into the patient's blood. Patients of doctor A received a higher dialysate flowrate, were exposed to a larger volume of contaminated dialysate over a longer period, and had higher levels of serum aluminum than patients of doctor B.

The findings in this report are subject to at least two limitations. First, opinions differ on the definition of toxic serum aluminum levels (*1*). NKF-KDOQI provides a recommended baseline level of <20 μg/L and a level potentially associated with toxicity of >60 μg/L. Although only five of the 10 hemodialysis patients at hospital A experienced serum aluminum levels >60 μg/L during the study period, the levels trended upward in late 2007 and declined in all 10 patients once the suspect pumps were removed from service. Second, serum aluminum values are a poor predictor of aluminum concentrations in tissues outside of the blood compartment (*7*). Although the patients were asymptomatic, no further diagnostics such as bone biopsy, deferoxamine stimulation, or advanced cognitive tests were performed on the patients to determine whether their aluminum exposure had resulted in any subclinical ill effects.

Since the 1992 outbreak, improvements in hemodialysis technologies and patient care have virtually eliminated occurrences of aluminum toxicosis. The low prevalence of aluminum toxicity among hemodialysis patients has raised debate among some in the dialysis community regarding the value of patient serum aluminum screening, which some hemodialysis units conduct routinely (*1,8*). NKF-KDOQI guidelines recommend serum aluminum testing at least annually in all hemodialysis patients and every 3 months in those who receive aluminum-containing medications (*6*); others propose routine serum aluminum testing only in patients with known aluminum exposure or manifestations of toxicity (*1*). As illustrated in this report, routine monitoring can detect elevated serum aluminum levels with the potential to produce serious illness in hemodialysis patients. Hemodialysis units should consider routine monitoring of aluminum in the water system and regular assessment of equipment compatibility with dialysate fluids (*1,2*). Dialysis unit operators should consider asking dialysate acid concentrate manufacturers for recommendations of appropriate devices (e.g., pumps or delivery systems) that are compatible with their dialysate fluids.

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Influenza Activity — United States and Worldwide, 2007–08 Season

During the 2007–08 influenza season, influenza activity* peaked in mid-February in the United States and was associated with greater mortality and higher rates of hospitalization of children aged 0–4 years, compared with each of the previous three seasons. In the United States, influenza A (H1N1) was the predominant strain early in the season; influenza A (H3N2) viruses increased in circulation in January and predominated overall. While influenza A (H1N1), A (H3N2), and B viruses cocirculated worldwide, influenza A (H1N1) viruses were most commonly reported in Canada, Europe, and Africa, and influenza B viruses were predominant in most Asian countries. This report summarizes influenza activity in the United States and worldwide during the 2007–08 influenza season (September 30, 2007–May 17, 2008).

Overview of Influenza Activity in the United States

The national percentage of respiratory specimens that tested positive for influenza peaked in early to mid-February, and the proportion of outpatient visits to sentinel providers for influenza-like illness (ILI)† and to BioSense§ Department of Veteran's Affairs (VA) and Department of Defense (DoD) outpatient clinics for acute respiratory illness (ARI)¶ peaked in mid-February.

Viral Surveillance

During September 30, 2007–May 17, 2008,** World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories in the United States tested 225,329 specimens for influenza viruses; 39,827 (18%) were positive (Figure 1). Of the positive specimens, 28,263 (71%) were influenza A viruses, and 11,564 (29%) were influenza B viruses. Among the influenza A viruses, 8,290 (29%) were subtyped; 2,175 (26%) were influenza A (H1N1), and 6,115 (74%) were influenza A (H3N2) viruses. The proportion of specimens testing positive for influenza first exceeded 10% during the week ending January 12, 2008 (week 2), peaked at 32% during the week ending February 9, 2008 (week 6), and declined to <10% during the week ending April 19, 2008 (week 16). The proportion positive was above 10% for 14 consecutive weeks. The peak percentage of specimens testing positive for influenza during the previous three seasons ranged from 22% to 34% and the peak occurred during mid-February to early March (*1*). During the previous three influenza seasons, the number of consecutive weeks during which more than 10% of specimens tested positive for influenza ranged from 13 to 17 weeks (*1*).

During the 2007–08 influenza season, more influenza A viruses than influenza B viruses were identified in all surveillance regions;†† however, the predominant influenza A virus varied by region. Influenza A (H1N1) was most commonly reported in two of the nine surveillance regions (Mountain and Pacific), and influenza A (H3N2) was most commonly reported in the remaining seven surveillance regions (East North Central, East South Central, Mid-Atlantic, New England, South Atlantic, West North Central, and West South Central).

Antigenic Characterization

Since September 30, 2007, CDC has antigenically characterized 1,161 influenza viruses collected by U.S. laboratories: 407 influenza A (H1N1) viruses, 404 influenza A (H3N2) viruses, and 350 influenza B viruses. Of the 407 influenza A (H1N1) viruses, 270 (66%) were characterized as antigenically similar to A/Solomon Islands/3/2006, the influenza A (H1N1) component of the 2007–08 Northern Hemisphere influenza vaccine. One hundred sixteen (29%) viruses were characterized as A/Brisbane/59/2007-like. Of the 404 influenza A (H3N2) viruses, 91 (23%) were characterized as similar to A/Wisconsin/67/2005, the influenza A (H3N2)

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* The CDC influenza surveillance system collects five categories of information from 10 data sources. *Viral surveillance*: U.S. World Health Organization collaborating laboratories, the National Respiratory and Enteric Virus Surveillance System, and novel influenza A virus case reporting. *Outpatient illness surveillance*: U.S. Influenza Sentinel Provider Surveillance Network and the U.S. Department of Veterans Affairs/U.S. Department of Defense BioSense Outpatient Surveillance System. *Mortality*: 122 Cities Mortality Reporting System and influenza-associated pediatric mortality reports. *Hospitalizations*: Emerging Infections Program and New Vaccine Surveillance Network. *Summary of geographic spread of influenza*: state and territorial epidemiologist reports.

† Defined as a temperature of ≥100.0°F (≥37.8°C), oral or equivalent, and cough and/or sore throat, in the absence of a known cause other than influenza.

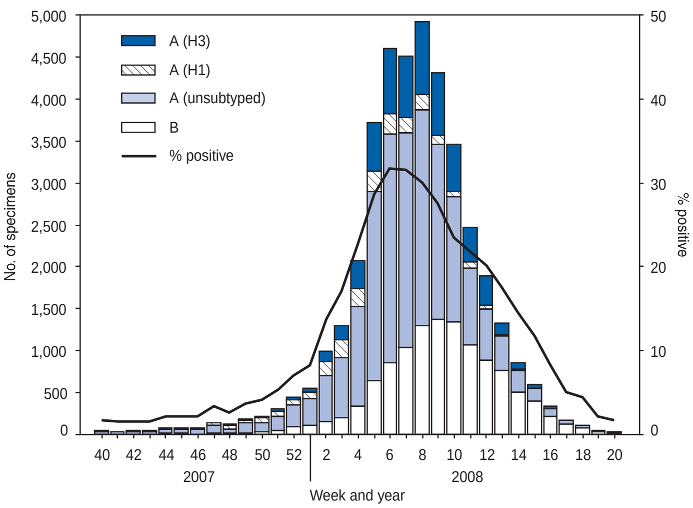
§ BioSense is a national surveillance system that receives, analyzes, and evaluates health data from multiple sources, including 1) approximately 1,150 VA/DoD hospitals and ambulatory-care clinics; 2) multihospital systems, local hospitals, and state and regional syndromic surveillance systems in 37 states; and 3) Laboratory Corporation of America (LabCorp) test results.

¶ Based on *International Classification of Diseases, Ninth Revision* codes for ARI: 460-66 and 480-88.

** Data as of June 19, 2008.

†† Surveillance regions: *New England* (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont); *Mid-Atlantic* (New Jersey, New York, Pennsylvania); *East North Central* (Illinois, Indiana, Michigan, Ohio, Wisconsin); *West North Central* (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota); *South Atlantic* (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia); *East South Central* (Alabama, Kentucky, Mississippi, Tennessee); *West South Central* (Arkansas, Louisiana, Oklahoma, Texas); *Mountain* (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming); *Pacific* (Alaska, California, Hawaii, Oregon, Washington).

FIGURE 1. Number* and percentage of respiratory specimens testing positive for influenza reported by World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories, by type, week, and year — United States, September 30, 2007–May 17, 2008†



* N = 225,329.
† As of June 19, 2008.

component of the 2007–08 Northern Hemisphere influenza vaccine. Two hundred forty-three (60%) viruses were characterized as A/Brisbane/10/2007-like.

Influenza B viruses currently circulating can be divided into two antigenically distinct lineages represented by B/Victoria/02/87 and B/Yamagata/16/88 viruses. Of the 350 influenza B viruses characterized, 342 (98%) were identified as belonging to the B/Yamagata lineage, and 304 (89%) of these viruses were similar to B/Florida/4/2006. The remaining eight (2%) of the 350 influenza B viruses characterized belong to the B/Victoria lineage; of these, six (75%) were similar to B/Ohio/01/2005, an antigenic equivalent to B/Malaysia/2506/2004, the influenza B component for the 2007–08 Northern Hemisphere influenza vaccine.

Resistance to Antiviral Medications

In the United States, two classes of antiviral drugs are approved by the Food and Drug Administration for use in treating or preventing influenza virus infections: neuraminidase inhibitors (oseltamivir and zanamivir) and adamantanes (amantadine and rimantidine). During the 2007–08 influenza season, a small increase in the number of influenza viruses resistant to the neuraminidase inhibitor oseltamivir was observed. All of the oseltamivir-resistant viruses were influenza A (H1N1) isolates that shared a single genetic mutation (H274Y, N2 neuraminidase molecule numbering) (*2*) that confers oseltamivir resistance. Among specimens collected since October 1, 2007, 111 (10.9%) of the 1,020 influenza A (H1N1) viruses tested were found to be resistant to oseltamivir, an increase from four (0.7%) of 588 influenza A (H1N1) viruses tested during the 2006–07 season. No resistance to oseltamivir was identified among the 444 influenza A (H3N2) or 305 influenza B viruses tested. All tested viruses were sensitive to zanamivir. Adamantane resistance continues to be high among influenza A (H3N2) viruses with 524 (99.8%) of 525 influenza A (H3N2) viruses tested being resistant to the adamantanes. Adamantane resistance among influenza A (H1N1) viruses has been detected at a lower level. Of the 918 influenza A (H1N1) viruses tested, 98 (10.7%) were resistant to the adamantanes. None of the oseltamivir-resistant influenza A (H1N1) viruses identified during the 2007–08 season were resistant to adamantanes.

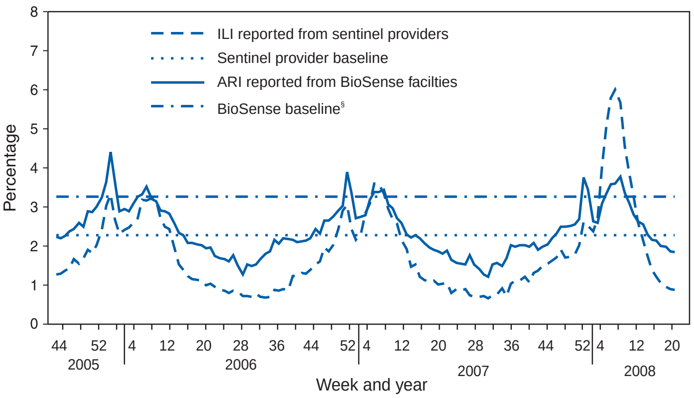
Outpatient Illness Surveillance

The weekly percentage of patient visits to U.S. sentinel providers for ILI met or exceeded national baseline levels[§§] (2.2%) during the weeks ending December 29, 2007–March 22, 2008 (weeks 52–12) and peaked at 6.0% for the week ending February 23, 2008 (week 7) (Figure 2). During the previous three influenza seasons, the peak percentage of patient visits for ILI ranged from 3.2% to 5.4% and occurred during mid-February to early March (*1*). The weekly percentage of visits to VA and DoD BioSense outpatient clinics for ARI was at or above national baseline levels[¶¶] (3.2%) during the weeks ending December 29, 2007–January 5, 2008 (weeks 52–1), and February 2–March 1, 2008 (weeks 5–9). Outpatient clinic visits for ARI peaked twice, once at 3.7% during the week ending December 29, 2007 (week 52), and again at 3.7% for the week ending February 23, 2008 (week 8). During the previous three influenza seasons, the peak percentage of patient visits for ARI has ranged from 3.4% to 4.5% and occurred during mid- to late February. The increase in the percentage of visits for ILI and ARI during the week ending December 29, 2007 (week 52) might have been influenced by a reduction in routine health-care visits during the holiday season, as has occurred during previous seasons.

§§ The national and regional baselines are the mean percentage of visits for ILI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. National and regional percentages of patient visits for ILI are weighted on the bases of state population. Use of the national baseline for regional data is not appropriate.

¶¶ The national, regional, and age-specific baselines are the mean percentage of visits for ARI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. Use of national baseline for regional data is not appropriate.

FIGURE 2. Percentage of outpatient visits for influenza-like illness (ILI) and acute respiratory illness (ARI) reported by the Sentinel Provider Surveillance Network and the U.S. Department of Veterans Affairs/U.S. Department of Defense BioSense Outpatient Surveillance System, by week and year — United States, 2005–06, 2006–07, and 2007–08 influenza seasons*



* As of June 19, 2008.
† The national and regional baselines are the mean percentage of visits for ILI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of speciments tested positive for influenza. National and regional percentages of patient visits for ILI are weighted on the basis of state population. Use of the national baseline for regional data is not appropriate.
§ The national, regional, and age-specific baselines are the mean percentage of visits for ARI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. Use of national baseline for regional data is not appropriate.

State-Specific Activity Levels

State and territorial epidemiologists report the geographic distribution of influenza in their state through a weekly influenza activity code.*** The geographic distribution of influenza activity peaked during the weeks ending February 16 and February 23, 2008 (weeks 7 and 8), when 49 states reported widespread activity and one state reported regional activity. All 50 states reported widespread influenza activity for at least 2 weeks during the 2007–08 season. No state reported widespread influenza activity during the weeks ending April 26–May 17, 2008 (weeks 17–20). The peak number of states reporting widespread or regional activity during the previous three seasons has ranged from 41 to 48 states (*1*).

*** Levels of activity are 1) *no activity*; 2) *sporadic*: isolated laboratory-confirmed influenza cases or a laboratory-confirmed outbreak in one institution, with no increase in ILI activity; 3) *local*: increased ILI , or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region with recent laboratory evidence of influenza in that region; virus activity no greater than sporadic in other regions; 4) *regional*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least two but less than half of the regions in the state with recent laboratory evidence of influenza in those regions; and 5) *widespread*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state with recent laboratory evidence of influenza in the state.

Influenza-Associated Pediatric Hospitalization

Pediatric hospitalizations associated with laboratory-confirmed influenza infections are monitored in two population-based surveillance networks: the Emerging Infections Program (EIP) and the New Vaccine Surveillance Network (NVSN).††† During September 30, 2007–May 3, 2008, the preliminary influenza-associated hospitalization rate reported by EIP for children aged 0–17 years was 1.54 per 10,000. For children aged 0–4 years and 5–17 years, the rate was 4.03 per 10,000 and 0.55 per 10,000, respectively. During November 4, 2007–May 3, 2008, the preliminary laboratory-confirmed influenza-associated hospitalization rate for children aged 0–4 years in NVSN was 7.00 per 10,000. Rate estimates are preliminary and are subject to change as data are finalized.

The end-of-season hospitalization rate for NVSN in the previous three seasons ranged from 3.5 (2006–07) to 7.0 (2004–05) per 10,000 children aged 0–4 years. The end-of-season hospitalization rate for EIP in the previous three seasons ranged from 2.5 (2006–07) to 3.8 (2005–06) per 10,000 children aged 0–4 years. The end-of-season hospitalization rate for EIP in the previous three seasons ranged from 0.3 (2006–07) to 0.6 per (2004–05) per 10,000 children aged 5–17 years. Differences in rate estimates between the NVSN and EIP systems are likely the result of different case-finding methods, diagnostic tests used, and the populations monitored.

Pneumonia- and Influenza-Related Mortality

During the 2007–08 influenza season, the percentage of deaths attributed to pneumonia and influenza (P&I) exceeded the epidemic threshold§§§ for 19 consecutive weeks in the

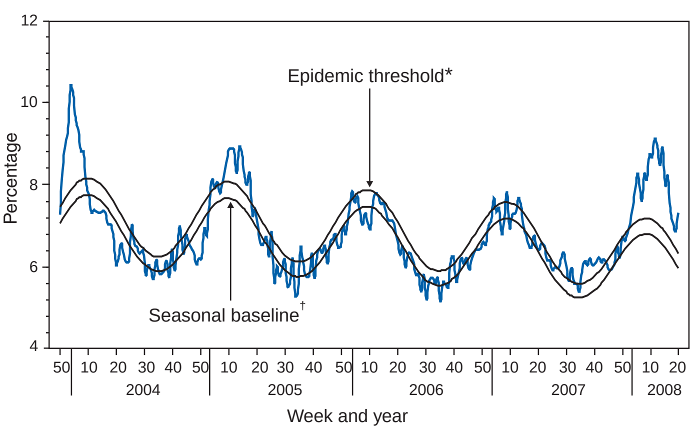
††† NVSN conducts surveillance in Monroe County, New York; Hamilton County, Ohio; and Davidson County, Tennessee. NVSN provides population-based estimates of laboratory-confirmed influenza hospitalization rates in children aged <5 years admitted to NVSN hospitals with fever or respiratory symptoms. Children are prospectively enrolled, and respiratory samples are collected and tested by viral culture and reverse transcription–polymerase chain reaction (RT-PCR). EIP conducts surveillance in 60 counties associated with 12 metropolitan areas: San Francisco, California; Denver, Colorado; New Haven, Connecticut; Atlanta, Georgia; Baltimore, Maryland; Minneapolis/St. Paul, Minnesota; Albuquerque, New Mexico; Las Cruces, New Mexico; Albany, New York; Rochester, New York; Portland, Oregon; and Nashville, Tennessee. EIP conducts surveillance for laboratory-confirmed, influenza-related hospitalizations in persons aged <18 years. Hospital laboratory and admission databases and infection-control logs are reviewed to identify children with a positive influenza test (i.e., viral culture, direct fluorescent antibody assays, RT-PCR, or a commercial rapid antigen test) from testing conducted as a part of their routine care.
§§§ The expected seasonal baseline proportion of P&I deaths reported by the 122 Cities Mortality Reporting System is projected using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I that occurred during the preceding 5 years. The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

122 Cities Mortality Reporting System during the weeks ending January 12–May 17, 2008 (weeks 2–20) (Figure 3). The percentage of P&I deaths peaked at 9.1% during the week ending March 15, 2008 (week 11). During the previous three influenza seasons, the peak percentage of P&I deaths has ranged from 7.7% to 8.9% and the total number of weeks the P&I ratio exceeded the epidemic threshold has ranged from one to 11 (*1*). The P&I baseline and epidemic threshold values are projected for each season at the onset of that season and are based on data from the previous 5 years. Because three of the five seasons used to calculate baseline and epidemic threshold values for the 2007–08 season were mild, failure of the percentage of P&I deaths to return to baseline levels by the end of the 2007–08 season might have resulted from lowering of the baseline values or from changes occurring in the 122 Cities Mortality data as reporting sites apply newer data management methods.

Influenza-Related Pediatric Mortality

As of June 19, 2008, 83 deaths associated with influenza infections that occurred among children aged <18 years during the 2007–08 influenza season were reported to CDC. These deaths were reported from 33 states (Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Utah, Vermont, Washington, and Wisconsin). All patients had laboratory-confirmed influenza virus infection. Among the 83 cases, the mean and median age was 6.4 years and 5.0 years, respectively; nine children were aged <6 months, 15 were aged 6–23 months, 11 were aged 2–4 years, and 48 were aged 5–17 years. Of the 79 cases for which the influenza virus type was known, 51 were influenza A viruses, 27 were influenza B viruses, and one had co-infection with influenza A and B viruses. Of the 63 cases aged ≥6 months for whom vaccination status was known, 58 (92%) had not been vaccinated against influenza according to the 2007 Advisory Committee on Immunization Practices (ACIP) recommendations (*3*). These data are provisional and subject to change as more information becomes available.

FIGURE 3. Percentage of all deaths attributed to pneumonia and influenza (P&I) reported by the 122 Cities Mortality Reporting System, by week and year, 2004–2008



* The epidemic threshold is 1.645 standard deviations above the seasonal baseline.
† The seasonal baseline is projected using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from P&I during the preceding 5 years.

Overview of Influenza Activity Worldwide

During the 2007–08 influenza season, influenza A (H1N1), A (H3N2), and B viruses cocirculated worldwide. Influenza A viruses were more commonly reported in Canada and Europe, with influenza A (H1N1) viruses more common than influenza A (H3N2) viruses, while in Africa, small numbers of influenza A and B viruses were reported. In Asia, influenza A (H1N1) and influenza A (H3N2) viruses circulated at lower levels than influenza B, which predominated in most Asian countries. Although influenza A (H1N1) was most commonly reported during the season overall in Europe, influenza B viruses circulated at high levels, and predominated circulation for the season overall in some countries. Additional information on global influenza circulation is available at http://www.who.int/csr/disease/influenza/influenzanetwork/en/index.html.

Reported by: *WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza. S Epperson, MPH, L Blanton, MPH, R Dhara, MPH, L Brammer, MPH, L Finelli, DrPH, M Okomo-Adhiambo, PhD, L Gubareva, PhD, T Wallis, MS, X Xu, MD, J Bresee, MD, A Klimov, PhD, N Cox, PhD, Influenza Div, National Center for Immunization and Respiratory Diseases, CDC.*

Editorial Note: During the 2007–08 season, influenza activity in the United States peaked in mid-February. In comparison with the previous three seasons, the most recent season had a severity similar to the 2004–05 influenza season, as determined by the percentage of deaths resulting from pneumonia and influenza, pediatric hospitalization rates, and the percentage of visits to outpatient clinics for ILI. In the United States, influenza A (H1N1), A (H3N2), and B viruses cocirculated throughout the season. The predominant virus varied by week, but influenza A (H3N2) viruses were most commonly reported for the season overall. Early in the season, from October to mid-January, influenza A (H1N1) was the most commonly reported subtype. Influenza A (H3N2) viruses were identified most frequently during the peak of the season from late January to mid-March. In the latter part of the season, from late March through May, when overall activity was declining, more influenza B than influenza A viruses were reported.

In the United States, the majority of influenza A (H3N2) and influenza B viruses sent to CDC for further antigenic characterization were not matched optimally to the 2007–08 Northern Hemisphere influenza vaccine strains, while the majority of influenza A (H1N1) viruses were similar to the vaccine strain. Interim results from a study carried out this season with the Marshfield Clinic in Wisconsin found an overall vaccine effectiveness of 44%, with 58% effectiveness against the predominant influenza A (H3N2) viruses, but no effectiveness against influenza B (*4*). These preliminary results indicate that vaccination provided substantial protection against influenza in the study population, even though circulating strains were antigenically distinct from vaccine strains. These results are consistent with studies conducted during previous influenza seasons indicating that vaccination provides measureable protection against laboratory-confirmed influenza, even when vaccine strains are not matched optimally to circulating strains (*5*).

Although influenza activity in the United States during the summer months is typically low, isolated cases and sporadic outbreaks of influenza, including sporadic cases of human infection with swine influenza, can occur during the summer. Public health laboratories are requested to submit summer isolates and any samples that cannot be subtyped by standard methods, or isolates that are otherwise unusual, to CDC for further antigenic characterization for influenza vaccine strain selection, antiviral resistance monitoring, and identification of novel influenza A viruses.

CDC released two Health Alert Network health advisories during the 2007–08 influenza season. The first, published in January 2008, contained updated information regarding the occurrence of influenza and bacterial coinfections in cases reported through the Pediatric Influenza-Associated Mortality Surveillance System (*6*). The increase in the number of pediatric influenza-associated deaths reported with *Staphylococcus aureus* coinfection was reported first during the 2006–07 season (*7*), and this advisory provided further testing and treatment information for health-care providers, and guidelines for health departments investigating such cases (*8*). The second advisory, issued in February 2008, reported an increase in the number of influenza A (H1N1) viruses resistant to the influenza antiviral drug oseltamivir and summarized availability and use of alternative influenza antiviral medications. As a supplement to influenza vaccination, antiviral drugs are important adjuncts in the control and prevention of influenza. CDC continues to recommend use of oseltamivir and zanamivir for the treatment or prevention of influenza. This recommendation is based on the low level of oseltamivir resistance observed in only one influenza subtype, influenza A (H1N1), the persistence of high levels of resistance to the adamantanes in influenza A (H3N2) viruses, and the predominance of influenza A (H3N2) viruses circulating in the United States during the 2007–08 season with co-circulation of influenza B viruses. Use of amantadine or rimantidine is not recommended. CDC will continue to monitor the prevalence of antiviral resistance in the United States.

In February 2008, ACIP voted to expand influenza vaccination recommendations to include all children aged 5–18 years, beginning with the 2008–09 influenza season, if feasible, but no later than the 2009–10 influenza season. The influenza vaccine supply is projected to be abundant for the upcoming influenza season in the United States with ample doses available for implementation of the new pediatric influenza vaccination recommendation. Continued efforts, however, are needed to improve influenza vaccination coverage among children aged 6 months through 4 years, an age group at high risk for influenza-related complications and hospitalization, and close contacts of all children aged <5 years (*9,10*). Vaccination of household contacts of children aged <6 months is particularly important because children aged <6 months are the pediatric group at highest risk for influenza complications, but no vaccine is available for this age group. High rates of laboratory confirmed influenza-associated hospitalization reported from the two population-based surveillance systems for children aged 0–4 years, and the low vaccination rate among influenza-associated pediatric deaths reported to CDC, highlight the increased risk for influenza-related complications and hospitalizations in young children, and the need to improve vaccine coverage in this age group.

Health-care providers should offer vaccination, whether individually or through mass campaigns, soon after 2008–09 vaccine is available. All children aged 6 months through 8 years who previously have not received influenza vaccine should have their first dose administered as soon as vaccine is available to allow time for a second dose before or shortly after the onset of influenza activity in their community. Influenza activity in the United States rarely peaks before November, and activity has peaked in January or later in 20 (80%) of the previous 25 influenza seasons. Thus, vaccine administered in December or later is likely to be beneficial during most influenza seasons. Additional information regarding influenza viruses, influenza surveillance, avian influenza, and influenza vaccination recommendations is available at http://www.cdc.gov/flu.

Acknowledgments

This report is based, in part, on data contributed by participating state and territorial health departments and state public health laboratories, World Health Organization collaborating laboratories, National Respiratory and Enteric Virus Surveillance System collaborating laboratories, the U.S. Influenza Sentinel Provider Surveillance Network, the U.S. Department of Veteran's Affairs/U.S. Department of Defense BioSense Outpatient Surveillance System, the New Vaccine Surveillance Network, the Emerging Infections Program, and the 122 Cities Mortality Reporting System.

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Delayed Onset and Diminished Magnitude of Rotavirus Activity — United States, November 2007–May 2008

On June 25, this report was posted as an MMWR Early Release *on the* MMWR *website* (http://www.cdc.gov/mmwr).

Rotavirus is the leading cause of severe acute gastroenteritis among infants and young children, accounting for an estimated 527,000 deaths among children aged <5 years worldwide in 2004 (*1,2*). In the United States, rotavirus causes few deaths (20–60) each year, but remains a substantial cause of morbidity among children, resulting in approximately 55,000–70,000 hospitalizations, 205,000–272,000 emergency department (ED) visits, and 410,000 physician office visits (*3*). In the continental United States, rotavirus activity follows a distinct winter-spring seasonal pattern (*4*). In winter months, approximately 50% of hospitalizations and ED visits and 30% of outpatient visits for acute gastroenteritis among U.S. children aged <3 years are caused by rotavirus (*5*). To prevent rotavirus disease, in February 2006, a human-bovine rotavirus vaccine, RotaTeq® (Merck & Co., Inc., Whitehouse Station, New Jersey), was recommended for routine use among U.S. infants (*3*). To summarize rotavirus activity through May 3, during the current 2007–08 season, CDC analyzed data from the National Respiratory and Enteric Virus Surveillance System (NREVSS) and the New Vaccine Surveillance Network (NVSN). The results indicated that, when compared with the 15 previous seasons spanning 1991–2006, rotavirus activity during the current season appeared delayed in onset by 2–4 months and diminished in magnitude by >50%. Additional surveillance and epidemiologic studies are needed to confirm the impact of rotavirus vaccination on the 2007-08 season and to monitor the impact of the vaccine on the incidence and epidemiology of rotavirus during future seasons.

NREVSS is a voluntary network of U.S. laboratories that provides CDC with weekly reports of the number of tests performed and positive results obtained for a variety of pathogens. For rotavirus, results of antigen testing using commercially available enzyme immunoassays (EIAs) are reported. Clinical and epidemiologic data are not obtained. During July 1991–June 2007, for each season, a median of 66 laboratories (range: 58–77) contributed rotavirus testing data to NREVSS. To approximate the median from previous seasons, 70 laboratories reporting directly to CDC were included in the 2007–08 analyses.*

To compare detection rates of rotavirus during the 2007–08 season with prevaccine seasons, NREVSS data were aggregated by surveillance week for the period July 1991–June 2006 (i.e., maximum, median, and minimum) and compared with results for July 2007–May 3, 2008. Data from July 2006–June 2007 were excluded from the prevaccine (1991–2006) baseline data because some persons tested likely received vaccine during that period. To explore trends in rotavirus testing

* For the 2007–08 season, a data-sharing agreement between CDC and Surveillance Data, Inc. (SDI) (Plymouth Meeting, Pennsylvania) increased the number of laboratories contributing rotavirus data to 214. SDI data shared with NREVSS showed patterns similar to data from other NREVSS laboratories; however, for sampling consistency, only 70 laboratories reporting directly to CDC were included in the 2007–08 analyses. Data from all 214 laboratories are available at http://www.cdc.gov/surveillance/nrevss/rota-data.htm. Additional information is available via e-mail at nrevss@cdc.gov.

practices and results, additional comparisons were performed using only data from 32 laboratories that consistently reported ≥30 weeks of data per year during July 2000–June 2007 and reported ≥2 months during July 2007–May 2008.

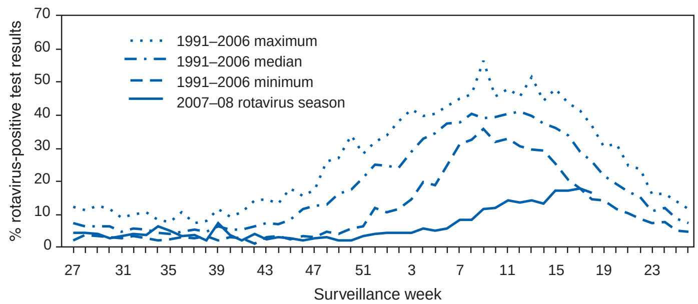
Since 2006, NVSN has consistently conducted prospective, population-based surveillance during January–May for rotavirus gastroenteritis among children aged <3 years residing in three U.S. counties (Monroe County, New York; Hamilton County, Ohio; and Davidson County, Tennessee). NVSN collects epidemiologic and clinical information on children with symptoms of acute gastroenteritis (i.e., diarrhea or vomiting) in inpatient, ED, and sentinel outpatient clinic settings. Fecal specimens are obtained and tested for rotavirus by commercial EIA tests (Premier Rotaclone, Meridian Biosciences, Cincinnati, Ohio). For this analysis, the number and proportion of acute gastroenteritis patients aged <3 years whose fecal specimens tested positive for rotavirus at NVSN sites during January–April in the years 2006, 2007, and 2008 were examined.

Based on NREVSS data, the onset of national rotavirus activity during the 2007–08 season appeared delayed by approximately 2–4 months compared with the 15 prevaccine rotavirus seasons (July 1991–June 2006)[†] (Figure 1). During 1991–2006, median onset occurred in mid-November (week 46; range: week 41 to 52). In 2008, onset of rotavirus activity occurred in late February (week 9). The proportion of all rotavirus tests that were positive from mid-November 2007 to mid-April 2008 (week 46 in 2007 to week 16 in 2008) was below the minimum level reported during 1991–2006. Whereas in all previous seasons the proportion of tests that were positive peaked by March (week 12) to a median of 41.0% (range: 30.6%–45.5%), in 2008 only 13.5 % of tests were positive in week 12, and only 17.8% were positive at the season peak at the end of April (week 17). Since reaching that peak, the percentage of rotavirus positive tests has continued to decline. For the week ending May 31, 2008 (week 22), the proportion of tests positive for rotavirus was 11.1%. The delayed season and atypically low percentage of rotavirus-positive tests has been observed in all four U.S. census regions (*6*).

Data from the 32 NREVSS laboratories that reported ≥30 weeks of data per year during July 2000–June 2007 and reported ≥2 months during July 2007–May 2008 were analyzed. During July 2, 2000–May 3, 2008, the 32 laboratories reported a total of 121,100 rotavirus antigen detection tests with 26,478 positive results (21.9%) (Figure 2). Although some year-to-year variation occurred during this period in the

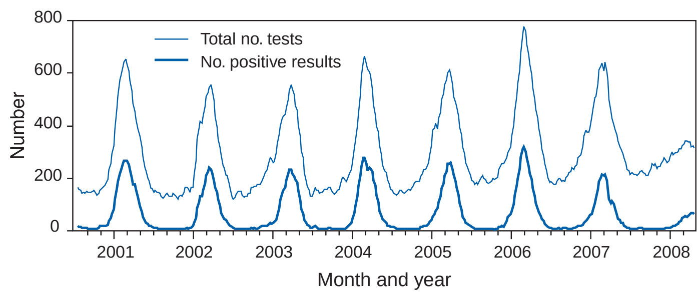
[†] Rotavirus national season onset was defined as the first of 2 consecutive weeks during which the median percentage of specimens testing positive for rotavirus antigen from all combined laboratory data is ≥10%.

FIGURE 1. Percentage of rotavirus tests with positive results from participating laboratories, by week of year — National Respiratory and Enteric Virus Surveillance System, United States, 1991–2006 rotavirus seasons and 2007–08 rotavirus season*



* 2008 data current through week ending 3 May 2008. Data from July 2006–June 2007 were excluded from the (1991–2006) prevaccine baseline data because some persons tested likely received vaccine during that period.

FIGURE 2. Total number of rotavirus tests and number of positive test results* from 32 continuously reporting laboratories[†] — National Respiratory and Enteric Virus Surveillance System, United States, July 2, 2000–May 3, 2008[§]



* 3-week moving averages.
[†] Laboratories that reported for at least 30 weeks during July 2000–June 2007 and reported for at least 2 months during the 2007–08 rotavirus season.
[§] 2007–08 rotavirus season data through week ending May 3, 2008.

total number of tests and the number that tested positive for rotavirus antigen, both numbers were substantially lower during the 2007–08 rotavirus season than during any of the prevaccine seasons. When the total number of rotavirus tests performed during January 1, 2008–May 3, 2008 (weeks 1–18) was compared with the total number performed during these same weeks in each of the seven preceding rotavirus seasons, the number of 2008 tests was lower by a median of 37.0% (season range: 27.0%–45.9%). The number of tests that were positive for rotavirus was lower by a median of 78.5% (season range: 70.9%–79.7%). Similar declines were observed in all regions.

In NVSN, 405, 481, and 283 children aged <3 years were enrolled during January 1–April 30 in 2006, 2007, and 2008, respectively. Among enrolled children, the overall percentage of fecal specimens testing positive for rotavirus was 51% in 2006, 54% in 2007, and 6% in 2008. Smaller percentages of positive results were observed at all inpatient, ED, and outpatient clinic sites in 2008 compared with 2006 and 2007 (Table).

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Editorial Note: In the United States, rotavirus activity during the ongoing 2007–08 season appears both substantially delayed in onset and diminished in magnitude, compared with previous years. These changes in rotavirus activity coincide with increasing use of rotavirus vaccine among infants. Although nationally representative data on vaccine coverage are not currently available, information from population-based immunization information system sentinel sites indicates that mean coverage with 1 dose of rotavirus vaccine among infants aged 3 months was 49.1% (range for six sites: 40.1%–65.4%) in May 2007 and 56.0% (range for eight sites[§]: 12.4%–75.8%) in March 2008 (*7*). Mean coverage with 3 doses of rotavirus vaccine among children aged 13 months at the sentinel sites was 3.4% (range: 0–11.0%) in May 2007 and 33.7% (range: 1.1%–53.0%) in March 2008 (D. Bartlett, MPH, CDC, personal communication, 2008). Most children aged ≥2 years at the start of the 2007–08 rotavirus season would not have received rotavirus vaccine because they would have been too old (e.g., ≥13 weeks) to start the series when the vaccine was first licensed in February 2006. Because the changes in rotavirus activity appear more pronounced than might be attributed to direct protective effects of vaccination alone, the results of this analysis suggest that vaccination of a proportion of the population might offer indirect benefits to unvaccinated children (i.e., herd immunity) by reducing transmission of rotavirus in the community.

The findings in this report are subject to at least five limitations. First, the 2007–08 rotavirus season is still ongoing, and further information is needed to evaluate rotavirus activity fully. Second, although most laboratories submit reports to NREVSS within 2 weeks of testing, delays in reporting might have some effect on these preliminary data. Third, testing for rotavirus is not part of routine clinical practice and is

[§] Not all six sites reporting in 2007 were among the eight sites reporting in 2008.

TABLE. Number of children with specimens and number and percentage testing positive by enzyme immunoassay (EIA) for rotavirus, by health-care provider type and site — New Vaccine Surveillance Network (NVSN), United States, January–April 2006, 2007, and 2008

	2006			2007			2008		
	No. children with specimen	Specimens rotavirus positive by EIA		No. children with specimen	Specimens rotavirus positive by EIA		No. children with specimen	Specimens rotavirus positive by EIA	
Health-care provider type and site		No.	(%)		No.	(%)		No.	(%)
Inpatient									
Monroe County, New York	22	11	(50)	61	45	(74)	10	0	—
Hamilton County, Ohio	76	43	(57)	61	24	(39)	52	0	—
Davidson County, Tennessee	45	26	(58)	21	9	(43)	32	4	(13)
Total inpatient	**143**	**80**	**(56)**	**143**	**78**	**(55)**	**94**	**4**	**(4)**
Emergency department									
Monroe County, New York	13	5	(38)	72	53	(74)	17	0	—
Hamilton County, Ohio	92	59	(64)	139	81	(58)	57	1	(2)
Davidson County, Tennessee	59	31	(53)	53	22	(42)	51	10	(20)
Total emergency department	**164**	**95**	**(58)**	**264**	**156**	**(59)**	**125**	**11**	**(9)**
Outpatient clinic									
Monroe County, New York	16	2	(13)	24	9	(38)	27	1	(4)
Hamilton County, Ohio	36	12	(33)	30	13	(43)	28	0	—
Davidson County, Tennessee	46	18	(39)	20	3	(15)	9	2	(22)
Total outpatient clinic	**98**	**32**	**(33)**	**74**	**25**	**(34)**	**64**	**3**	**(5)**
Total	**405**	**207**	**(51)**	**481**	**259**	**(54)**	**283**	**18**	**(6)**

conducted at the discretion of the physician and based on institutional policies. Changes in testing practices might impact these findings; however, such changes would be unlikely to explain the large decline in positive test results in 2008, particularly given the consistency of this decline across participating laboratories. Fourth, because NREVSS is a purely laboratory-based surveillance system, patient-level information is not available and NREVSS might receive more than one result for a given patient. However, any contribution of this to the results likely would be small. Finally, the counties where NVSN conducts active surveillance might not be representative of the entire U.S. population; however, the findings from NREVSS support very similar interpretation.

The ongoing 2007–08 rotavirus season appears substantially delayed in onset and diminished in magnitude compared with previous seasons. These changes coincide with increasing use of rotavirus vaccine. Continued surveillance and additional epidemiologic studies are needed to confirm the effects of rotavirus vaccination on the 2007–08 season and to monitor the effects of the vaccine on the incidence and epidemiology of rotavirus disease over time.

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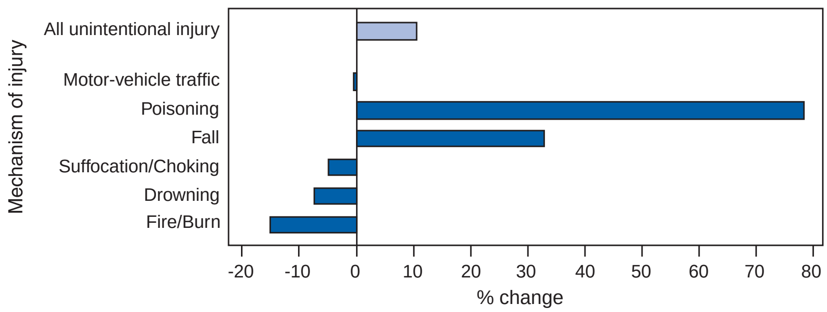
QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage Change in Death Rates for Leading Causes of Unintentional Injury, by Mechanism of Injury — United States, 1999 to 2005



From 1999 to 2005, the age-adjusted unintentional injury death rate increased 10.5% overall, from 35.3 per 100,000 population to 39.0. The increase resulted primarily from a 79.6% increase in the death rate for poisoning (including drug overdose) from 4.4 per 100,000 population to 7.9, and a 33.3% increase in the death rate for falls from 4.8 per 100,000 population to 6.4.

SOURCE: National Vital Statistics System (NVSS), 1999–2005. NVSS injury mortality data are available from CDC's Web-Based Injury Statistics Query and Reporting System (WISQARS) at http://www.cdc.gov/ncipc/wisqars.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 21, 2008 (25th Week)*

Disease	Current week	Cum 2008	5-year weekly average[†]	Total cases reported for previous years 2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Anthrax	—	—	—	1	1	—	—	—	
Botulism:									
foodborne	—	4	0	32	20	19	16	20	
infant	—	32	2	85	97	85	87	76	
other (wound & unspecified)	1	6	1	27	48	31	30	33	CA (1)
Brucellosis	3	37	2	130	121	120	114	104	CA (3)
Chancroid	—	22	1	23	33	17	30	54	
Cholera	—	—	0	7	9	8	6	2	
Cyclosporiasis[§]	5	40	12	92	137	543	160	75	FL (5)
Diphtheria	—	—	—	—	—	—	—	1	
Domestic arboviral diseases[§,¶]:									
California serogroup	—	—	2	53	67	80	112	108	
eastern equine	—	—	0	4	8	21	6	14	
Powassan	—	—	0	7	1	1	1	—	
St. Louis	—	—	0	9	10	13	12	41	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis[§,**]:									
Ehrlichia chaffeensis	6	81	15	827	578	506	338	321	ME (1), MD (2), GA (1), FL (1), TN (1)
Ehrlichia ewingii	—	—	—	—	—	—	—	—	
Anaplasma phagocytophilum	9	30	19	834	646	786	537	362	MN (9)
undetermined	—	2	9	337	231	112	59	44	
Haemophilus influenzae,[††] invasive disease (age <5 yrs):									
serotype b	—	17	0	23	29	9	19	32	
nonserotype b	—	85	3	197	175	135	135	117	
unknown serotype	3	110	3	181	179	217	177	227	NY (1), MN (1), AZ (1)
Hansen disease[§]	1	33	2	101	66	87	105	95	OH (1)
Hantavirus pulmonary syndrome[§]	—	6	1	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal[§]	1	49	5	292	288	221	200	178	AL (1)
Hepatitis C viral, acute	9	350	16	856	766	652	720	1,102	MO (1), NC (5), TX (1), CA (2)
HIV infection, pediatric (age <13 yrs)[§§]	—	—	4	—	—	380	436	504	
Influenza-associated pediatric mortality[§,¶¶]	—	85	0	76	43	45	—	N	
Listeriosis	12	228	16	808	884	896	753	696	NY (1), OH (1), MN (1), NC (1), TN (2), OK (1), WA (3), CA (2)
Measles***	18	109	2	43	55	66	37	56	WA (18)
Meningococcal disease, invasive[†††]:									
A, C, Y, & W-135	2	148	5	322	318	297	—	—	MD (1), TX (1)
serogroup B	1	84	4	166	193	156	—	—	MN (1)
other serogroup	—	17	0	34	32	27	—	—	
unknown serogroup	10	351	12	552	651	765	—	—	OH (1), MI (1), MO (1), NC (2), FL (1), OR (1), CA (3)
Mumps	5	234	24	799	6,584	314	258	231	MD (2), NC (2), FL (1)
Novel influenza A virus infections	—	—	—	1	N	N	N	N	
Plague	—	1	0	7	17	8	3	1	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Poliovirus infection, nonparalytic[§]	—	—	—	—	N	N	N	N	
Psittacosis[§]	—	3	0	12	21	16	12	12	
Q fever[§,§§§] total:	1	47	4	171	169	136	70	71	
acute	1	43	—	—	—	—	—	—	CA (1)
chronic	—	4	—	—	—	—	—	—	
Rabies, human	—	—	0	1	3	2	7	2	
Rubella[¶¶¶]	—	6	0	12	11	11	10	7	
Rubella, congenital syndrome	—	—	—	—	1	1	—	1	
SARS-CoV[§,****]	—	—	—	—	—	—	—	8	

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

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

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

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

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

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

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

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

¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Eighty-three cases occurring during the 2007–08 influenza season have been reported.

*** The 18 measles cases reported for the current week were indigenous.

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

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

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

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

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 21, 2008 (25th Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years 2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	1	77	2	132	125	129	132	161	CT (1)
Syphilis, congenital (age <1 yr)	—	74	9	426	349	329	353	413	
Tetanus	—	2	1	27	41	27	34	20	
Toxic-shock syndrome (staphylococcal)§	1	28	2	92	101	90	95	133	CA (1)
Trichinellosis	—	4	0	5	15	16	5	6	
Tularemia	4	22	4	137	95	154	134	129	NE (1), OK (2), CO (1)
Typhoid fever	3	166	6	437	353	324	322	356	MD (1), CA (2)
Vancomycin-intermediate *Staphylococcus aureus*§	—	4	0	28	6	2	—	N	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	2	1	3	1	N	
Vibriosis (noncholera *Vibrio* species infections)§	6	77	2	404	N	N	N	N	MD (2), FL (2), AL (1), CA (1)
Yellow fever	—	—	—	—	—	—	—	—	

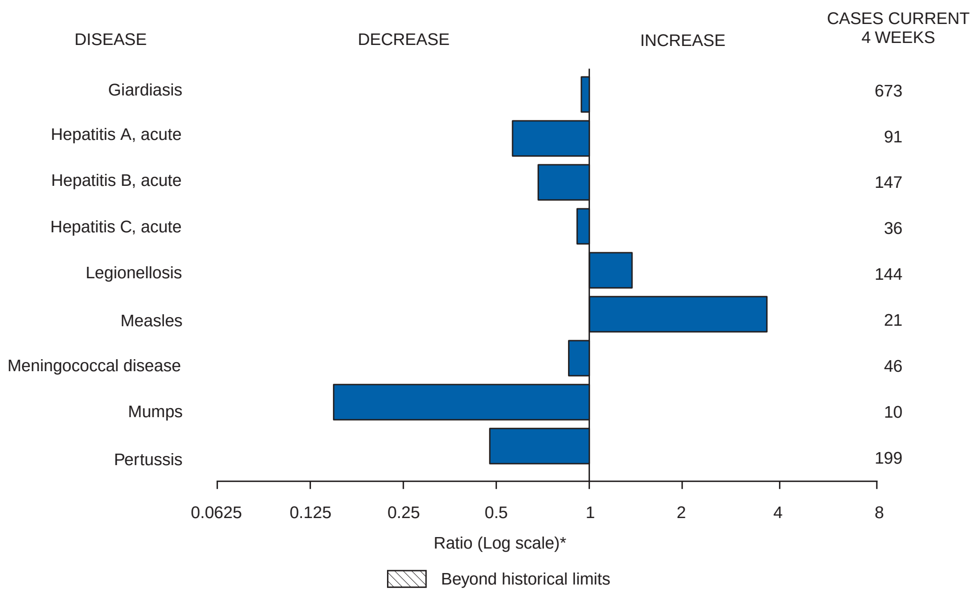
—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

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

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

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals June 21, 2008, with historical data



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

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	12,583	21,368	28,892	497,994	516,432	43	128	341	3,129	3,714	46	88	975	1,611	1,482
New England	490	676	1,516	16,283	16,599	—	0	1	1	2	1	6	15	105	122
Connecticut	—	201	1,093	4,343	4,879	N	0	0	N	N	—	0	13	13	42
Maine§	47	48	67	1,181	1,235	N	0	0	N	N	—	1	5	10	13
Massachusetts	358	311	660	8,216	7,507	N	0	0	N	N	—	2	11	31	35
New Hampshire	28	39	73	982	944	—	0	1	1	2	—	1	4	25	16
Rhode Island§	38	56	98	1,385	1,541	—	0	0	—	—	1	0	3	4	5
Vermont§	19	16	36	176	493	N	0	0	N	N	—	1	4	22	11
Mid. Atlantic	2,235	2,751	4,842	68,671	67,502	—	0	0	—	—	4	13	120	210	175
New Jersey	88	405	528	8,015	10,346	N	0	0	N	N	—	1	8	10	10
New York (Upstate)	523	564	2,177	13,084	12,305	N	0	0	N	N	3	5	20	69	49
New York City	1,125	951	3,150	27,697	23,963	N	0	0	N	N	—	2	8	34	32
Pennsylvania	499	802	1,031	19,875	20,888	N	0	0	N	N	1	6	103	97	84
E.N. Central	1,071	3,477	4,373	80,050	86,191	—	1	3	22	16	5	21	134	394	327
Illinois	19	1,014	1,711	20,166	24,514	N	0	0	N	N	—	2	13	27	39
Indiana	263	395	656	9,851	10,138	N	0	0	N	N	—	2	41	65	24
Michigan	601	754	1,221	21,868	18,501	—	0	2	15	12	—	4	11	87	71
Ohio	73	868	1,530	19,442	23,584	—	0	1	7	4	3	6	60	109	82
Wisconsin	115	379	614	8,723	9,454	N	0	0	N	N	2	7	60	106	111
W.N. Central	704	1,228	1,695	29,984	29,795	—	0	77	—	5	17	17	125	285	218
Iowa	—	163	251	3,911	4,068	N	0	0	N	N	2	4	61	56	41
Kansas	228	157	529	4,411	3,862	N	0	0	N	N	—	1	15	20	28
Minnesota	—	261	372	5,874	6,395	—	0	77	—	—	11	4	34	81	46
Missouri	353	467	577	11,585	10,978	—	0	1	—	5	2	3	14	64	40
Nebraska§	70	91	162	2,064	2,498	N	0	0	N	N	2	3	24	42	13
North Dakota	—	33	65	796	824	N	0	0	N	N	—	0	51	2	1
South Dakota	53	54	81	1,343	1,170	N	0	0	N	N	—	1	16	20	49
S. Atlantic	3,231	3,966	7,609	91,288	99,517	—	0	1	2	2	10	19	65	320	342
Delaware	150	65	144	1,794	1,630	—	0	0	—	—	—	0	4	6	3
District of Columbia	68	117	202	3,041	2,871	—	0	1	—	—	—	0	2	3	1
Florida	1,075	1,301	1,555	32,737	24,635	N	0	0	N	N	7	8	35	150	151
Georgia	5	657	1,338	3,622	19,460	N	0	0	N	N	—	4	14	98	78
Maryland§	360	469	683	10,786	9,868	—	0	1	2	2	1	0	3	8	13
North Carolina	427	215	4,783	9,717	14,097	N	0	0	N	N	—	0	18	11	35
South Carolina§	515	472	3,073	13,398	13,416	N	0	0	N	N	2	1	15	17	26
Virginia§	628	511	1,062	14,744	12,024	N	0	0	N	N	—	1	6	20	31
West Virginia	3	62	96	1,449	1,516	N	0	0	N	N	—	0	5	7	4
E.S. Central	704	1,510	2,394	37,122	40,108	—	0	0	—	—	—	4	64	49	65
Alabama§	35	478	605	10,428	12,108	N	0	0	N	N	—	1	14	18	23
Kentucky	224	222	361	5,281	3,841	N	0	0	N	N	—	1	40	10	21
Mississippi	—	309	1,048	8,368	10,630	N	0	0	N	N	—	1	11	6	10
Tennessee§	445	517	716	13,045	13,529	N	0	0	N	N	—	1	18	15	11
W.S. Central	1,845	2,718	4,426	68,730	56,284	—	0	1	1	—	3	6	29	68	85
Arkansas§	316	232	455	6,705	4,270	N	0	0	N	N	—	1	8	13	12
Louisiana	—	384	851	7,909	8,715	—	0	1	1	—	—	0	4	3	26
Oklahoma	251	235	416	5,643	5,954	N	0	0	N	N	3	1	11	19	15
Texas§	1,278	1,808	3,923	48,473	37,345	N	0	0	N	N	—	3	18	33	32
Mountain	452	1,399	1,836	28,535	35,330	27	90	170	2,151	2,292	5	10	567	148	112
Arizona	118	480	679	10,562	11,505	26	87	168	2,104	2,222	—	1	4	20	20
Colorado	51	307	488	5,082	8,476	N	0	0	N	N	1	2	26	32	31
Idaho§	—	55	233	1,483	1,896	N	0	0	N	N	1	2	71	29	6
Montana§	38	50	363	1,418	1,356	N	0	0	N	N	—	1	7	18	8
Nevada§	194	184	411	4,648	4,449	—	1	7	30	28	—	0	6	6	5
New Mexico§	—	141	561	2,636	4,568	—	0	3	13	16	—	2	9	23	32
Utah	51	117	209	2,695	2,486	1	0	7	4	26	3	1	484	12	3
Wyoming§	—	13	34	11	594	—	0	1	—	—	—	0	8	8	7
Pacific	1,851	3,374	4,676	77,331	85,106	16	31	217	952	1,397	1	2	20	32	36
Alaska	60	94	129	2,202	2,343	N	0	0	N	N	—	0	2	1	—
California	1,639	2,815	4,115	67,623	66,338	16	31	217	952	1,397	—	0	0	—	—
Hawaii	2	110	152	2,555	2,742	N	0	0	N	N	—	0	4	1	—
Oregon§	150	189	402	4,838	4,526	N	0	0	N	N	1	2	16	30	36
Washington	—	275	498	113	9,157	N	0	0	N	N	—	0	0	—	—
American Samoa	—	0	22	62	73	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	12	26	86	401	—	0	0	—	—	—	0	0	—	—
Puerto Rico	207	116	612	3,463	3,792	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	6	6	21	292	98	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	192	302	1,158	6,412	6,873	3,494	6,412	8,913	138,966	165,142	35	46	173	1,384	1,290
New England	9	24	58	465	518	46	96	227	2,287	2,658	1	3	12	82	92
Connecticut	—	6	18	126	136	—	45	199	954	1,002	—	0	9	19	23
Maine§	7	3	10	54	64	2	2	7	46	52	—	0	3	8	7
Massachusetts	—	9	27	157	225	38	46	127	1,054	1,285	—	1	5	36	49
New Hampshire	—	1	4	41	9	1	2	6	58	80	—	0	2	6	8
Rhode Island§	2	1	15	34	28	5	6	13	162	213	1	0	2	7	5
Vermont§	—	3	9	53	56	—	1	5	13	26	—	0	3	6	—
Mid. Atlantic	30	62	131	1,215	1,216	557	626	1,028	15,104	17,072	9	9	31	253	255
New Jersey	—	7	15	132	169	34	114	174	2,295	2,938	—	1	7	32	42
New York (Upstate)	22	23	111	462	409	115	136	545	2,938	2,757	4	3	22	77	66
New York City	—	15	29	324	380	223	176	526	4,585	5,102	—	1	6	40	49
Pennsylvania	8	15	29	297	258	185	227	394	5,286	6,275	5	3	9	104	98
E.N. Central	29	52	96	952	1,116	438	1,343	1,638	28,040	34,582	3	7	28	189	199
Illinois	1	13	34	219	340	10	389	589	6,333	8,837	—	2	7	45	64
Indiana	N	0	0	N	N	106	158	311	3,969	4,160	—	1	20	41	28
Michigan	4	10	22	210	284	268	302	657	8,069	7,459	—	0	3	10	16
Ohio	19	16	36	371	307	23	344	685	7,147	10,900	2	2	6	80	57
Wisconsin	5	9	26	152	185	31	121	214	2,522	3,226	1	1	4	13	34
W.N. Central	13	26	621	684	417	221	335	440	7,595	9,498	6	3	24	104	71
Iowa	1	5	24	115	90	—	31	56	625	906	—	0	1	2	1
Kansas	2	3	11	54	57	60	41	130	1,073	1,088	—	0	4	11	8
Minnesota	—	0	575	191	6	1	62	92	1,338	1,647	5	0	21	22	25
Missouri	5	9	23	187	182	128	172	235	3,773	4,999	1	1	6	47	28
Nebraska§	5	4	8	95	49	24	25	51	620	684	—	0	3	16	8
North Dakota	—	0	36	14	6	—	2	7	43	53	—	0	2	6	1
South Dakota	—	2	6	28	27	8	5	10	123	121	—	0	0	—	—
S. Atlantic	37	56	102	1,065	1,227	993	1,467	3,072	31,029	38,062	5	11	29	363	322
Delaware	—	1	6	17	16	34	23	44	563	650	—	0	1	3	5
District of Columbia	—	1	5	19	32	26	47	104	1,177	1,104	—	0	1	5	1
Florida	25	23	47	534	524	344	473	616	11,174	10,420	1	3	10	96	88
Georgia	4	11	28	203	269	—	274	561	1,363	7,757	1	2	9	82	71
Maryland§	1	5	18	91	114	99	123	237	2,860	3,022	1	2	5	58	53
North Carolina	N	0	0	N	N	134	135	1,949	4,086	6,935	2	1	9	40	36
South Carolina§	1	3	7	54	36	196	190	836	4,858	4,866	—	1	7	29	31
Virginia§	5	8	39	124	223	156	135	486	4,604	2,874	—	1	22	41	24
West Virginia	1	0	8	23	13	4	16	38	344	434	—	0	3	9	13
E.S. Central	3	9	23	175	204	255	564	945	13,463	15,222	3	3	8	78	74
Alabama§	3	5	11	96	110	12	198	287	4,190	5,176	1	0	2	14	18
Kentucky	N	0	0	N	N	88	80	161	2,061	1,432	—	0	1	1	4
Mississippi	N	0	0	N	N	—	131	401	3,110	3,919	—	0	2	11	5
Tennessee§	—	4	16	79	94	155	173	261	4,102	4,695	2	2	6	52	47
W.S. Central	1	7	41	94	145	592	1,019	1,355	23,132	23,309	1	2	29	64	52
Arkansas§	1	3	11	51	56	84	78	138	2,080	2,004	—	0	3	3	5
Louisiana	—	1	14	11	42	—	182	384	3,586	5,127	—	0	2	3	3
Oklahoma	—	3	35	32	47	116	94	171	2,113	2,299	1	1	21	53	40
Texas§	N	0	0	N	N	392	644	1,102	15,353	13,879	—	0	3	5	4
Mountain	22	31	68	548	635	121	244	333	5,011	6,400	7	5	14	181	149
Arizona	—	3	11	47	86	27	83	130	1,574	2,394	3	2	11	82	61
Colorado	6	11	26	213	203	54	61	91	1,417	1,601	3	1	4	33	34
Idaho§	5	3	19	64	53	—	4	19	65	124	—	0	4	8	4
Montana§	—	2	8	28	36	—	1	48	46	45	—	0	1	1	—
Nevada§	4	3	6	50	63	39	45	129	1,177	1,077	—	0	1	10	6
New Mexico§	—	2	5	36	56	—	27	104	481	744	—	1	4	20	25
Utah	7	6	32	96	119	1	12	36	251	381	1	1	6	27	16
Wyoming§	—	1	3	14	19	—	0	5	—	34	—	0	1	—	3
Pacific	48	62	185	1,214	1,395	271	639	809	13,305	18,339	—	2	7	70	76
Alaska	1	1	5	32	31	2	11	24	233	248	—	0	4	11	5
California	32	40	91	841	968	245	556	683	12,173	15,362	—	0	4	15	25
Hawaii	—	1	5	13	40	1	11	22	261	333	—	0	1	9	6
Oregon§	2	9	19	197	178	23	24	63	621	520	—	1	4	33	39
Washington	13	8	87	131	178	—	48	105	17	1,876	—	0	3	2	1
American Samoa	—	0	0	—	—	—	0	1	2	3	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	1	—	1	9	25	63	—	0	1	—	—
Puerto Rico	—	3	31	31	131	7	5	23	125	157	—	0	1	—	2
U.S. Virgin Islands	—	0	0	—	—	—	1	5	55	25	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

	Hepatitis (viral, acute), by type†										Legionellosis				
	A					B									
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	34	54	167	1,188	1,290	40	77	262	1,528	2,031	56	49	117	864	821
New England	—	2	7	46	52	—	1	6	23	60	—	3	14	32	46
Connecticut	—	0	3	11	8	—	0	5	8	23	—	1	4	8	5
Maine§	—	0	1	2	—	—	0	2	7	3	—	0	2	1	1
Massachusetts	—	1	5	18	26	—	0	3	3	24	—	0	3	1	21
New Hampshire	—	0	2	4	10	—	0	1	1	4	—	0	2	4	1
Rhode Island§	—	0	2	10	6	—	0	3	3	5	—	0	5	14	15
Vermont§	—	0	1	1	2	—	0	1	1	1	—	0	2	4	3
Mid. Atlantic	1	7	18	124	205	3	9	18	185	281	12	14	37	198	224
New Jersey	—	1	6	22	63	—	2	7	36	85	—	1	13	17	29
New York (Upstate)	—	1	6	30	34	1	2	7	37	41	5	4	15	62	62
New York City	—	2	7	37	66	—	2	7	34	65	—	2	12	16	57
Pennsylvania	1	1	6	35	42	2	3	7	78	90	7	6	21	103	76
E.N. Central	1	6	15	148	152	7	7	17	164	234	17	11	35	181	184
Illinois	—	2	10	45	60	—	1	6	34	81	—	1	16	19	39
Indiana	—	0	4	7	4	—	0	8	14	20	—	1	7	14	13
Michigan	—	2	7	62	38	—	2	6	57	63	2	3	11	49	57
Ohio	1	1	3	22	32	7	2	6	56	70	15	4	17	95	65
Wisconsin	—	0	2	12	18	—	0	1	3	—	—	0	5	4	10
W.N. Central	4	4	29	162	80	4	2	9	45	56	2	2	10	41	33
Iowa	—	1	7	70	17	—	0	2	7	12	—	0	2	6	3
Kansas	—	0	3	8	3	—	0	3	6	7	—	0	1	1	4
Minnesota	2	0	23	18	42	1	0	5	4	8	—	0	6	4	5
Missouri	1	1	3	27	8	3	1	4	25	20	2	1	3	20	16
Nebraska§	1	1	5	37	6	—	0	1	3	6	—	0	2	9	3
North Dakota	—	0	2	—	—	—	0	1	—	—	—	0	2	—	—
South Dakota	—	0	1	2	4	—	0	2	—	3	—	0	1	1	2
S. Atlantic	12	9	22	157	210	12	16	60	409	496	17	8	28	175	165
Delaware	—	0	1	3	3	—	0	3	6	9	—	0	2	5	4
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	1	6	7
Florida	2	3	8	70	64	8	6	12	163	163	4	3	10	69	61
Georgia	2	1	5	23	38	2	3	8	56	68	1	1	3	12	20
Maryland§	—	1	3	18	39	1	2	6	35	58	4	2	6	39	29
North Carolina	8	0	9	17	11	—	0	17	48	63	3	0	7	11	18
South Carolina§	—	0	4	6	5	1	1	6	31	34	1	0	2	5	8
Virginia§	—	1	5	17	47	—	2	16	47	74	4	1	6	25	15
West Virginia	—	0	2	3	3	—	0	30	23	27	—	0	3	3	3
E.S. Central	2	2	9	38	44	1	7	13	154	159	3	2	7	51	43
Alabama§	—	0	4	4	8	1	2	5	46	60	—	0	1	5	5
Kentucky	1	0	2	14	9	—	2	7	41	22	2	1	3	25	19
Mississippi	—	0	1	2	6	—	0	3	16	16	—	0	1	1	—
Tennessee§	1	1	6	18	21	—	2	8	51	61	1	1	4	20	19
W.S. Central	—	5	51	110	96	8	17	134	305	393	—	2	23	30	41
Arkansas§	—	0	1	3	6	—	1	3	16	35	—	0	2	4	6
Louisiana	—	0	3	4	15	—	1	8	14	46	—	0	2	—	1
Oklahoma	—	0	7	4	3	4	2	37	42	24	—	0	3	3	1
Texas§	—	5	49	99	72	4	12	110	233	288	—	2	18	23	33
Mountain	1	4	10	98	127	1	3	7	80	113	—	2	6	39	35
Arizona	—	2	8	43	92	—	1	4	18	49	—	1	5	11	9
Colorado	1	0	3	20	17	—	0	3	10	18	—	0	2	3	8
Idaho§	—	0	3	14	2	—	0	2	4	5	—	0	1	2	3
Montana§	—	0	2	—	2	—	0	1	—	—	—	0	1	2	1
Nevada§	—	0	1	3	7	1	1	3	20	26	—	0	2	6	3
New Mexico§	—	0	3	14	3	—	0	2	7	9	—	0	1	3	3
Utah	—	0	2	2	2	—	0	5	19	4	—	0	3	12	5
Wyoming§	—	0	1	2	2	—	0	1	2	2	—	0	0	—	3
Pacific	13	13	51	305	324	4	9	30	163	239	5	4	18	117	50
Alaska	—	0	1	2	2	—	0	2	7	4	—	0	1	1	—
California	11	10	42	247	290	3	6	19	114	179	4	3	14	91	40
Hawaii	—	0	2	4	3	—	0	2	3	5	—	0	1	4	1
Oregon§	—	1	3	20	13	—	1	4	20	30	—	0	2	8	3
Washington	2	1	7	32	16	1	1	9	19	21	1	0	3	13	6
American Samoa	—	0	0	—	—	—	0	0	—	14	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	2	—	0	0	—	—
Puerto Rico	—	0	4	8	41	—	1	5	20	36	—	0	1	1	3
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive[†] All serogroups				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007
United States	312	270	1,627	3,996	7,586	10	22	132	346	509	13	18	52	600	592
New England	23	39	675	281	2,394	—	1	35	10	22	—	1	3	16	28
Connecticut	—	9	280	—	1,148	—	0	27	5	1	—	0	1	1	4
Maine[§]	14	6	61	69	39	—	0	2	—	3	—	0	1	3	4
Massachusetts	—	9	280	28	881	—	0	3	2	17	—	0	3	12	15
New Hampshire	5	9	96	157	295	—	0	4	1	1	—	0	0	—	1
Rhode Island[§]	—	0	77	—	—	—	0	8	—	—	—	0	1	—	1
Vermont[§]	4	1	13	27	31	—	0	2	2	—	—	0	1	—	3
Mid. Atlantic	207	157	662	2,287	2,761	—	7	18	80	145	—	2	6	67	67
New Jersey	—	29	220	285	1,213	—	0	7	—	30	—	0	1	3	9
New York (Upstate)	159	58	453	733	517	—	1	8	13	27	—	0	3	20	19
New York City	—	3	27	4	115	—	4	9	55	76	—	0	2	12	14
Pennsylvania	48	52	293	1,265	916	—	1	4	12	12	—	1	5	32	25
E.N. Central	3	6	221	41	748	1	2	7	49	72	2	3	9	92	90
Illinois	—	0	16	2	57	—	0	6	20	36	—	1	3	26	36
Indiana	—	0	7	2	11	—	0	1	2	5	—	0	4	15	13
Michigan	1	1	5	14	8	—	0	2	8	9	1	0	2	15	15
Ohio	2	0	4	9	5	1	0	3	16	12	1	1	4	27	21
Wisconsin	—	4	201	14	667	—	0	3	3	10	—	0	2	9	5
W.N. Central	32	3	740	198	139	—	0	8	21	19	2	2	8	57	37
Iowa	—	1	8	12	61	—	0	1	2	2	—	0	3	11	9
Kansas	—	0	1	1	8	—	0	1	3	1	—	0	1	1	2
Minnesota	31	0	731	168	63	—	0	8	6	11	1	0	7	16	9
Missouri	—	0	4	12	5	—	0	4	6	2	1	0	3	18	10
Nebraska[§]	1	0	1	3	2	—	0	2	4	2	—	0	2	9	2
North Dakota	—	0	9	1	—	—	0	2	—	—	—	0	1	1	2
South Dakota	—	0	1	1	—	—	0	0	—	1	—	0	1	1	3
S. Atlantic	39	61	221	1,027	1,451	6	5	15	93	107	4	3	7	85	89
Delaware	14	12	34	315	295	—	0	1	1	2	—	0	1	1	1
District of Columbia	—	2	9	51	57	—	0	1	—	2	—	0	0	—	—
Florida	2	1	4	17	2	—	1	7	24	20	1	1	5	31	30
Georgia	—	0	3	3	3	1	1	3	20	15	—	0	3	10	9
Maryland[§]	8	31	136	492	809	1	1	5	26	32	1	0	2	10	17
North Carolina	—	0	8	2	19	2	0	2	4	12	2	0	4	5	10
South Carolina[§]	—	0	4	7	10	—	0	1	3	4	—	0	3	12	9
Virginia[§]	15	13	68	135	250	2	1	7	15	20	—	0	3	14	13
West Virginia	—	0	9	5	6	—	0	1	—	—	—	0	1	2	—
E.S. Central	1	1	7	19	23	—	0	3	7	16	—	1	6	35	31
Alabama[§]	1	0	3	8	9	—	0	1	3	2	—	0	2	3	7
Kentucky	—	0	2	1	—	—	0	1	3	3	—	0	2	7	5
Mississippi	—	0	1	—	—	—	0	1	—	1	—	0	2	9	8
Tennessee[§]	—	0	5	10	14	—	0	2	1	10	—	0	3	16	11
W.S. Central	—	1	9	23	31	—	1	60	16	39	1	2	13	60	63
Arkansas[§]	—	0	1	—	—	—	0	1	—	—	—	0	1	6	7
Louisiana	—	0	0	—	2	—	0	1	—	13	—	0	3	12	21
Oklahoma	—	0	1	—	—	—	0	4	2	3	—	0	5	9	11
Texas[§]	—	1	8	23	29	—	1	56	14	23	1	1	7	33	24
Mountain	2	0	3	8	12	1	1	5	12	27	—	1	4	33	43
Arizona	—	0	1	1	—	1	0	1	5	5	—	0	2	5	10
Colorado	—	0	1	1	—	—	0	2	3	10	—	0	2	8	14
Idaho[§]	2	0	2	4	3	—	0	2	—	—	—	0	2	2	4
Montana[§]	—	0	2	1	1	—	0	1	—	2	—	0	1	4	1
Nevada[§]	—	0	2	1	6	—	0	3	4	1	—	0	2	6	3
New Mexico[§]	—	0	2	—	1	—	0	1	—	1	—	0	1	4	2
Utah	—	0	1	—	1	—	0	1	—	8	—	0	2	2	7
Wyoming[§]	—	0	1	—	—	—	0	0	—	—	—	0	1	2	2
Pacific	5	4	8	112	27	2	3	10	58	62	4	4	17	155	144
Alaska	—	0	2	1	2	—	0	2	2	2	—	0	2	3	1
California	3	3	8	98	23	1	2	8	46	42	3	3	17	115	104
Hawaii	N	0	0	N	N	—	0	1	2	2	—	0	2	1	4
Oregon[§]	2	0	2	13	2	—	0	2	4	11	1	0	3	21	21
Washington	—	0	7	—	—	1	0	3	4	5	—	0	5	15	14
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	1	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	1	—	0	1	2	5
U.S. Virgin Islands	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, & W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	65	158	846	2,942	4,313	46	91	177	1,856	2,739	31	27	195	290	643
New England	—	25	49	268	668	7	8	20	161	257	—	0	2	—	4
Connecticut	—	0	5	—	34	3	4	17	89	106	—	0	0	—	—
Maine†	—	1	5	16	37	—	1	5	22	39	N	0	0	N	N
Massachusetts	—	18	35	224	536	N	0	0	N	N	—	0	2	—	4
New Hampshire	—	0	5	9	36	2	1	4	17	22	—	0	1	—	—
Rhode Island†	—	0	25	14	4	N	0	0	N	N	—	0	0	—	—
Vermont†	—	0	6	5	21	2	2	6	33	90	—	0	0	—	—
Mid. Atlantic	12	22	43	354	590	12	18	29	395	459	3	1	6	26	38
New Jersey	—	2	9	3	96	—	0	0	—	—	—	0	2	2	13
New York (Upstate)	9	7	23	136	291	12	9	20	196	212	1	0	2	6	3
New York City	—	2	7	34	66	—	0	2	10	26	—	0	2	10	14
Pennsylvania	3	8	23	181	137	—	8	18	189	221	2	0	2	8	8
E.N. Central	3	18	188	603	815	8	3	43	36	44	—	0	3	3	22
Illinois	—	3	8	58	90	N	0	0	N	N	—	0	3	1	15
Indiana	—	0	12	21	26	—	0	1	1	5	—	0	2	1	3
Michigan	—	4	16	77	126	6	1	32	22	25	—	0	1	—	2
Ohio	3	8	176	447	385	2	1	11	13	14	—	0	2	1	2
Wisconsin	—	0	13	—	188	N	0	0	N	N	—	0	1	—	—
W.N. Central	8	11	143	269	304	1	4	13	57	122	5	4	33	76	113
Iowa	—	1	8	30	92	—	0	3	9	15	—	0	5	—	7
Kansas	—	1	5	24	49	—	0	7	—	70	—	0	2	—	6
Minnesota	6	0	131	69	59	—	0	6	19	6	—	0	4	—	1
Missouri	1	2	18	110	42	1	0	3	14	12	4	3	25	74	92
Nebraska†	1	1	12	31	16	—	0	0	—	—	1	0	2	2	5
North Dakota	—	0	5	1	3	—	0	8	13	9	—	0	0	—	—
South Dakota	—	0	2	4	43	—	0	2	2	10	—	0	1	—	2
S. Atlantic	21	13	50	286	469	18	40	73	995	1,097	7	8	109	80	305
Delaware	—	0	2	5	5	—	0	0	—	—	—	0	2	3	9
District of Columbia	—	0	1	2	7	—	0	0	—	—	—	0	2	2	2
Florida	2	3	9	83	112	—	0	25	62	128	—	0	3	3	3
Georgia	—	0	3	8	23	3	6	37	166	115	—	0	6	10	29
Maryland†	2	1	6	31	64	—	9	18	199	188	—	1	6	15	21
North Carolina	15	0	38	76	159	7	9	16	235	239	3	0	96	14	178
South Carolina†	—	1	22	31	43	—	0	0	—	46	3	0	5	12	23
Virginia†	2	2	11	48	47	8	13	27	278	343	1	1	9	20	39
West Virginia	—	0	12	2	9	—	0	11	55	38	—	0	3	1	1
E.S. Central	2	7	31	99	137	—	2	7	64	75	4	4	16	48	108
Alabama†	—	1	6	19	37	—	0	0	—	—	1	1	10	12	26
Kentucky	—	0	4	14	12	—	0	3	14	9	—	0	2	—	2
Mississippi	—	3	29	42	39	—	0	1	2	—	—	0	3	3	5
Tennessee†	2	1	4	24	49	—	2	6	48	66	3	1	10	33	75
W.S. Central	2	18	194	258	441	—	11	40	52	557	12	2	153	49	32
Arkansas†	—	1	17	29	94	—	1	6	35	12	—	0	15	1	1
Louisiana	—	0	2	2	12	—	0	0	—	—	—	0	2	2	1
Oklahoma	—	0	26	12	2	—	0	32	16	45	12	0	132	40	21
Texas†	2	14	175	215	333	—	8	34	1	500	—	1	8	6	9
Mountain	7	19	37	420	554	—	2	8	25	17	—	0	4	6	18
Arizona	—	3	10	97	146	N	0	0	N	N	—	0	2	4	3
Colorado	2	4	13	68	141	—	0	0	—	—	—	0	2	—	—
Idaho†	—	1	4	18	22	—	0	4	—	—	—	0	1	—	2
Montana†	—	0	11	56	30	—	0	3	1	2	—	0	1	1	1
Nevada†	2	0	7	17	22	—	0	2	1	1	—	0	0	—	—
New Mexico†	—	1	7	22	27	—	0	3	16	5	—	0	1	1	3
Utah	3	6	27	138	151	—	0	2	1	4	—	0	0	—	—
Wyoming†	—	0	2	4	15	—	0	4	6	5	—	0	2	—	9
Pacific	10	18	303	385	335	—	4	10	71	111	—	0	1	2	3
Alaska	2	1	29	40	19	—	0	4	12	36	N	0	0	N	N
California	—	9	129	156	196	—	3	8	57	74	—	0	1	1	1
Hawaii	—	0	2	4	10	—	0	0	—	—	N	0	0	N	N
Oregon†	—	2	14	69	46	—	0	3	2	1	—	0	1	1	2
Washington	8	5	169	116	64	—	0	0	—	—	N	0	0	N	N
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	—	1	5	27	20	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007
United States	695	776	2,116	13,957	16,755	89	76	245	1,496	1,389	292	384	1,235	7,585	6,807
New England	7	20	202	560	1,187	1	4	12	57	144	—	3	22	66	136
Connecticut	—	0	173	173	431	—	0	4	4	71	—	0	20	20	44
Maine§	2	2	14	58	51	—	0	4	4	16	—	0	1	3	12
Massachusetts	—	14	60	221	564	—	2	9	24	40	—	2	8	34	68
New Hampshire	1	3	10	46	62	—	0	5	13	9	—	0	1	1	4
Rhode Island§	—	1	13	33	46	—	0	3	7	3	—	0	9	7	6
Vermont§	4	1	5	29	33	1	0	3	5	5	—	0	1	1	2
Mid. Atlantic	63	81	212	1,679	2,327	8	8	194	333	160	24	25	78	880	240
New Jersey	—	16	48	241	506	—	1	7	6	44	—	5	15	171	50
New York (Upstate)	40	25	73	492	561	6	3	190	278	47	23	6	36	307	46
New York City	—	21	48	403	509	—	1	5	18	18	—	8	35	354	106
Pennsylvania	23	30	83	543	751	2	2	11	31	51	1	2	65	48	38
E.N. Central	46	85	263	1,635	2,421	20	10	36	161	173	38	73	145	1,347	849
Illinois	—	24	187	389	850	—	1	13	12	30	—	17	37	362	255
Indiana	—	9	34	167	237	—	1	12	13	17	—	10	83	360	28
Michigan	6	16	43	310	380	3	2	10	39	30	—	1	7	33	25
Ohio	39	26	65	562	518	17	2	9	64	48	33	21	104	393	265
Wisconsin	1	14	37	207	436	—	3	16	33	48	5	11	39	199	276
W.N. Central	46	51	95	1,040	1,125	19	13	38	226	212	15	23	57	425	987
Iowa	2	9	18	166	191	—	2	13	43	41	1	2	9	67	38
Kansas	3	6	21	117	180	2	1	4	17	24	—	0	2	8	16
Minnesota	19	13	39	285	265	14	3	15	60	65	9	4	11	112	116
Missouri	18	14	29	300	299	3	3	12	64	39	5	10	37	134	778
Nebraska§	4	5	13	107	95	—	2	6	27	23	—	0	3	—	12
North Dakota	—	1	35	19	15	—	0	20	2	5	—	0	15	31	3
South Dakota	—	2	11	46	80	—	1	5	13	15	—	2	31	73	24
S. Atlantic	212	228	442	3,604	3,968	13	12	40	250	248	58	74	149	1,534	2,269
Delaware	1	3	8	57	55	—	0	2	7	9	—	0	2	7	4
District of Columbia	—	1	4	21	25	—	0	1	5	—	—	0	3	5	7
Florida	104	92	181	1,698	1,603	6	2	18	78	65	21	26	75	452	1,277
Georgia	25	34	86	548	615	2	1	6	20	27	15	27	47	596	816
Maryland§	32	15	44	263	295	1	2	5	43	35	1	2	7	25	40
North Carolina	10	19	228	354	553	—	1	24	24	37	—	1	12	47	31
South Carolina§	11	18	52	307	314	1	0	3	17	5	17	7	32	325	38
Virginia§	29	19	49	292	450	3	2	9	46	67	4	4	14	71	55
West Virginia	—	4	25	64	58	—	0	3	10	3	—	0	61	6	1
E.S. Central	30	54	144	925	1,065	5	5	26	106	60	10	54	178	956	626
Alabama§	11	15	50	258	296	1	1	19	35	12	1	13	43	215	245
Kentucky	5	9	23	144	199	1	1	12	17	15	5	12	35	168	114
Mississippi	7	16	57	252	250	—	0	1	3	3	1	18	112	221	177
Tennessee§	7	16	34	271	320	3	2	12	51	30	3	11	32	352	90
W.S. Central	109	104	900	1,318	1,397	1	5	25	85	103	83	53	756	1,521	862
Arkansas§	23	13	50	187	200	—	1	4	20	19	19	2	18	192	44
Louisiana	—	10	44	58	286	—	0	1	—	6	—	5	22	58	249
Oklahoma	26	10	72	224	158	1	0	14	13	12	2	3	32	46	43
Texas§	60	54	800	849	753	—	4	11	52	66	62	39	710	1,225	526
Mountain	58	56	83	1,239	1,074	7	9	42	162	154	12	18	40	296	337
Arizona	13	17	40	346	349	1	1	8	26	44	4	9	30	132	168
Colorado	19	11	44	372	250	3	2	17	45	27	4	2	6	38	45
Idaho§	7	3	10	72	50	3	2	16	34	28	—	0	2	5	6
Montana§	1	1	10	35	44	—	0	3	13	—	—	0	1	1	13
Nevada§	6	5	12	88	112	—	0	3	10	12	3	2	10	90	15
New Mexico§	—	6	26	175	112	—	0	5	16	21	—	1	6	17	54
Utah	11	5	17	129	116	—	1	9	14	22	1	1	5	10	11
Wyoming§	1	1	5	22	41	—	0	1	4	—	—	0	2	3	25
Pacific	124	110	399	1,957	2,191	15	9	40	116	135	52	30	79	560	501
Alaska	1	1	5	22	43	—	0	1	3	—	—	0	1	—	6
California	92	78	286	1,452	1,650	9	5	34	71	73	50	26	61	484	406
Hawaii	2	5	14	95	110	—	0	5	3	14	—	1	43	19	15
Oregon§	—	6	15	148	144	2	1	11	11	16	—	1	6	24	27
Washington	29	12	103	240	244	4	1	13	28	32	2	2	20	33	47
American Samoa	—	0	1	1	—	—	0	0	—	—	—	0	1	1	3
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	5	11	—	0	0	—	—	—	0	3	11	9
Puerto Rico	—	12	55	145	346	—	0	1	2	—	—	0	2	4	18
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

Reporting area	Streptococcal disease, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2008	Cum 2007
United States	82	99	258	3,099	3,129	21	34	166	917	982
New England	—	6	31	199	252	—	2	14	41	80
Connecticut	—	0	28	71	70	—	0	11	—	11
Maine§	—	0	3	15	18	—	0	1	1	1
Massachusetts	—	2	7	83	127	—	1	5	30	52
New Hampshire	—	0	2	16	20	—	0	1	7	8
Rhode Island§	—	0	6	5	2	—	0	1	2	6
Vermont§	—	0	2	9	15	—	0	1	1	2
Mid. Atlantic	16	16	43	635	622	5	4	19	115	183
New Jersey	—	3	9	94	119	—	1	6	21	36
New York (Upstate)	10	6	18	224	184	5	2	14	61	60
New York City	—	3	10	111	153	—	1	12	33	87
Pennsylvania	6	5	16	206	166	N	0	0	N	N
E.N. Central	7	17	59	641	658	4	5	23	186	182
Illinois	—	5	16	163	202	—	1	6	40	44
Indiana	—	2	11	83	68	—	0	14	23	11
Michigan	—	3	10	101	137	1	1	5	45	54
Ohio	6	4	15	182	160	2	1	5	35	37
Wisconsin	1	1	38	112	91	1	1	9	43	36
W.N. Central	14	4	39	255	209	4	2	16	76	52
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	6	33	25	—	0	3	12	—
Minnesota	13	0	35	116	97	4	0	13	28	32
Missouri	1	2	10	61	56	—	1	2	22	14
Nebraska§	—	0	3	24	15	—	0	3	5	5
North Dakota	—	0	5	9	10	—	0	2	4	1
South Dakota	—	0	2	12	6	—	0	1	5	—
S. Atlantic	21	22	51	609	691	3	6	13	140	167
Delaware	—	0	2	6	5	—	0	0	—	—
District of Columbia	—	0	2	12	15	—	0	1	1	2
Florida	1	6	11	145	162	3	1	4	39	35
Georgia	5	4	10	123	142	—	1	5	9	38
Maryland§	5	4	9	112	121	—	1	5	37	41
North Carolina	6	3	22	83	72	N	0	0	N	N
South Carolina§	—	1	5	35	66	—	1	4	26	19
Virginia§	4	3	12	77	90	—	1	6	24	28
West Virginia	—	0	3	16	18	—	0	1	4	4
E.S. Central	2	4	13	100	115	2	2	11	62	53
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	1	0	3	18	29	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	3	15	4
Tennessee§	1	3	13	82	86	2	2	9	47	49
W.S. Central	11	7	84	249	176	1	5	66	137	129
Arkansas§	—	0	2	4	14	—	0	2	5	8
Louisiana	—	0	1	3	13	—	0	2	1	24
Oklahoma	1	1	19	65	42	—	1	7	45	29
Texas§	10	5	64	177	107	1	3	58	86	68
Mountain	9	11	22	341	330	2	5	12	150	127
Arizona	1	4	9	121	122	1	2	8	76	63
Colorado	6	3	8	97	84	—	1	4	41	30
Idaho§	1	0	2	10	6	1	0	1	3	2
Montana§	N	0	0	N	N	—	0	1	2	—
Nevada§	—	0	2	6	3	N	0	0	N	N
New Mexico§	1	3	7	65	57	—	0	3	13	26
Utah	—	1	5	37	53	—	0	4	14	6
Wyoming§	—	0	2	5	5	—	0	1	1	—
Pacific	2	3	9	70	76	—	0	2	10	9
Alaska	1	0	3	20	15	N	0	0	N	N
California	—	0	0	—	—	N	0	0	N	N
Hawaii	1	2	9	50	61	—	0	2	10	9
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	12	22	4	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	3	—	5	—	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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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

	Streptococcus pneumoniae, invasive disease, drug resistant[†]										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	23	47	262	1,412	1,473	1	9	43	231	290	123	229	351	5,181	4,954
New England	—	1	41	27	82	—	0	8	5	12	4	6	14	137	114
Connecticut	—	0	37	—	51	—	0	7	—	4	—	0	6	10	14
Maine[§]	—	0	2	11	7	—	0	1	1	1	1	0	2	6	2
Massachusetts	—	0	0	—	—	—	0	0	—	2	2	4	11	112	69
New Hampshire	—	0	0	—	—	—	0	0	—	—	1	0	3	6	11
Rhode Island[§]	—	0	3	7	13	—	0	1	2	3	—	0	3	2	16
Vermont[§]	—	0	2	9	11	—	0	1	2	2	—	0	5	1	2
Mid. Atlantic	1	2	8	92	88	—	0	2	15	20	37	32	45	841	759
New Jersey	—	0	0	—	—	—	0	0	—	—	3	4	10	97	93
New York (Upstate)	—	1	4	31	28	—	0	2	4	8	6	3	13	65	65
New York City	—	0	3	3	—	—	0	0	—	—	28	17	30	540	473
Pennsylvania	1	1	8	58	60	—	0	2	11	12	—	5	12	139	128
E.N. Central	9	13	50	407	404	1	2	14	66	67	8	16	31	401	408
Illinois	—	2	15	51	75	—	0	6	12	24	—	6	19	69	213
Indiana	—	3	28	127	88	—	0	11	15	12	1	2	6	67	19
Michigan	1	0	2	7	1	—	0	1	1	1	2	2	17	102	53
Ohio	8	7	15	222	240	1	1	4	38	30	5	4	14	142	92
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	4	21	31
W.N. Central	—	2	106	101	106	—	0	9	7	20	4	8	15	186	148
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	7	8
Kansas	—	1	5	43	58	—	0	1	2	4	1	0	5	19	8
Minnesota	—	0	105	—	1	—	0	9	—	12	—	1	4	41	33
Missouri	—	1	8	58	39	—	0	1	2	—	3	5	10	116	94
Nebraska[§]	—	0	0	—	2	—	0	0	—	—	—	0	1	3	3
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	—	6	—	0	1	3	4	—	0	3	—	2
S. Atlantic	10	19	39	589	631	—	4	10	100	138	25	48	215	1,088	1,053
Delaware	—	0	1	2	5	—	0	1	—	1	—	0	4	6	6
District of Columbia	—	0	0	—	4	—	0	0	—	—	1	2	11	50	97
Florida	9	11	26	333	349	—	2	6	66	72	10	18	34	423	348
Georgia	1	7	18	196	230	—	1	6	29	57	2	10	175	136	140
Maryland[§]	—	0	2	3	1	—	0	1	1	—	6	6	13	144	136
North Carolina	N	0	0	N	N	N	0	0	N	N	3	6	18	156	170
South Carolina[§]	—	0	0	—	—	—	0	0	—	—	2	1	5	43	50
Virginia[§]	N	0	0	N	N	N	0	0	N	N	1	5	17	130	100
West Virginia	—	1	7	55	42	—	0	2	4	8	—	0	0	—	6
E.S. Central	2	4	12	153	86	—	1	4	27	16	12	20	31	489	376
Alabama[§]	N	0	0	N	N	N	0	0	N	N	7	8	17	207	152
Kentucky	1	1	4	39	17	—	0	2	8	2	—	1	7	44	34
Mississippi	—	0	0	—	—	—	0	0	—	—	—	2	15	61	56
Tennessee[§]	1	4	12	114	69	—	1	3	19	14	5	8	14	177	134
W.S. Central	1	1	5	26	50	—	0	2	6	7	19	40	61	932	804
Arkansas[§]	1	0	2	9	1	—	0	1	2	2	1	2	10	53	55
Louisiana	—	0	5	17	49	—	0	2	4	5	—	10	22	189	215
Oklahoma	N	0	0	N	N	N	0	0	N	N	1	1	5	38	33
Texas[§]	—	0	0	—	—	—	0	0	—	—	17	26	48	652	501
Mountain	—	1	6	17	26	—	0	2	4	8	2	9	29	180	195
Arizona	—	0	0	—	—	—	0	0	—	—	—	5	21	78	104
Colorado	—	0	0	—	—	—	0	0	—	—	1	1	7	53	22
Idaho[§]	N	0	0	N	N	N	0	0	N	N	—	0	1	1	1
Montana[§]	—	0	0	—	—	—	0	0	—	—	—	0	3	—	1
Nevada[§]	N	0	0	N	N	N	0	0	N	N	1	2	6	35	40
New Mexico[§]	—	0	1	1	—	—	0	0	—	—	—	1	3	13	21
Utah	—	0	6	16	15	—	0	2	4	7	—	0	2	—	5
Wyoming[§]	—	0	1	—	11	—	0	1	—	1	—	0	1	—	1
Pacific	—	0	0	—	—	—	0	1	1	2	12	40	71	927	1,097
Alaska	N	0	0	N	N	N	0	0	N	N	—	0	1	—	5
California	N	0	0	N	N	N	0	0	N	N	7	37	59	825	1,018
Hawaii	—	0	0	—	—	—	0	1	1	2	—	0	2	11	5
Oregon[§]	N	0	0	N	N	N	0	0	N	N	1	0	2	7	8
Washington	N	0	0	N	N	N	0	0	N	N	4	3	13	84	61
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	4
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	9	2	10	84	73
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 2008, and June 23, 2007 (25th Week)*

	Varicella (chickenpox)					West Nile virus disease[†] Neuroinvasive					West Nile virus disease[†] Nonneuroinvasive[§]				
		Previous 52 weeks					Previous 52 weeks					Previous 52 weeks			
Reporting area	Current week	Med	Max	Cum 2008	Cum 2007	Current week	Med	Max	Cum 2008	Cum 2007	Current week	Med	Max	Cum 2008	Cum 2007
United States	218	649	1,693	16,545	24,628	—	1	143	3	27	—	2	307	10	53
New England	9	19	68	291	1,523	—	0	2	—	—	—	0	2	—	—
Connecticut	—	10	38	—	872	—	0	1	—	—	—	0	1	—	—
Maine[¶]	—	0	26	—	205	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
New Hampshire	3	6	18	132	208	—	0	0	—	—	—	0	0	—	—
Rhode Island[¶]	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Vermont[¶]	6	6	17	159	238	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	55	56	117	1,371	3,044	—	0	3	—	—	—	0	3	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New York City	N	0	0	N	N	—	0	3	—	—	—	0	3	—	—
Pennsylvania	55	56	117	1,371	3,044	—	0	1	—	—	—	0	1	—	—
E.N. Central	47	152	359	3,995	6,740	—	0	19	—	2	—	0	12	—	1
Illinois	2	5	63	605	101	—	0	14	—	2	—	0	8	—	—
Indiana	—	0	222	—	—	—	0	4	—	—	—	0	2	—	—
Michigan	29	61	154	1,688	2,697	—	0	5	—	—	—	0	1	—	—
Ohio	15	55	128	1,482	3,173	—	0	4	—	—	—	0	3	—	1
Wisconsin	1	7	80	220	769	—	0	2	—	—	—	0	2	—	—
W.N. Central	6	23	144	724	1,121	—	0	41	—	4	—	0	118	1	27
Iowa	N	0	0	N	N	—	0	4	—	1	—	0	3	—	1
Kansas	—	7	36	250	445	—	0	3	—	1	—	0	7	—	1
Minnesota	—	0	0	—	—	—	0	9	—	—	—	0	12	—	—
Missouri	6	11	47	408	615	—	0	8	—	—	—	0	3	—	—
Nebraska[¶]	N	0	0	N	N	—	0	5	—	—	—	0	16	—	11
North Dakota	—	0	140	48	—	—	0	11	—	2	—	0	49	1	7
South Dakota	—	0	5	18	61	—	0	9	—	—	—	0	32	—	7
S. Atlantic	32	97	157	2,642	3,114	—	0	12	—	—	—	0	6	—	—
Delaware	—	1	4	17	23	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	3	16	20	—	0	0	—	—	—	0	0	—	—
Florida	20	30	87	1,069	708	—	0	1	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	8	—	—	—	0	5	—	—
Maryland[¶]	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
South Carolina[¶]	8	15	66	489	677	—	0	2	—	—	—	0	1	—	—
Virginia[¶]	2	22	82	639	1,003	—	0	1	—	—	—	0	1	—	—
West Virginia	2	15	66	412	683	—	0	0	—	—	—	0	0	—	—
E.S. Central	8	16	97	749	312	—	0	11	2	8	—	0	14	3	2
Alabama[¶]	8	16	97	741	311	—	0	2	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	8	1	—	0	7	2	7	—	0	12	2	2
Tennessee[¶]	N	0	0	N	N	—	0	1	—	1	—	0	2	1	—
W.S. Central	47	173	928	5,532	7,008	—	0	36	—	4	—	0	19	5	3
Arkansas[¶]	—	11	42	326	432	—	0	5	—	1	—	0	2	—	—
Louisiana	—	1	7	27	87	—	0	5	—	—	—	0	3	—	—
Oklahoma	N	0	0	N	N	—	0	11	—	—	—	0	8	2	—
Texas[¶]	47	162	894	5,179	6,489	—	0	19	—	3	—	0	11	3	3
Mountain	10	39	105	1,213	1,742	—	0	36	1	6	—	0	148	—	11
Arizona	—	0	0	—	—	—	0	8	1	5	—	0	10	—	—
Colorado	6	16	43	548	672	—	0	17	—	—	—	0	67	—	4
Idaho[¶]	N	0	0	N	N	—	0	3	—	—	—	0	22	—	3
Montana[¶]	—	6	25	173	264	—	0	10	—	—	—	0	30	—	—
Nevada[¶]	N	0	0	N	N	—	0	1	—	—	—	0	3	—	1
New Mexico[¶]	1	4	22	127	269	—	0	8	—	—	—	0	6	—	—
Utah	3	9	55	360	519	—	0	8	—	1	—	0	9	—	2
Wyoming[¶]	—	0	9	5	18	—	0	8	—	—	—	0	34	—	1
Pacific	4	1	4	28	24	—	0	18	—	3	—	0	23	1	9
Alaska	4	1	4	28	24	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	18	—	3	—	0	20	1	8
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon[¶]	N	0	0	N	N	—	0	3	—	—	—	0	4	—	1
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	2	17	55	170	—	0	0	—	—	—	0	0	—	—
Puerto Rico	4	11	37	253	424	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending June 21, 2008 (25th Week)

Reporting Area	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1	Total
New England	505	356	89	25	7	14	42
Boston, MA	149	97	33	8	5	6	16
Bridgeport, CT	38	31	6	1	—	—	2
Cambridge, MA	16	14	2	—	—	—	1
Fall River, MA	25	24	1	—	—	—	1
Hartford, CT	48	33	1	—	—	—	2
Lowell, MA	25	18	4	3	—	—	1
Lynn, MA	6	1	3	2	—	—	—
New Bedford, MA	26	18	7	1	—	—	4
New Haven, CT	U	U	U	U	U	U	U
Providence, RI	54	34	13	4	—	3	3
Somerville, MA	2	2	—	—	—	—	—
Springfield, MA	47	26	13	4	1	3	3
Waterbury, CT	11	6	2	1	1	1	—
Worcester, MA	58	52	4	1	—	1	9
Mid. Atlantic	2,006	1,368	427	131	36	44	107
Albany, NY	33	27	6	—	—	—	2
Allentown, PA	24	18	5	1	—	—	4
Buffalo, NY	57	35	19	1	2	—	5
Camden, NJ	20	10	6	3	1	—	2
Elizabeth, NJ	14	10	1	2	—	1	2
Erie, PA	45	36	6	3	—	—	3
Jersey City, NJ	U	U	U	U	U	U	U
New York City, NY	1,067	724	233	68	25	17	41
Newark, NJ	49	26	13	7	—	3	5
Paterson, NJ	14	9	2	1	—	2	—
Philadelphia, PA	324	209	71	29	4	11	11
Pittsburgh, PA§	37	22	6	1	2	6	4
Reading, PA	18	14	2	—	—	2	1
Rochester, NY	126	100	21	1	2	2	14
Schenectady, NY	23	14	6	3	—	—	3
Scranton, PA	24	16	6	2	—	—	2
Syracuse, NY	72	52	15	5	—	—	6
Trenton, NJ	21	18	2	1	—	—	1
Utica, NY	17	13	3	1	—	—	—
Yonkers, NY	21	15	4	2	—	—	1
E.N. Central	1,842	1,233	417	96	54	42	146
Akron, OH	36	25	9	1	1	—	2
Canton, OH	40	33	4	2	—	1	4
Chicago, IL	284	159	80	22	15	8	19
Cincinnati, OH	69	44	16	2	4	3	9
Cleveland, OH	207	146	48	9	—	4	14
Columbus, OH	182	115	49	9	5	4	17
Dayton, OH	125	93	24	5	2	1	9
Detroit, MI	152	79	44	20	7	2	10
Evansville, IN	41	30	9	2	—	—	3
Fort Wayne, IN	59	46	9	2	2	—	2
Gary, IN	7	4	3	—	—	—	3
Grand Rapids, MI	43	31	7	—	4	1	—
Indianapolis, IN	185	114	39	12	8	12	20
Lansing, MI	45	37	6	1	1	—	3
Milwaukee, WI	80	49	22	4	2	3	10
Peoria, IL	42	34	6	—	—	2	7
Rockford, IL	44	36	8	—	—	—	3
South Bend, IN	51	38	11	2	—	—	1
Toledo, OH	91	70	15	3	3	—	5
Youngstown, OH	59	50	8	—	—	1	5
W.N. Central	588	364	140	44	23	16	45
Des Moines, IA	U	U	U	U	U	U	U
Duluth, MN	44	32	7	5	—	—	3
Kansas City, KS	21	9	11	—	1	—	—
Kansas City, MO	96	60	23	6	2	5	3
Lincoln, NE	53	44	5	2	—	2	5
Minneapolis, MN	67	34	20	8	3	2	3
Omaha, NE	84	64	12	7	1	—	13
St. Louis, MO	104	45	36	8	10	4	8
St. Paul, MN	50	32	8	3	4	3	7
Wichita, KS	69	44	18	5	2	—	3

Reporting Area	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1	Total
S. Atlantic	1,133	686	278	91	37	41	72
Atlanta, GA	65	40	15	5	3	2	2
Baltimore, MD	187	95	49	19	10	14	14
Charlotte, NC	123	75	30	7	6	5	8
Jacksonville, FL	159	107	37	6	3	6	6
Miami, FL	88	59	19	6	4	—	18
Norfolk, VA	48	28	14	4	1	1	—
Richmond, VA	50	31	16	1	2	—	3
Savannah, GA	77	50	13	6	1	7	4
St. Petersburg, FL	41	25	8	7	1	—	3
Tampa, FL	173	102	49	13	5	4	13
Washington, D.C.	100	60	22	15	1	2	1
Wilmington, DE	22	14	6	2	—	—	—
E.S. Central	882	583	199	51	23	26	64
Birmingham, AL	190	123	39	10	5	13	16
Chattanooga, TN	65	45	15	2	2	1	1
Knoxville, TN	94	73	18	2	—	1	4
Lexington, KY	53	31	16	3	1	2	4
Memphis, TN	165	99	42	11	6	7	14
Mobile, AL	88	61	21	5	1	—	7
Montgomery, AL	79	56	15	6	2	—	7
Nashville, TN	148	95	33	12	6	2	11
W.S. Central	1,376	889	298	101	43	45	55
Austin, TX	84	56	18	6	2	2	2
Baton Rouge, LA	67	49	11	4	2	1	—
Corpus Christi, TX	51	40	5	1	1	4	—
Dallas, TX	163	106	27	10	7	13	7
El Paso, TX	76	53	17	1	3	2	2
Fort Worth, TX	142	74	36	19	6	7	5
Houston, TX	341	211	86	26	9	9	19
Little Rock, AR	87	50	21	9	4	3	—
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	215	136	48	21	6	4	15
Shreveport, LA	64	47	12	4	1	—	3
Tulsa, OK	86	67	17	—	2	—	2
Mountain	1,132	738	254	80	31	28	70
Albuquerque, NM	129	91	25	8	2	3	10
Boise, ID	55	40	11	3	1	—	2
Colorado Springs, CO	57	44	9	2	1	1	4
Denver, CO	85	48	21	7	4	5	2
Las Vegas, NV	257	160	68	19	4	6	16
Ogden, UT	25	14	5	5	1	—	2
Phoenix, AZ	165	100	36	16	9	3	7
Pueblo, CO	24	18	4	1	1	—	2
Salt Lake City, UT	112	64	25	9	7	7	8
Tucson, AZ	223	159	50	10	1	3	17
Pacific	1,599	1,095	344	100	35	25	150
Berkeley, CA	10	6	2	1	—	1	—
Fresno, CA	147	101	33	12	1	—	8
Glendale, CA	30	21	7	2	—	—	9
Honolulu, HI	91	73	14	4	—	—	13
Long Beach, CA	57	38	11	7	1	—	5
Los Angeles, CA	249	155	58	17	10	9	33
Pasadena, CA	U	U	U	U	U	U	U
Portland, OR	116	79	26	7	2	2	3
Sacramento, CA	180	129	37	8	4	2	17
San Diego, CA	145	103	34	3	3	2	20
San Francisco, CA	99	65	21	9	1	3	11
San Jose, CA	156	107	31	13	3	2	16
Santa Cruz, CA	16	10	4	1	1	—	1
Seattle, WA	120	85	26	4	3	2	9
Spokane, WA	60	39	17	3	—	1	5
Tacoma, WA	123	84	23	9	6	1	—
Total	11,063**	7,312	2,446	719	289	281	751

U: Unavailable. —:No reported cases.

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

† Pneumonia and influenza.

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

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

** Total includes unknown ages.

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