



MMWRTM

Morbidity and Mortality Weekly Report

Weekly

October 22, 2004 / Vol. 53 / No. 41

Self-Reported Frequent Mental Distress Among Adults — United States, 1993–2001

Poor mental health is a major source of distress, disability, and social burden (1); in any given year, as many as one in five adults in the United States has a mental disorder (2). To identify differences among populations and factors contributing to poor mental health, CDC examined the prevalence of frequent mental distress (FMD) among U.S. adults by race/ethnicity, socioeconomic status (SES), and sex, by using aggregate data from Behavioral Risk Factor Surveillance System (BRFSS) surveys for 1993–2001. This report describes the results of that analysis, which indicated that the prevalence of FMD varied among racial/ethnic populations and increased substantially among whites and blacks. In addition, FMD was reported more frequently by women and by persons with low SES within each racial/ethnic population. Targeting adverse socioeconomic risk factors and improving access to mental health services might decrease FMD among adults and reduce racial/ethnic disparities in mental health (2).

BRFSS is an ongoing, state-based, random-digit-dialed telephone survey of the noninstitutionalized, civilian, U.S. population aged ≥ 18 years (3). The study described in this report included 1,283,258 respondents from all 50 states and the District of Columbia. The median state response rate* ranged from 71.4% in 1993 to 51.1% in 2001 (3). In response to the question, "Now, thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?," a person who reported ≥ 14 days was identified as having FMD. This 14-day minimum period was selected because physicians and researchers often use a similar period as a marker for clinical depression and anxiety disorders (4).

*According to the methodology of the Council of American Survey Research Organizations, the response rate includes the number of completed interviews in the numerator and an estimate of the number of all eligible interviewees and those whose eligibility is undetermined in the denominator.

Racial/ethnic populations were mutually exclusive. To study associations of FMD with SES, respondents were identified as having 1) low SES: those without a high school diploma or with $< \$15,000$ annual household income; 2) high SES: those with a college education and $\geq \$50,000$ annual household income; or 3) middle SES: all other respondents.

Data were weighted to estimate population parameters. To examine how certain variables accounted for differences in FMD, unadjusted, age- and sex-adjusted, and multivariable-adjusted estimates (i.e., adjusted for age, sex, marital status, education, annual household income, employment status, and health insurance status) were calculated. Unadjusted and adjusted prevalences and their standard errors were calculated by using cross-tabulation and logistic regression analyses to account for the complex BRFSS survey design. Multicollinearity testing indicated no collinearity among independent variables in the models (5).

Overall, the prevalence of FMD among U.S. adults increased significantly, from 8.4% in 1993 to 10.1% in 2001 ($p < 0.05$). Moreover, FMD prevalence increased for non-Hispanic whites, from 8.1% to 9.7%, and for non-Hispanic blacks, from 9.5% to 11.3% (Figure 1). FMD was most common among American Indians/Alaska Natives (AI/ANs) (14.4% unadjusted and 11.4% multivariable-adjusted) and non-Hispanics of other

INSIDE

- 966 Transmission of Primary and Secondary Syphilis by Oral Sex — Chicago, Illinois, 1998–2002
- 969 Postexposure Prophylaxis, Isolation, and Quarantine To Control an Import-Associated Measles Outbreak — Iowa, 2004
- 971 West Nile Virus Activity — United States, October 13–19, 2004
- 972 Notice to Readers

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

SUGGESTED CITATION

Centers for Disease Control and Prevention. [Article Title]. *MMWR* 2004;53:[inclusive page numbers].

Centers for Disease Control and Prevention

Julie L. Gerberding, M.D., M.P.H.
Director

Dixie E. Snider, M.D., M.P.H.
(Acting) Chief of Science

Tanja Popovic, M.D., Ph.D.
(Acting) Associate Director for Science

Coordinating Center for Health Information and Service (Proposed)

James S. Marks, M.D., M.P.H.
(Acting) Director

John W. Ward, M.D.
Editor, MMWR Series

Suzanne M. Hewitt, M.P.A.
Managing Editor, MMWR Series

Douglas W. Weatherwax
(Acting) Lead Technical Writer/Editor

Stephanie M. Malloy
Jude C. Rutledge
Teresa F. Rutledge
Writers/Editors

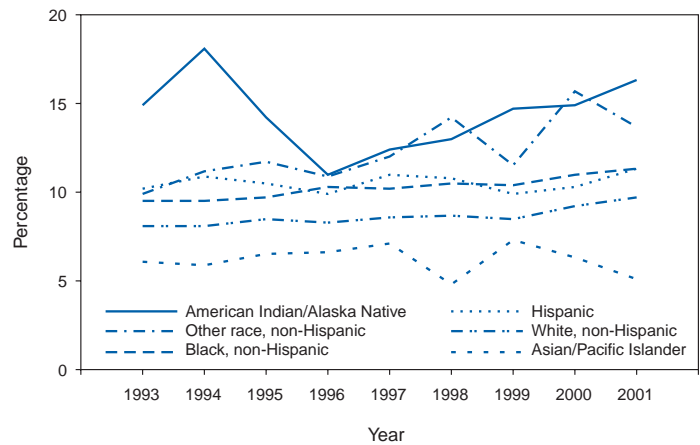
Lynda G. Cupell
Malbea A. LaPete
Visual Information Specialists

Kim L. Bright, M.B.A.
Quang M. Doan, M.B.A.
Erica R. Shaver
Information Technology Specialists

Notifiable Disease Morbidity and 122 Cities Mortality Data

Robert F. Fagan
Deborah A. Adams
Felicia J. Connor
Lateka Dammond
Rosaline Dhara
Donna Edwards
Patsy A. Hall
Pearl C. Sharp

FIGURE 1. Prevalence of frequent mental distress* among adults, by racial/ethnic population and year — Behavioral Risk Factor Surveillance System, United States, 1993–2001†



* Self-reported mental health was not good (e.g., stress, depression, or emotional problems) ≥ 14 days during the preceding 30 days.

† Unadjusted.

race[†] (12.9% unadjusted and 12.3% multivariable-adjusted) and least common among Asians/Pacific Islanders (A/PIs) (6.2% unadjusted and 7.5% multivariable-adjusted). Among non-Hispanic whites, the prevalence of FMD was 8.6% unadjusted and 9.4% multivariable-adjusted; among Hispanics, 10.5% unadjusted and 8.4% multivariable-adjusted; and among blacks, 10.3% unadjusted and 8.0% multivariable-adjusted (Table).

Across all racial/ethnic populations, respondents with high SES were least likely to have FMD; however, racial/ethnic differences remained consistent within socioeconomic categories. For high-SES respondents, the prevalence of FMD was highest among non-Hispanics of other race (7.9%) and AI/ANs (7.7%) and lowest among A/PIs (3.8%). Non-Hispanic whites, non-Hispanic blacks, and Hispanics had intermediate FMD prevalences (4.7%, 6.1%, and 5.9%, respectively) (Figure 2). In all racial/ethnic populations, persons with low SES were at least twice as likely to have FMD as those with high SES.

FMD was more prevalent among women than men in all racial/ethnic populations except A/PIs and AI/ANs (both unadjusted and multivariable-adjusted prevalences) (Table). After multivariable adjustment, prevalence of FMD was highest among women who identified themselves as non-Hispanic of other race (14.3%) and AI/AN (12.5%), followed by women who identified themselves as non-Hispanic white (11.1%), Hispanic (9.5%), non-Hispanic black (9.2%), and A/PI (7.7%). Respondents in all racial/ethnic populations who were

[†] Includes persons who did not identify as one of the following racial/ethnic populations: white, non-Hispanic; black, non-Hispanic; Hispanic; Asian/Pacific Islander; or American Indian/Alaska Native. These persons might be of multiple race/ethnicity.

TABLE. Prevalence of frequent mental distress* among adults, by racial/ethnic population and sex — Behavioral Risk Factor Surveillance System, United States, 1993–2001

Racial/Ethnic population	Unadjusted (N = 1,272,441)		Age- and sex- adjusted† (N = 1,259,871)		Multivariable- adjusted§ (N = 1,081,758)	
	%	(95% CI¶)	%	(95% CI)	%	(95% CI)
White, non-Hispanic						
Both sexes	8.6	(8.5–8.7)	8.7	(8.6–8.8)	9.4	(9.2–9.6)
Men	6.8	(6.7–6.9)	6.8	(6.7–6.9)	7.5	(7.3–7.6)
Women	10.3	(10.1–10.4)	10.5	(10.4–10.6)	11.1	(11.0–11.3)
Black, non-Hispanic						
Both sexes	10.3	(10.0–10.6)	9.9	(9.6–10.2)	8.0	(7.8–8.2)
Men	8.2	(7.8–8.6)	8.0	(7.5–8.4)	6.8	(6.4–7.1)
Women	11.9	(11.5–12.3)	11.8	(11.4–12.2)	9.2	(8.9–9.6)
Hispanic						
Both sexes	10.5	(10.1–10.9)	10.1	(9.7–10.5)	8.4	(8.0–8.8)
Men	8.9	(8.3–9.5)	8.5	(7.9–9.0)	7.1	(6.7–7.6)
Women	12.2	(11.6–12.7)	11.7	(11.2–12.2)	9.5	(9.0–9.9)
Asian/Pacific Islander						
Both sexes	6.2	(5.6–6.8)	6.1	(5.6–6.6)	7.5	(6.7–8.3)
Men	5.7	(4.9–6.6)	5.4	(4.6–6.2)	7.0	(6.0–8.1)
Women	6.8	(6.0–7.5)	6.5	(5.8–7.2)	7.7	(6.8–8.6)
American Indian/Alaska Native						
Both sexes	14.4	(13.3–15.5)	14.1	(13.0–15.2)	11.4	(10.4–12.4)
Men	12.9	(11.3–14.5)	12.4	(10.9–14.0)	10.1	(8.8–11.4)
Women	16.0	(14.5–17.5)	15.6	(14.1–17.0)	12.5	(11.2–13.8)
Other race, non-Hispanic						
Both sexes	12.9	(11.7–14.0)	12.9	(11.7–14.1)	12.3	(11.1–13.5)
Men	10.4	(8.9–12.0)	10.2	(8.7–11.7)	10.2	(8.5–11.8)
Women	15.6	(13.9–17.4)	15.5	(13.7–17.2)	14.3	(12.6–16.0)
Total						
Both sexes	9.0	(8.9–9.1)	—	—	—	—
Men	7.2	(7.1–7.3)	—	—	—	—
Women	10.6	(10.5–10.7)	—	—	—	—

* Self-reported mental health was not good (e.g., stress, depression, or emotional problems) ≥ 14 days during the preceding 30 days.

† Adjusted by age and sex for both sexes and adjusted by age for each sex within each racial/ethnic population.

§ Adjusted by age, sex, education, income, marital status, employment status, and health insurance status.

¶ Confidence interval.

younger, female, separated, divorced, widowed, unemployed, or unable to work or who had <\$15,000 annual household income, less than a high school education, or no health insurance reported significantly more FMD.

Reported by: HS Zahran, MD, R Kobau, MPH, DG Moriarty, MM Zack, MD, WH Giles, MD, Div of Adult and Community Health; J Lando, MD, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: Previous analyses have indicated that poor mental health is more prevalent among certain racial/ethnic minority populations. These differences might be associated with multiple factors (2,6). In this analysis, SES was strongly associated with FMD among all racial/ethnic populations, a finding consistent with previous studies relating SES to poor mental health (4,6–8). SES shapes a person's exposure to psychosocial, environmental, behavioral, and biomedical risk factors that directly and indirectly affect mental health (9).

The findings in this report also indicate that racial/ethnic differences in FMD prevalence persisted during 1993–2001. AI/ANs reported the highest prevalence of FMD, whereas A/PIs reported the lowest. The pattern for these two populations persisted after adjustments for age, sex, and the other variables in the model. Non-Hispanic blacks and Hispanics had higher unadjusted FMD percentages than whites; however, whites had higher FMD percentages after multivariable adjustment, suggesting that socioeconomic and other factors accounted for the unadjusted differences.

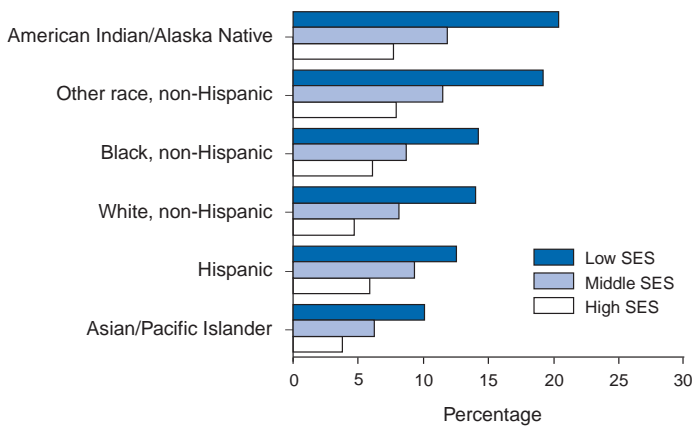
Among AI/ANs, unhealthy behaviors and comorbidity (e.g., alcoholism and other substance abuse), physical and social environment (e.g., social disadvantage, inadequate schools, and violence), psychosocial and historical factors (e.g., racism, discrimination, and disenfranchisement), and other unmeasured sociodemographic factors might contribute to the disproportionate burden of FMD (2). Among A/PIs, protective factors attenuating FMD and cultural norms and perceptions of stigma inhibiting disclosure of FMD might partly explain lower unadjusted and multivariable-adjusted FMD

prevalence (2). Among all populations, cultural and social contexts can influence mental health and alter the types of mental health services persons seek and receive (2,6).

Although physiologic and social factors unique to women (e.g., pregnancy, care giving, and social roles) might affect FMD in women, men's reluctance to disclose psychological distress also might account for the difference in FMD by sex (2). Moreover, unique social and cultural influences relevant to A/PIs and AI/ANs or low statistical power because of small numbers of respondents might explain the similar FMD prevalence among men and women in these two populations.

The findings in this report are subject to at least five limitations. First, because BRFSS surveys include only non-institutionalized adults with telephones, persons in institutions and in households without telephones (i.e., populations that might have worse mental health than others) are excluded (6). Because certain racial/ethnic minorities are disproportionately represented in these vulnerable populations, their overall FMD

FIGURE 2. Prevalence of frequent mental distress*, among adults, by racial/ethnic population and socioeconomic status (SES)† — Behavioral Risk Factor Surveillance System, United States, 1993–2001



* Self-reported mental health was not good (e.g., stress, depression, or emotional problems) ≥ 14 days during the preceding 30 days.

† Low SES: Those without a high school diploma or with annual household income of $< \$15,000$. High SES: Those with a college education and with annual household income of $\geq \$50,000$. Middle SES: All other respondents.

prevalence likely is underestimated. Second, because states commonly use only English- or Spanish-language surveys, persons who speak another primary language are excluded. Third, because BRFSS is a cross-sectional survey, whether the characteristics studied (e.g., SES and marital status) affect FMD or whether FMD affects these characteristics is uncertain. Fourth, although the characteristics studied explained some of the variability in FMD among racial/ethnic populations, risk behaviors, physical and social environment, psychosocial factors, health conditions, stressful life events, unmeasured socioeconomic factors, and cultural factors might account for additional FMD differences among racial/ethnic populations. Finally, the BRFSS mental health measure was not validated for detection of mental illness with clinical psychiatric examinations.

Unfavorable socioeconomic factors were associated with increased self-reported FMD in all racial/ethnic populations. However, the proportion of persons with low SES differed among racial/ethnic populations. Targeting adverse socioeconomic risk factors, improving access to culturally competent mental health services and social services (e.g., job training programs and educational programs that address stigma), and promoting supportive relationships and social cohesion could decrease FMD among all adults and reduce racial/ethnic disparities in FMD prevalence.

Acknowledgments

This report is based on data contributed by state BRFSS coordinators. The project was supported under a cooperative agreement from CDC through the Assoc of Teachers of Preventive Medicine, Atlanta, Georgia.

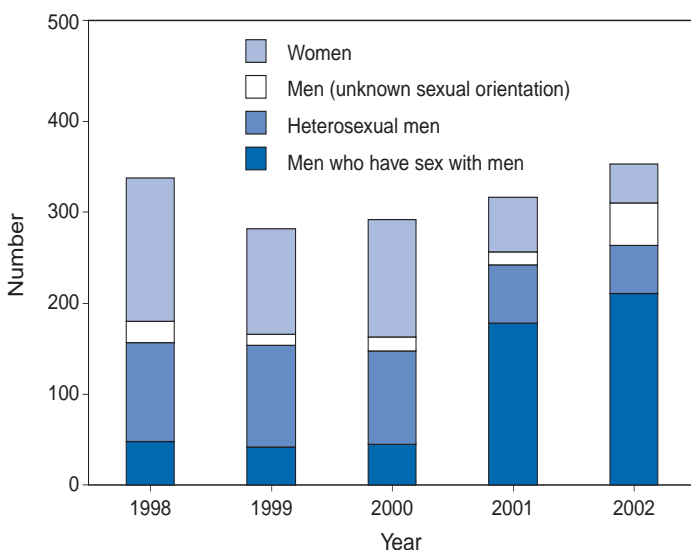
References

- Murray CJL, Lopez AD, eds. The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020; summary. Boston, MA: Harvard School of Public Health; 1996.
- US Department of Health and Human Services. Mental health: culture, race, and ethnicity. A supplement to Mental Health: A Report to the Surgeon General. Rockville, MD: US Department of Health and Human Services; 2001.
- CDC. Behavioral Risk Factor Surveillance System. Available at <http://www.cdc.gov/brfss> Atlanta, GA: US Department of Health and Human Services, CDC; 2004.
- CDC. Self-reported frequent mental distress among adults—United States, 1993–1996. MMWR 1998;47:326–31.
- Davis CE, Hyde JE, Bangdiwala SI, et al. An example of dependencies among variables in a conditional logistic regression. In: Moolgavkar SH, Prentice RL, eds. Modern statistical methods in chronic disease epidemiology. New York, NY: John Wiley & Sons; 1986:140–7.
- Chung H, Teresi J, Guarnaccia P, et al. Depressive symptoms and psychiatric distress in low-income Asian and Latino primary-care patients: prevalence and recognition. Community Ment Health J 2003;39:33–46.
- Strine TW, Balluz L, Chapman DP, et al. Risk behaviors and healthcare coverage among adults by frequent mental distress status, 2001. Am J Prev Med 2004;26:213–6.
- Dunlop DD, Song J, Lyons JS, Manheim LM, Chang RW. Racial/ethnic differences in rates of depression among preretirement adults. Am J Public Health 2003;93:1945–52.
- Adler NE, Newman K. Socioeconomic disparities in health: pathways and policies. Inequality in education, income, and occupation exacerbates the gaps between the health “haves” and “have-nots.” Health Aff 2002;21:60–76.

Transmission of Primary and Secondary Syphilis by Oral Sex — Chicago, Illinois, 1998–2002

During 1998–2002, the STD/HIV Prevention and Care Program of the Chicago Department of Public Health (CDPH) recorded 1,582 cases of primary and secondary (P&S) syphilis, the most of any U.S. city (1). Although case numbers and overall rates remained stable in Chicago during this period, patterns of transmission changed substantially. Throughout most of the 1990s, P&S syphilis was reported almost exclusively among heterosexuals. During 1998–2000, however, men who have sex with men (MSM) accounted for approximately 15% of Chicago’s P&S syphilis morbidity. Since 2001, MSM have accounted for nearly 60% of patients with P&S syphilis (Figure 1). During 2000–2002, CDPH conducted interviews with persons with syphilis; some MSM reported they had engaged in only oral sex and were surprised to have acquired syphilis. In response, CDPH began collecting information on oral sex from persons with syphilis. To assess the role of oral sex in the transmission of P&S syphilis in Chicago, CDPH analyzed surveillance data and interview responses. This report summarizes the results of these analy-

FIGURE 1. Number of primary and secondary syphilis cases, by sex, sexual orientation, and year — Chicago, Illinois, 1998–2002



ses, which suggested that a substantial proportion (13.7%) of syphilis cases were attributed to oral sex, particularly among MSM. Persons who are not in a long-term monogamous relationship and who engage in oral sex should use barrier protection (e.g., male condoms or other barrier methods) to reduce the risk for sexually transmitted disease (STD) transmission.

CDPH staff interviewed persons with syphilis to ensure adequacy of treatment for patients and their sex partners and to provide STD/human immunodeficiency virus (HIV) education and other testing and treatment services. Interviewers obtained demographic data (i.e., sex, age, race/ethnicity, and sexual orientation) and risk-behavior information (i.e., sexual behavior, number and sex of sex partners, venues for meeting partners, and self-reported HIV status). During the interviews, CDPH staff determined whether oral sex was the only sexual exposure the patient reported during the period of syphilis acquisition. Persons were asked about the type of sexual contact during the interval in which they likely acquired syphilis. This period usually is considered to be 3 months before treatment for primary syphilis and 6 months for secondary syphilis.

Surveillance Data

During 1998–2002, the number of reported cases of P&S syphilis in Chicago ranged from 338 to 353 cases annually; overall rates per 100,000 population ranged from 11.8 to 12.2. Rates declined 68% among women, from 9.2 to 2.9, and increased 50% among men, from 14.7 to 22.1. Of the 1,582 persons with P&S syphilis, 948 (60%) were heterosexuals, and 524 (33%) were MSM. Approximately 90% of heterosexuals were non-Hispanic black. An estimated 54% of MSM were non-Hispanic white, 26% were non-Hispanic black, and

13% were Hispanic. Rates declined by 31% among non-Hispanic black men and by 67% among non-Hispanic black, non-Hispanic white, and Hispanic women; rates increased among non-Hispanic white and Hispanic men (469% and 462%, respectively) (Figure 2).

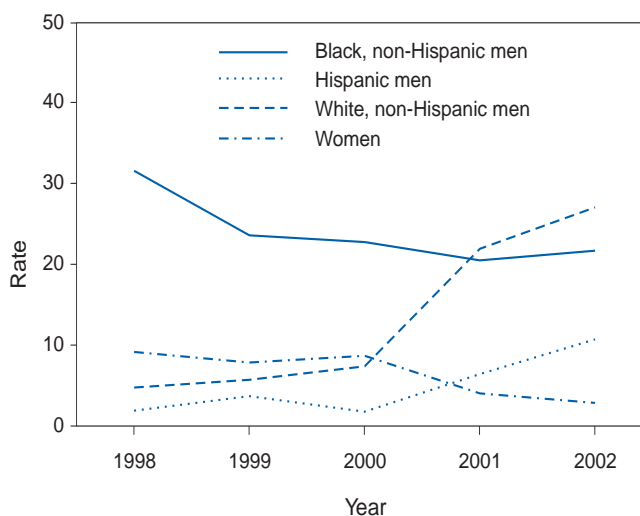
HIV-infection rates for persons with syphilis varied by sex and sexual orientation. In 2001 and 2002, among persons with P&S syphilis, less than 10% of heterosexuals and approximately half of MSM were HIV infected.

Interview Data

During 2000–2002, of 962 persons with P&S syphilis, data were available for 627 (65.2%); 325 (51.8%) were MSM, 157 (25.0%) were heterosexual men, and 145 (23.1%) were heterosexual women. Overall, 86 (13.7%) persons indicated that oral sex was their only sexual exposure during the period they likely acquired syphilis: 66 (20.3%) of 325 MSM, 10 (6.4%) of 157 heterosexual men, and 10 (6.9%) of 145 heterosexual women ($p < 0.0001$) (Table).

During the period of syphilis acquisition among the 325 MSM, oral sex was the only sexual exposure reported by 18 (22.7%) of 79 with primary syphilis, 48 (19.5%) of 246 with secondary syphilis, 36 (21.6%) of 167 with HIV infection, nine (19.6%) of 46 without HIV infection, and 21 (18.7%) of 112 with unknown HIV status. Thirty-three (17.2%) of 192 non-Hispanic white MSM, 16 (30.2%) of 53 Hispanic MSM, and 14 (19.4%) of 72 non-Hispanic black MSM reported having only oral sex during the period in which they likely acquired syphilis. When compared with heterosexual men and women, respectively, MSM were 3.8 and 3.4 times

FIGURE 2. Rate* of primary and secondary syphilis, by race/ethnicity, sex, and year — Chicago, Illinois, 1998–2002



* Per 100,000 population.

TABLE. Number and percentage of persons with primary and secondary syphilis who reported having only oral sex during the period of syphilis acquisition, by selected characteristics — Chicago, Illinois, 2000–2002

Characteristic	No.	No. indicating only oral sex	(%)
MSM*			
Primary syphilis	79	18	(22.7)
Secondary syphilis	246	48	(19.5)
HIV positive	167	36	(21.6)
HIV negative	46	9	(19.6)
Serostatus unknown	112	21	(18.7)
White, non-Hispanic	192	33	(17.2)
Hispanic	53	16	(30.2)
Black, non-Hispanic	72	14	(19.4)
Total	325	66	(20.3)
Heterosexual men			
Primary syphilis	53	4	(7.5)
Secondary syphilis	104	6	(5.8)
HIV positive	8	0	(0)
HIV negative	53	2	(3.8)
Serostatus unknown	96	8	(8.3)
Total	157	10	(6.4)
Women			
Primary syphilis	12	0	(0)
Secondary syphilis	133	10	(7.5)
HIV positive	5	0	(0)
HIV negative	56	3	(5.3)
Serostatus unknown	84	7	(8.3)
Total	145	10	(6.9)
Total	627	86	(13.7)

* Men who have sex with men.

more likely to report only oral sex during the period of syphilis acquisition.

Reported by: C Ciesielski, MD, I Tabidze, MD, C Brown, MBA, Chicago Dept of Public Health, Illinois. Div of Sexually Transmitted Diseases Prevention, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: The findings in this report suggest that during 2000–2002, 13.7% of P&S syphilis cases in Chicago were attributed to oral sex, including 20.3% of cases among MSM. Other reports also have associated oral sex with transmission of syphilis (2); one third of MSM who were involved in syphilis outbreaks in Brighton and Manchester, United Kingdom, acquired syphilis through oral sex (3). Syphilitic lesions develop at the site of syphilis infection within 10–90 days (median: 21 days), and lesions on the lips, tongue, and oral mucosa have been commonly described. During the secondary stage of syphilis, mucous patches, which have high concentrations of *Treponema pallidum* and are extremely infectious, might develop in the mouth. Syphilis in the oral cavity often is asymptomatic or subclinical and can be mistaken by patients for aphthous ulcers or herpes, thereby delaying curative treatment and allowing ongoing transmission.

Because the risk for HIV transmission through oral sex is much lower than the risk through anal or vaginal sex (4), persons might mistakenly consider unprotected oral sex (i.e., with-

out a condom) to be a safe or no-risk sexual practice and adopt oral sex as a replacement for higher-risk behaviors. Condoms rarely are used for oral sex. Of an estimated 1,000 MSM in Chicago who stated that they had engaged in oral sex during the preceding 60 days, more than 75% never used condoms for either oral insertive or oral receptive sex (CDPH, unpublished data, 2003). Oral syphilitic lesions disrupt the protective epithelial barrier and recruit HIV target cells, increasing the risk for HIV transmission (5). Although oral sex might carry a lower risk for transmitting HIV than other forms of sex, repeated unprotected exposures, especially in the presence of syphilitic lesions, represent a substantial risk for HIV transmission. Syphilis might also increase progression of HIV disease (6,7).

The findings in this report are subject to at least one limitation. The data might underestimate the role of oral sex in syphilis transmission because most persons who reported engaging in anal and vaginal sex also reported engaging in oral sex. Transmission was attributed to oral sex in only the 14% of cases in which oral sex was the only sexual exposure reported during the interval when syphilis likely was acquired.

Some men who engaged in only oral sex believed that they were practicing safe sex and were surprised when they received a syphilis diagnosis. These data underscore the need for educating sexually active persons regarding the risk for syphilis transmission through oral sex. That syphilis might hasten the progression of HIV disease should provide a further motivation for MSM, especially HIV-infected MSM, to avoid syphilis acquisition. Persons who are not in a long-term monogamous relationship and who engage in oral sex should use barrier protection (e.g., male condoms or other barrier methods) to reduce the risk for STD and HIV transmission.

References

1. CDC. Sexually transmitted disease surveillance, 2002. Atlanta, GA: US Department of Health and Human Services; September 2003.
2. Edwards S, Carne C. Oral sex and the transmission of nonviral STIs. *Sex Transm Infect* 1998;74:95–100.
3. Communicable Disease Surveillance Centre. Increased transmission of syphilis in Brighton and Greater Manchester among men who have sex with men. *Commun Dis Rep CDR Wkly* 2000;10:386.
4. Varghese B, Maher JE, Peterman TA, Branson BM, Steketee RW. Reducing the risk of sexual HIV transmission: quantifying the per-act risk for HIV on the basis of choice of partner, sex act, and condom use. *Sex Transm Dis* 2002;29:38–43.
5. Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect* 1999;75:3–17.
6. Buchacz K, Patel P, Taylor M, et al. Syphilis infection increases HIV viral load and decreases CD4⁺ cell counts in HIV-infected patients with new syphilis infections. *AIDS* 2004;18:2075–9.
7. Mellors JW, Munoz A, Giorgi JV, et al. Plasma viral load and CD4⁺ lymphocytes as prognostic markers of HIV-1 infection. *Ann Intern Med* 1997;126:946–54.

Postexposure Prophylaxis, Isolation, and Quarantine To Control an Import-Associated Measles Outbreak — Iowa, 2004

On March 12, 2004, a college student infectious with measles returned to Iowa from India by a commercial airliner (1); the case was subsequently linked to two other measles cases. This report updates information about this outbreak and provides details regarding vaccination, quarantine, and other measures used by Iowa public health authorities to interrupt disease transmission in a vulnerable population. The effective uses of quarantine and isolation during the outbreak underscore the utility of these public health tools in halting communicable disease transmission.

Immediately after being notified of the measles case, the Iowa Department of Public Health (IDPH) and local health departments in Iowa began using media releases, passenger lists, and interviews with the infected student to identify and contact persons potentially exposed to measles. Susceptible contacts (i.e., persons exposed and not fully vaccinated) were offered postexposure prophylaxis (PEP), either measles-mumps-rubella (MMR) vaccination within 72 hours of exposure or immune globulin (IG) within 6 days of exposure. Approximately 10 days later, measles cases were identified in two other Iowa residents: 1) a fellow airline passenger who previously had received two MMR vaccinations and 2) an unvaccinated close contact who had received postexposure MMR vaccination approximately 26 hours after contact with the first patient. Contacts of these two patients also were identified and offered PEP if they were deemed susceptible to measles infection. In public health immunization clinics specifically organized to vaccinate persons who had been exposed to measles, approximately 175 persons received postexposure MMR vaccination, and 20 received postexposure IG.

All three patients, who were moderately ill, were placed in voluntary isolation, which IDPH and local health departments monitored with home visits and telephone calls. Two susceptible health-care workers, who were exposed when the second patient sought medical care and who did not receive PEP within the recommended period, were placed in voluntary quarantine for 2 weeks, during which they did not leave their homes.

Two of the three measles patients were part of an insular community (estimated population: 2,000–3,000) with low vaccination rates (i.e., the community's K–12 school had a vaccination rate of 59% for vaccines required for school entry, including MMR). Community members held daily gatherings that provided opportunities for measles transmission to susceptible persons. PEP was offered to all susceptible persons in the community, and 56 accepted. Seven persons who

had potentially been exposed to measles refused PEP, even though they were aware of the potential for being quarantined. Initially, all seven agreed to be quarantined in lieu of receiving vaccine, but because of their subsequent unwillingness to comply with voluntary quarantine, all seven were served by the local public health nurse with state-issued involuntary home quarantine orders, some with the assistance of local law enforcement officers. (Examples of Iowa's quarantine orders are available at <http://www.idph.state.ia.us/adper/cade.asp>.) Although none reported a history of full vaccination or symptomatic measles, within days of being quarantined, four of the seven were determined serologically to be immune and were released from quarantine; the other three completed their 2-week quarantine.

IDPH and the local health department monitored compliance with quarantine orders with at least daily unannounced home visits or telephone calls and released the persons from quarantine via oral communication. In the future, because of confusion about the exact time of day the quarantine should end, written release-from-quarantine notices will be served. No known breaks in quarantine occurred. None of those persons in quarantine acquired measles. No additional cases were reported.

Reported by: V McKeever, Jefferson County Public Health, Iowa; H Adams, JD, Office of the Iowa Attorney General; T Thornton, P Quinlisk, MD, Iowa Dept of Public Health. M Cetron, MD, Div of Global Migration and Quarantine, National Center for Infectious Diseases; R Goodman, MD, JD, F Shaw, MD, JD, A Moulton, PhD, Public Health Law Program, Office of the Chief of Public Health Practice; M Papania, MD, National Immunization Program, CDC.

Editorial Note: Use of vaccination, both pre- and postexposure, is the most common and preferred strategy for preventing transmission of measles (2). During this outbreak, Iowa public health officials first offered timely postexposure vaccination to susceptible persons who had close contact with a person infected with measles. However, when postexposure vaccination was refused, quarantine was used to reduce the risk of further transmission of measles to a vulnerable population.

An essential public health tool, rarely used in the last half century in the United States, quarantine is often confused with isolation, which is the restriction of movement of persons who are known to be infected with a communicable disease and who often are symptomatic. Quarantine reduces the risk of exposure to disease by separating and restricting the movement of persons who are not yet ill but who have been exposed to an infectious agent and might become infectious. Quarantine is more difficult to implement than isolation because the persons under quarantine are not symptomatic and thus have greater difficulty understanding the need for staying at home when compared with ill persons who need to be isolated.

Before antibiotics and vaccines, quarantine was used when direct medical countermeasures were not routinely available. However, quarantine often was implemented in a manner that equated disease with crime; consequently, quarantine acquired negative connotations associated with stigma and discrimination. For quarantine to be an effective and acceptable public health tool, these negative connotations must be overcome by applying the measure equally and fairly among all persons who have been exposed, and by using other approaches. These include providing education about the rationale for using quarantine; offering acceptable alternatives to quarantine, when feasible, such as postexposure vaccination or obtaining serologic proof of immunity; and applying due process measures, such as written notice and opportunities to appeal.

The use of quarantine to address public health problems demands a balancing of individual civil liberties with the collective needs of the public's health. Additional focus on the health, welfare, and social needs of persons subjected to quarantine is required. During the 2003 epidemic of severe acute respiratory syndrome (SARS), CDC listed 10 principles for modern quarantine (Box 1) (3,4).

In the United States, as in most countries of the world, government has the duty and legal power to address risks associated with persons whose freedom of movement might endanger the public's health. Under circumstances described in federal statute*, the U.S. government has the authority to detain persons for the control of communicable diseases. In particular, the U.S. government has the authority to isolate and quarantine persons to control the spread of selected communicable diseases specified by presidential executive order (5,6). In addition, all 50 states and the District of Columbia have the authority to detain persons under their own quarantine laws. In the event of an epidemic resulting from natural transmission or from deliberate introduction, both state and federal quarantine laws could be invoked to stem the spread of disease.

After the events of September 11, 2001, and in response to the draft Model State Emergency Health Powers Act (7), Iowa lawmakers reviewed the state's legal authority for public health emergency preparedness and response. In 2003, as a result of this review, the Iowa state legislature enacted new laws related to public health disaster preparedness. The new legislation included a provision authorizing IDPH to order quarantine in the event of a public health disaster†. To implement this legislation and preexisting laws authorizing quarantine in nondisaster situations, IDPH adopted administrative rules governing the quarantine process. These rules became effective on March 10, 2004, only 2 days before the measles-infected student returned home to Iowa. Although the measles

BOX 1. Ten principles of modern quarantine

Modern quarantine is a collective action for the common good predicated on aiding persons infected or exposed to infectious agents while protecting others from the dangers of inadvertent exposure.

1. Used when exposed to highly dangerous and contagious diseases, when resources are available to implement and maintain, and when less restrictive means cannot accomplish the public health objectives.
2. Encompasses a wide range of strategies, from passive self-monitoring for symptoms to use of barriers limiting entry and exit to authorized persons.
3. Used in combination with other interventions and countermeasures to ensure that persons in quarantine or isolation are among the first to receive all supportive interventions available.
4. Ensures rapid isolation of infectious persons and separation from those merely exposed.
5. Lasts only as long as necessary to achieve epidemic control but no longer than the disease incubation period.
6. Does not have to be absolute to be effective; therefore, favors voluntary over compulsory approaches.
7. More likely to involve limited numbers of exposed persons in small areas than in a widespread geographic locale.
8. Requires clear understanding of the roles of jurisdictions and legal authorities.
9. Requires coordination and planning with multiple partners.
10. Requires education, trust, and participation of the general public.

outbreak did not constitute a public health disaster under the 2003 statute, the state used the new quarantine process as outlined in its administrative rules to assist in containing the outbreak.

In 2003, the SARS outbreak triggered the widest use of quarantine globally since the influenza pandemic of 1917. Largely voluntary quarantine was used in Canada to keep approximately 20,000 persons in their homes for 10 days (8). For 27 persons who refused voluntary quarantine, public health officials issued legally enforceable quarantine orders. In certain cities in Asia (e.g., Beijing, Hong Kong, Singapore, and Taipei), quarantine authority was used to order thousands of persons to remain in their homes, an intervention that has been credited with helping to contain the outbreak (3). Although SARS did not spread within the United States, certain jurisdictions used quarantine authority to minimize the risk of spreading the virus (e.g., via unprotected health-care workers exposed to infectious SARS patients).

*42 U.S.C. § 264.

† Iowa Code section 135.144 (2003 Suppl.), 139A.4, 139A.9, and 641 Iowa Administrative Code chapter 1.

The scope and specifics of laws authorizing quarantine vary substantially by state. States that have not reviewed their quarantine laws might consider doing so by using a systematic approach covering essential features (e.g., quarantine, jurisdictional aspects, and due process) (Box 2). State and local health officials also might consider reviewing quarantine-related laws with their agencies' legal counsels, in coordination with law enforcement officials and the judiciary.

References

1. CDC. Imported measles case associated with nonmedical vaccine exemption—Iowa, March 2004. *MMWR* 2004;53:244–6.
2. Heymann DL, ed. *Control of communicable diseases manual*. 18th ed. Washington, DC: American Public Health Association; 2004:353.
3. Cetron M, Maloney S, Koppaka R, Simone P. Isolation and quarantine: containment strategies for SARS 2003. SARS: emergence, detection, and response. In: Knobler S, Mahmoud A, Lemon S, Mack A, Sivitz L, Oberholtzer K, eds. *Learning from SARS: preparing for the next disease outbreak—workshop summary*. Washington, DC: National Academies Press; 2004:71–83.
4. CDC. Public health guidance for community-level preparedness and response to severe acute respiratory syndrome (SARS). Atlanta, GA: US Department of Health and Human Services, CDC; 2004. Available at <http://www.cdc.gov/ncidod/sars/guidance/index.htm>.
5. Executive Office of the President. Executive Order 13295: revised list of quarantinable communicable diseases. *Federal Register* 2003;68:17255. Available at <http://www.cdc.gov/ncidod/sars/executiveorder040403.htm>.
6. CDC. Questions and answers on legal authorities for isolation and quarantine. Atlanta, GA: US Department of Health and Human Services, CDC; 2004. Available at <http://www.cdc.gov/ncidod/sars/quarantineqa.htm>.
7. Gostin LO, Sapsin JW, Teret SP, et al. The Model State Emergency Health Powers Act: planning for and response to bioterrorism and naturally occurring infectious diseases. *JAMA* 2002;288:622–8.
8. Svoboda T, Henry B, Shulman L, et al. Public health measures to control the spread of the severe acute respiratory syndrome during the outbreak in Toronto. *N Engl J Med* 2004;350:2352–61.

West Nile Virus Activity — United States, October 13–19, 2004

During October 13–19, a total of 200 cases of human West Nile virus (WNV) illness were reported from 20 states (Arizona, Arkansas, California, Colorado, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Mississippi, Missouri, Nevada, New Mexico, North Carolina, Oklahoma, Pennsylvania, South Dakota, Wisconsin, and Wyoming).

During 2004, a total of 40 states and the District of Columbia (DC) have reported 2,151 cases of human WNV illness to CDC through ArboNET (Table and Figure). Of these, 687 (32%) cases were reported in California, 378 (18%) in Arizona, and 276 (13%) in Colorado. A total of 1,232 (58%) of the 2,118 cases for which such data were available occurred in males; the median age of patients was 52 years (range: 1 month–99 years). Date of illness onset ranged from April 23 to October 6; a total of 68 cases were fatal.

A total of 191 presumptive West Nile viremic blood donors (PVDs) have been reported to ArboNET in 2004. Of these, 70 (37%) were reported in California; 37 (19%) in Arizona; 16 in Texas; 15 in New Mexico; seven each in Colorado and Louisiana; six in Oklahoma; five in Nevada; four in Georgia; three each in Florida, Michigan, and South Dakota; two each in Minnesota, Mississippi, Missouri, and Wisconsin; and one each in Delaware, Iowa, Nebraska, New Jersey, North Dakota, Oregon, and Pennsylvania. Of the 191 PVDs, three persons aged 35, 69, and 77 years subsequently had neuroinvasive illness, and 45 persons (median age: 52 years; range: 17–73 years) subsequently had West Nile fever.

In addition, during 2004, a total of 5,073 dead corvids and 1,263 other dead birds with WNV infection have been reported from 45 states and New York City. WNV infections have been reported in horses in 36 states; one bat in Wisconsin; seven dogs in Nevada, New Mexico, and Wisconsin; six squirrels in Arizona and Wyoming; and 13 unidentified animal species in eight states (Arizona, Idaho, Illinois, Iowa, Missouri, Nevada, New York, and South Carolina). WNV seroconversions have been reported in 1,195 sentinel chicken flocks in 13 states (Alabama, Arizona, Arkansas, California,

BOX 2. Essential questions to review regarding quarantine authority

Quarantine authority

- Who may declare a quarantine?
- Does a list of specific diseases exist for which a person can be quarantined?
- What is the process of initiating a quarantine?
- What is the penalty for violating a quarantine?
- How is the quarantine enforced?
- Is area quarantine authorized by law?
- Is group quarantine authorized by law?

Jurisdictional considerations

- Does the law clarify the relation between state and local jurisdictions in quarantine situations?
- Does the law clarify the coordination of quarantine authority among local jurisdictions?
- Does the law place any restrictions on coordination of quarantine authority between this state and the federal government?

Due process considerations

- What legal provisions exist for notice, hearing, consolidation of petitions, and legal representation?
- What provisions address confidentiality?
- Does the law contain any provisions addressing the use of habeas corpus?

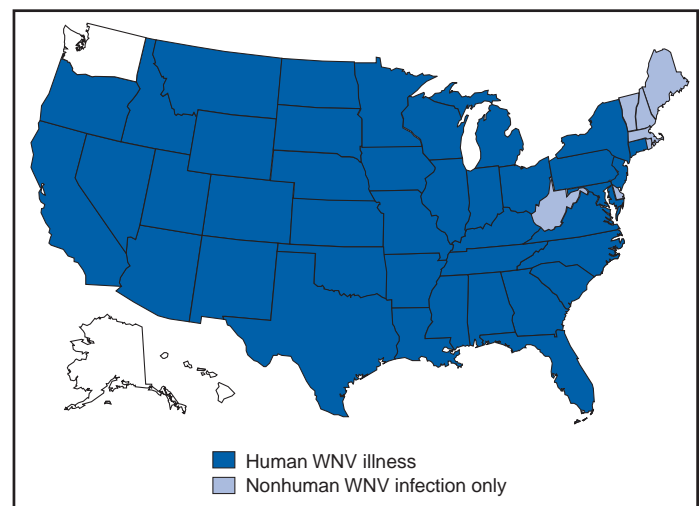
TABLE. Number of human cases of West Nile virus (WNV) illness, by area — United States, 2004*

Area	Neuro-invasive disease [†]	West Nile fever [§]	Other clinical/unspecified [¶]	Total reported to CDC ^{**}	Deaths
Alabama	13	0	0	13	0
Arizona	128	70	180	378	9
Arkansas	12	9	1	22	0
California	142	242	303	687	20
Colorado	39	237	0	276	3
Connecticut	0	1	0	1	0
District of Columbia	1	0	0	1	0
Florida	30	5	0	35	1
Georgia	11	5	0	16	0
Idaho	0	0	2	2	0
Illinois	28	27	1	56	2
Indiana	5	0	2	7	1
Iowa	10	7	2	19	1
Kansas	19	25	0	44	2
Kentucky	1	5	0	6	0
Louisiana	55	15	0	70	3
Maryland	6	5	1	12	0
Michigan	8	1	0	9	0
Minnesota	13	20	0	33	2
Mississippi	23	5	1	29	3
Missouri	24	7	1	32	1
Montana	1	3	1	5	0
Nebraska	2	20	0	22	0
Nevada	25	19	0	44	0
New Jersey	1	0	0	1	0
New Mexico	29	46	4	79	4
New York	3	2	0	5	0
North Carolina	3	0	0	3	0
North Dakota	2	18	0	20	1
Ohio	7	1	0	8	2
Oklahoma	9	6	0	15	1
Oregon	0	1	0	1	0
Pennsylvania	7	3	1	11	1
South Carolina	0	1	0	1	0
South Dakota	5	44	0	49	1
Tennessee	9	1	0	10	0
Texas	75	20	0	95	8
Utah	5	5	0	10	0
Virginia	4	0	1	5	1
Wisconsin	4	6	0	10	1
Wyoming	2	5	2	9	0
Total	761	887	503	2,151	68

* As of October 19, 2004.

[†] Cases with neurologic manifestations (i.e., West Nile meningitis, West Nile encephalitis, and West Nile myelitis).[§] Cases with no evidence of neuroinvasion.[¶] Illnesses for which sufficient clinical information was not provided.^{**} Total number of human cases of WNV illness reported to ArboNet by state and local health departments.

Delaware, Florida, Iowa, Louisiana, Nebraska, Nevada, Pennsylvania, South Dakota, and Utah) and in 25 wild hatchling birds in Missouri and Ohio. Four seropositive sentinel horses were reported in Minnesota and Puerto Rico. A total of 7,262 WNV-positive mosquito pools have been reported in 38 states, DC, and New York City.

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2004*

* As of 3 a.m., Mountain Standard Time, October 19, 2004.

Additional information about national WNV activity is available from CDC at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm> and at <http://westnilemaps.usgs.gov>.

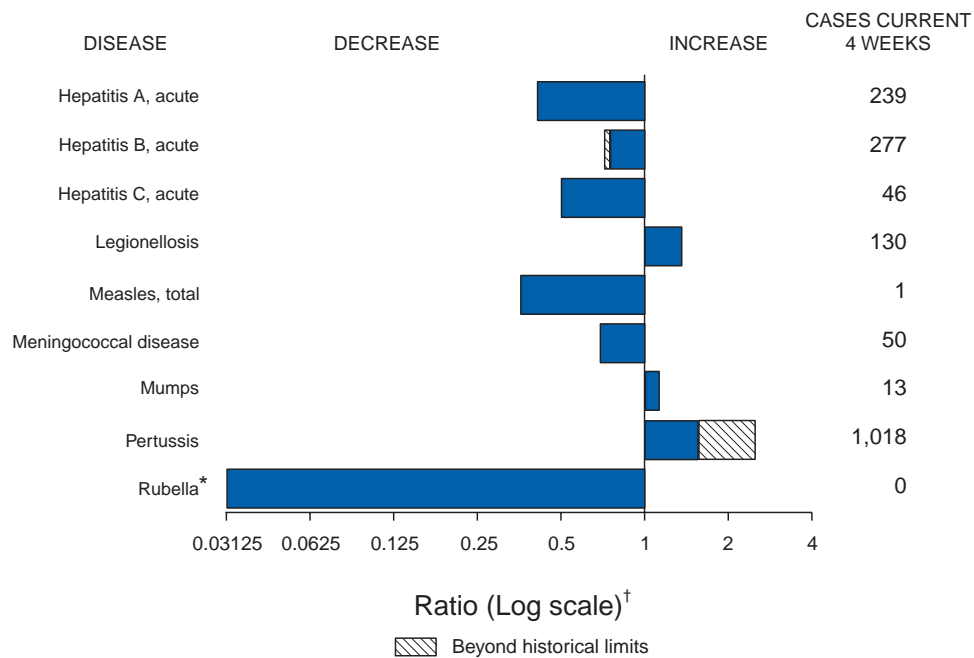
Notice to Readers

Availability of 24-Hour Clinician Information Line and Addition of Topics

CDC's Clinician Information Line (CIL) announces the addition of three topics — mass trauma, bovine spongiform encephalopathy (BSE)/variant Creutzfeldt-Jakob disease (vCJD), and viral hemorrhagic fevers — to its expanding list of disease topics. The line now covers 16 topics: smallpox, influenza/avian influenza, ricin, severe acute respiratory syndrome, radiation, West Nile virus, chlorine, anthrax, botulism, plague, nerve agents, tularemia, viral hemorrhagic fevers, hurricane recovery, mass trauma, and BSE/vCJD. Clinicians with questions relating to any of these topics can reach CIL at telephone 877-554-4625 (toll-free).

CIL was established by CDC in 2003 to rapidly disseminate information to clinicians. The hotline, available 24 hours a day, 7 days a week, is staffed by registered nurses who have access to the latest CDC guidelines and information. The nurses use these guidelines to address emergency preparedness concerns and answer specific questions about emerging diseases. In addition, CIL nurses can connect callers to their local and state public health departments in real time. CIL nurses interact with CDC staff and subject matter specialists to obtain the most up-to-date information. Additional information is available at <http://www.bt.cdc.gov/coca>.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals October 16, 2004, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 41 of zero (0).
 † 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.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending October 16, 2004 (41st Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	HIV infection, pediatric ^{¶¶}	126	166
Botulism:	-	-	Influenza-associated pediatric mortality	-	NA
foodborne	11	9	Measles, total	24**	51 ^{††}
infant	60	54	Mumps	150	170
other (wound & unspecified)	9	23	Plague	1	1
Brucellosis [†]	81	77	Poliomyelitis, paralytic	-	-
Chancroid	27	47	Psittacosis [†]	9	9
Cholera	4	1	Q fever [†]	58	56
Cyclosporiasis [†]	200	59	Rabies, human	5	2
Diphtheria	-	-	Rubella	10	7
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE) [†]	237	247	SARS-associated coronavirus disease ^{† §§}	-	8
human monocytic (HME) [†]	226	205	Smallpox ^{† ¶¶}	-	NA
human, other and unspecified	26	38	<i>Staphylococcus aureus</i> :	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA) ^{† ¶¶}	-	NA
California serogroup viral ^{† §}	67	104	Vancomycin-resistant (VRSA) ^{† ¶¶}	1	NA
eastern equine ^{† §}	3	13	Streptococcal toxic-shock syndrome [†]	84	133
Powassan ^{† §}	-	-	Tetanus	11	15
St. Louis ^{† §}	8	39	Toxic-shock syndrome	103	99
western equine ^{† §}	-	-	Trichinosis	4	1
Hansen disease (leprosy) [†]	63	68	Tularemia [†]	63	69
Hantavirus pulmonary syndrome [†]	17	18	Yellow fever	-	-
Hemolytic uremic syndrome, postdiarrheal [†]	113	129			

-: No reported cases.
 * Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
 † Not notifiable in all states.
 § Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
 ¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update September 26, 2004.
 ** Of 24 cases reported, 11 were indigenous, and 13 were imported from another country.
 †† Of 51 cases reported, 31 were indigenous, and 20 were imported from another country.
 §§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
 ¶¶ Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 16, 2004, and October 11, 2003 (41st Week)*

Reporting area	AIDS		Chlamydia [†]		Coccidiomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile [§]	
	Cum. 2004 [†]	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	31,120	33,700	685,609	676,937	4,526	2,884	2,571	2,685	761	2,804
NEW ENGLAND	981	1,150	24,023	21,908	-	-	145	158	-	26
Maine	15	49	1,626	1,571	N	N	18	18	-	-
N.H.	37	25	1,338	1,243	-	-	27	18	-	2
Vt.	14	14	806	831	-	-	21	28	-	-
Mass.	343	476	10,824	8,742	-	-	49	68	-	12
R.I.	109	82	2,676	2,327	-	-	4	12	-	4
Conn.	463	504	6,753	7,194	N	N	26	14	-	8
MID. ATLANTIC	6,925	8,025	83,882	84,075	-	-	371	334	11	218
Upstate N.Y.	724	740	17,556	15,494	N	N	99	96	1	-
N.Y. City	3,949	4,369	25,829	27,264	-	-	82	97	2	56
N.J.	1,140	1,259	12,318	12,471	-	-	25	14	1	21
Pa.	1,112	1,657	28,179	28,846	N	N	165	127	7	141
E.N. CENTRAL	2,742	3,195	115,962	123,068	14	7	760	819	52	150
Ohio	525	640	26,211	34,281	N	N	194	117	7	84
Ind.	300	428	14,534	13,596	N	N	77	77	5	15
Ill.	1,290	1,472	32,418	37,660	-	-	69	83	28	30
Mich.	493	509	29,066	23,918	14	7	130	107	8	14
Wis.	134	146	13,733	13,613	-	-	290	435	4	7
W.N. CENTRAL	641	631	42,224	39,191	5	2	295	473	75	690
Minn.	152	123	7,213	8,476	N	N	105	128	13	48
Iowa	50	67	5,293	4,003	N	N	68	97	10	80
Mo.	277	304	16,601	14,242	3	1	56	37	24	36
N. Dak.	14	3	1,229	1,234	N	N	10	11	2	94
S. Dak.	8	8	2,001	2,027	-	-	33	35	5	151
Nebr.**	41	42	4,046	3,667	2	1	23	19	2	192
Kans.	99	84	5,841	5,542	N	N	-	146	19	89
S. ATLANTIC	9,492	9,302	136,479	127,227	-	4	428	289	55	178
Del.	121	183	2,289	2,333	N	N	-	4	-	11
Md.	1,252	1,147	14,931	12,894	-	4	14	20	6	48
D.C.	621	807	2,572	2,442	-	-	12	9	1	3
Va.	513	699	17,814	14,965	-	-	49	36	4	19
W. Va.	67	71	2,238	2,067	N	N	4	4	-	1
N.C.	482	886	22,926	19,961	N	N	65	37	3	16
S.C.**	535	615	15,847	11,558	-	-	15	7	-	2
Ga.	1,327	1,499	25,317	28,032	-	-	160	94	11	23
Fla.	4,574	3,395	32,545	32,975	N	N	109	78	30	55
E.S. CENTRAL	1,528	1,491	44,330	43,953	4	1	106	106	46	85
Ky.	187	141	4,494	6,407	N	N	37	21	1	11
Tenn.**	617	644	17,528	15,995	N	N	28	34	9	21
Ala.**	360	344	9,273	11,578	-	-	20	41	13	25
Miss.	364	362	13,035	9,973	4	1	21	10	23	28
W.S. CENTRAL	3,581	3,354	85,233	83,440	2	-	73	90	151	585
Ark.	174	146	5,763	6,228	1	-	14	16	12	23
La.	719	444	17,750	15,659	1	-	3	3	55	84
Okla.	154	162	8,679	9,268	N	N	17	12	9	56
Tex.**	2,534	2,602	53,041	52,285	-	-	39	59	75	422
MOUNTAIN	1,178	1,248	38,435	38,120	2,912	1,918	141	112	229	870
Mont.	6	11	1,756	1,500	N	N	34	17	1	75
Idaho	15	21	2,192	1,919	N	N	23	26	-	-
Wyo.	16	5	830	763	2	1	3	4	2	92
Colo.	257	313	9,447	10,191	N	N	47	29	39	620
N. Mex.	152	96	4,333	5,874	18	7	11	9	29	74
Ariz.	437	534	12,692	10,489	2,809	1,872	17	5	128	7
Utah	53	52	2,834	2,942	32	7	4	15	5	-
Nev.	242	216	4,351	4,442	51	31	2	7	25	2
PACIFIC	4,052	5,304	115,041	115,955	1,589	952	252	304	142	2
Wash.	313	365	13,801	12,992	N	N	36	43	-	-
Oreg.	239	202	6,548	5,834	-	-	29	35	-	-
Calif.	3,357	4,640	87,698	89,878	1,589	952	185	225	142	2
Alaska	39	15	2,914	2,993	-	-	-	1	-	-
Hawaii	104	82	4,080	4,258	-	-	2	-	-	-
Guam	2	5	-	493	-	-	-	-	-	-
P.R.	595	851	2,701	1,970	N	N	N	N	-	-
V.I.	10	29	143	331	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	32	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

[†] Chlamydia refers to genital infections caused by *C. trachomatis*.

[§] Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

[†] Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update September 26, 2004.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 16, 2004, and October 11, 2003 (41st Week)*

Reporting area	<i>Escherichia coli</i> , Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003				
UNITED STATES	1,874	1,970	182	189	130	126	13,592	14,787	242,632	258,797
NEW ENGLAND	125	124	43	35	16	12	1,279	1,206	5,619	5,716
Maine	10	10	-	-	-	-	103	145	179	152
N.H.	15	15	5	3	-	-	32	30	98	95
Vt.	10	15	-	-	-	-	136	96	67	68
Mass.	53	53	13	8	16	12	584	608	2,553	2,275
R.I.	8	1	1	-	-	-	101	84	666	768
Conn.	29	30	24	24	-	-	323	243	2,056	2,358
MID. ATLANTIC	221	205	26	18	28	31	2,928	2,960	26,876	32,294
Upstate N.Y.	101	73	13	9	12	15	1,047	804	5,646	6,043
N.Y. City	32	7	-	-	-	-	782	960	8,138	10,704
N.J.	32	29	4	2	5	-	298	404	4,796	6,406
Pa.	56	96	9	7	11	16	801	792	8,296	9,141
E.N. CENTRAL	340	461	35	28	24	16	1,913	2,561	48,366	54,933
Ohio	81	86	10	15	18	16	647	709	13,395	18,071
Ind.	47	70	-	-	-	-	-	-	5,300	5,248
Ill.	49	107	1	2	1	-	338	760	14,181	16,969
Mich.	69	73	7	-	5	-	565	595	11,970	10,205
Wis.	94	125	17	11	-	-	363	497	3,520	4,440
W.N. CENTRAL	388	333	25	39	14	18	1,449	1,592	13,405	13,673
Minn.	101	113	13	17	1	1	590	579	2,262	2,358
Iowa	115	76	-	-	-	-	237	221	938	1,007
Mo.	67	66	11	12	7	1	420	407	7,090	6,802
N. Dak.	13	10	-	4	6	7	20	32	87	67
S. Dak.	30	22	-	4	-	-	50	61	223	170
Nebr.	60	21	1	2	-	-	114	112	811	1,225
Kans.	2	25	-	-	-	9	18	180	1,994	2,044
S. ATLANTIC	139	119	30	37	37	34	2,196	2,112	61,811	63,366
Del.	2	7	N	N	N	N	39	39	708	901
Md.	20	12	3	3	1	1	86	89	6,391	6,114
D.C.	1	1	-	-	-	-	52	37	1,951	1,935
Va.	31	32	10	10	-	-	400	266	7,007	6,986
W. Va.	2	3	-	-	-	-	28	33	747	687
N.C.	-	-	-	-	25	26	N	N	12,189	11,510
S.C.	7	1	-	-	-	-	51	119	7,741	6,822
Ga.	20	25	11	5	-	-	647	689	11,100	13,890
Fla.	56	38	6	19	11	7	893	840	13,977	14,521
E.S. CENTRAL	73	68	3	2	9	5	309	300	19,286	21,961
Ky.	22	23	2	2	6	5	N	N	2,030	2,847
Tenn.	31	29	1	-	3	-	158	133	6,579	6,645
Ala.	13	12	-	-	-	-	151	167	5,638	7,399
Miss.	7	4	-	-	-	-	-	-	5,039	5,070
W.S. CENTRAL	63	73	2	4	2	4	253	236	32,812	34,587
Ark.	11	9	1	-	-	-	97	124	2,884	3,312
La.	3	3	-	-	-	-	36	9	8,286	9,024
Okla.	16	22	-	-	-	-	116	103	3,689	3,791
Tex.	33	39	1	4	2	4	4	-	17,953	18,460
MOUNTAIN	203	245	17	23	-	6	1,201	1,259	8,339	8,224
Mont.	14	13	-	-	-	-	59	86	51	84
Idaho	43	58	9	15	-	-	143	163	73	58
Wyo.	8	2	1	-	-	-	21	20	48	33
Colo.	44	57	2	3	-	6	416	363	2,077	2,288
N. Mex.	9	10	2	4	-	-	55	42	603	958
Ariz.	20	28	N	N	N	N	140	201	3,076	2,922
Utah	46	56	2	-	-	-	268	273	442	295
Nev.	19	21	1	1	-	-	99	111	1,969	1,586
PACIFIC	322	342	1	3	-	-	2,064	2,561	26,118	24,043
Wash.	121	89	-	1	-	-	296	278	2,112	2,179
Oreg.	58	89	1	2	-	-	360	340	954	795
Calif.	134	154	-	-	-	-	1,278	1,803	21,655	19,704
Alaska	1	4	-	-	-	-	67	71	436	434
Hawaii	8	6	-	-	-	-	63	69	961	931
Guam	N	N	-	-	-	-	-	2	-	53
P.R.	-	1	-	-	-	-	85	224	202	210
V.I.	-	-	-	-	-	-	-	-	49	70
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	3	U

N: Not notifiable. U: Unavailable. - : No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 16, 2004, and October 11, 2003 (41st Week)*

Reporting area	<i>Haemophilus influenzae</i> , invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years						A	
	All serotypes		Serotype b		Non-serotype b		Unknown serotype			
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,440	1,486	10	21	78	93	141	164	4,334	5,432
NEW ENGLAND	124	106	1	2	5	5	3	3	837	256
Maine	12	4	-	-	-	-	-	1	11	11
N.H.	16	12	-	1	2	-	-	-	17	15
Vt.	6	7	-	-	-	-	1	-	8	6
Mass.	50	49	1	1	-	5	2	1	720	140
R.I.	3	6	-	-	-	-	-	1	20	12
Conn.	37	28	-	-	3	-	-	-	61	72
MID. ATLANTIC	297	319	-	1	4	3	32	40	508	1,040
Upstate N.Y.	98	115	-	1	4	3	5	8	80	99
N.Y. City	60	55	-	-	-	-	11	11	198	367
N.J.	61	57	-	-	-	-	3	8	101	175
Pa.	78	92	-	-	-	-	13	13	129	399
E.N. CENTRAL	222	248	-	3	6	4	34	45	445	510
Ohio	83	59	-	-	2	-	14	11	40	95
Ind.	40	41	-	-	4	-	1	5	85	54
Ill.	50	89	-	-	-	-	11	20	154	153
Mich.	18	21	-	3	-	4	6	1	125	166
Wis.	31	38	-	-	-	-	2	8	41	42
W.N. CENTRAL	80	91	2	1	3	7	8	12	124	142
Minn.	40	37	1	1	3	7	1	2	31	37
Iowa	1	-	1	-	-	-	-	-	41	24
Mo.	28	35	-	-	-	-	6	9	37	44
N. Dak.	3	2	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	3	-
Nebr.	8	2	-	-	-	-	1	-	10	12
Kans.	-	14	-	-	-	-	-	1	1	25
S. ATLANTIC	364	323	-	1	21	13	29	18	849	1,366
Del.	-	-	-	-	-	-	-	-	5	7
Md.	50	74	-	-	4	5	-	1	90	136
D.C.	-	1	-	-	-	-	-	-	7	31
Va.	30	40	-	-	-	-	1	5	102	76
W. Va.	14	14	-	-	1	-	3	-	6	13
N.C.	46	36	-	-	6	3	1	2	77	74
S.C.	4	5	-	-	-	-	-	1	24	34
Ga.	123	60	-	-	-	-	22	6	304	655
Fla.	97	93	-	1	10	5	2	3	234	340
E.S. CENTRAL	59	69	1	1	-	3	8	8	137	225
Ky.	5	6	-	-	-	2	-	-	29	28
Tenn.	38	40	-	-	-	1	6	5	79	161
Ala.	13	21	1	1	-	-	2	3	7	22
Miss.	3	2	-	-	-	-	-	-	22	14
W.S. CENTRAL	60	68	1	2	7	10	1	4	314	519
Ark.	2	6	-	-	-	1	-	-	54	25
La.	11	20	-	-	-	2	1	4	40	39
Okla.	46	39	-	-	7	7	-	-	19	13
Tex.	1	3	1	2	-	-	-	-	201	442
MOUNTAIN	160	136	3	6	24	22	19	15	379	392
Mont.	-	-	-	-	-	-	-	-	5	8
Idaho	5	4	-	-	-	-	2	1	19	12
Wyo.	1	1	-	-	-	-	1	-	5	1
Colo.	40	31	-	-	-	-	5	6	45	58
N. Mex.	31	15	-	-	7	4	5	1	18	18
Ariz.	59	64	-	6	12	9	2	4	230	219
Utah	12	11	2	-	2	5	3	3	45	31
Nev.	12	10	1	-	3	4	1	-	12	45
PACIFIC	74	126	2	4	8	26	7	19	741	982
Wash.	3	10	2	-	-	6	1	3	50	51
Oreg.	38	32	-	-	-	-	3	2	58	49
Calif.	21	55	-	4	8	20	1	9	607	863
Alaska	4	18	-	-	-	-	1	5	5	8
Hawaii	8	11	-	-	-	-	1	-	21	11
Guam	-	-	-	-	-	-	-	-	-	2
P.R.	-	-	-	-	-	-	-	-	20	62
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 16, 2004, and October 11, 2003 (41st Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003						
UNITED STATES	4,918	5,537	682	835	1,432	1,697	498	540	13,770	16,852
NEW ENGLAND	279	283	9	7	45	91	31	38	1,928	3,212
Maine	2	1	-	-	-	2	6	6	53	131
N.H.	30	13	-	-	7	8	3	3	173	139
Vt.	5	4	4	7	4	5	1	-	43	37
Mass.	159	187	4	-	6	47	5	15	619	1,399
R.I.	5	11	-	-	13	13	1	-	175	434
Conn.	78	67	1	-	15	16	15	14	865	1,072
MID. ATLANTIC	963	603	120	98	411	502	121	112	9,303	11,242
Upstate N.Y.	73	74	14	13	85	123	39	28	3,117	3,735
N.Y. City	89	158	-	-	41	57	16	20	-	186
N.J.	563	145	-	-	75	74	20	22	2,566	2,596
Pa.	238	226	106	85	210	248	46	42	3,620	4,725
E.N. CENTRAL	444	408	91	125	386	349	83	70	788	840
Ohio	100	110	5	7	184	184	37	19	58	57
Ind.	34	28	7	7	65	25	16	6	15	19
Ill.	71	52	12	18	18	39	5	18	1	65
Mich.	216	181	67	88	112	84	22	18	28	6
Wis.	23	37	-	5	7	17	3	9	686	693
W.N. CENTRAL	241	254	41	178	39	57	11	13	440	316
Minn.	41	29	16	7	7	3	3	3	347	213
Iowa	13	10	-	1	4	9	1	-	39	47
Mo.	154	173	25	168	21	28	5	6	47	49
N. Dak.	4	2	-	-	2	1	-	-	-	-
S. Dak.	-	2	-	-	3	2	-	-	-	1
Nebr.	29	23	-	2	1	5	2	3	7	2
Kans.	-	15	-	-	1	9	-	1	-	4
S. ATLANTIC	1,527	1,595	136	125	303	439	88	111	1,107	1,006
Del.	28	6	-	-	12	24	N	N	137	174
Md.	125	103	14	7	59	111	14	22	647	596
D.C.	15	9	1	-	8	14	-	1	8	5
Va.	206	140	16	7	41	79	14	9	121	77
W. Va.	33	25	20	2	6	15	3	6	21	19
N.C.	138	131	10	11	29	34	16	16	97	85
S.C.	65	140	6	24	3	7	3	4	12	8
Ga.	530	544	15	12	36	31	16	28	12	10
Fla.	387	497	54	62	109	124	22	25	52	32
E.S. CENTRAL	359	366	82	66	76	89	20	25	43	53
Ky.	58	54	23	12	33	37	4	6	14	11
Tenn.	168	157	35	15	29	29	10	7	17	15
Ala.	59	78	4	5	11	18	4	10	3	8
Miss.	74	77	20	34	3	5	2	2	9	19
W.S. CENTRAL	209	874	103	140	54	60	30	42	55	87
Ark.	58	66	2	3	-	2	2	1	8	-
La.	52	102	58	92	4	1	3	2	4	6
Okla.	47	46	3	2	5	6	-	2	-	-
Tex.	52	660	40	43	45	51	25	37	43	81
MOUNTAIN	384	474	40	40	69	54	22	31	29	14
Mont.	2	13	2	1	2	4	-	2	-	-
Idaho	10	7	-	1	7	3	1	2	6	3
Wyo.	7	27	2	-	5	2	-	-	3	2
Colo.	46	66	8	9	17	9	11	9	3	-
N. Mex.	11	32	7	-	4	2	-	2	1	1
Ariz.	208	219	5	7	11	10	-	10	6	3
Utah	38	38	4	-	19	18	2	2	10	2
Nev.	62	72	12	22	4	6	8	4	-	3
PACIFIC	512	680	60	56	49	56	92	98	77	82
Wash.	41	61	20	17	10	8	9	6	13	3
Oreg.	95	90	14	11	N	N	5	4	28	13
Calif.	352	504	23	26	39	48	74	83	34	63
Alaska	14	4	-	-	-	-	-	-	2	3
Hawaii	10	21	3	2	-	-	4	5	N	N
Guam	-	9	-	3	-	-	-	-	-	-
P.R.	44	98	-	-	1	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 16, 2004, and October 11, 2003 (41st Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	987	1,039	1,020	1,321	11,131	6,761	4,381	5,662	1,145	715
NEW ENGLAND	60	55	53	60	1,254	969	528	482	18	7
Maine	6	2	9	6	2	12	38	59	-	-
N.H.	5	6	4	3	56	77	22	21	-	-
Vt.	4	2	2	2	61	60	31	29	-	-
Mass.	28	26	31	36	1,092	756	223	172	15	7
R.I.	4	2	1	2	31	16	30	58	1	-
Conn.	13	17	6	11	12	48	184	143	2	-
MID. ATLANTIC	237	277	129	160	2,286	784	467	751	75	39
Upstate N.Y.	39	45	29	40	1,585	354	433	347	3	-
N.Y. City	107	148	23	37	128	111	5	6	19	13
N.J.	50	53	31	20	188	118	-	62	27	16
Pa.	41	31	46	63	385	201	29	336	26	10
E.N. CENTRAL	90	89	145	207	2,429	690	137	147	26	19
Ohio	27	17	58	51	464	209	66	49	15	8
Ind.	14	2	23	38	125	54	10	23	5	1
Ill.	21	37	12	56	319	67	43	23	2	5
Mich.	18	23	41	37	219	92	16	39	4	5
Wis.	10	10	11	25	1,302	268	2	13	-	-
W.N. CENTRAL	52	41	62	106	1,385	350	336	563	104	58
Minn.	25	20	22	25	276	132	75	30	-	1
Iowa	3	5	14	23	99	103	92	93	-	2
Mo.	17	5	18	39	251	65	51	34	88	47
N. Dak.	3	1	2	1	686	6	51	48	-	-
S. Dak.	1	2	2	1	20	3	10	116	4	4
Nebr.	3	-	4	6	33	8	53	91	12	3
Kans.	-	8	-	11	20	33	4	151	-	1
S. ATLANTIC	261	261	191	230	532	518	1,540	2,198	562	419
Del.	6	2	4	8	8	7	9	43	4	1
Md.	52	61	10	24	94	71	157	287	54	94
D.C.	11	13	4	5	3	2	-	-	-	1
Va.	36	31	16	22	163	87	399	433	24	27
W. Va.	1	4	5	5	17	16	52	72	4	5
N.C.	17	20	26	30	67	108	506	663	386	195
S.C.	9	3	11	20	42	101	125	192	17	27
Ga.	54	58	20	27	31	29	290	320	55	61
Fla.	75	69	95	89	107	97	2	188	18	8
E.S. CENTRAL	27	26	51	69	229	129	119	180	164	110
Ky.	4	7	9	16	56	41	20	31	2	1
Tenn.	7	5	15	18	135	60	36	96	89	59
Ala.	11	7	14	18	26	17	53	52	40	20
Miss.	5	7	13	17	12	11	10	1	33	30
W.S. CENTRAL	93	106	94	147	580	588	919	983	166	54
Ark.	7	4	14	13	55	41	43	25	86	-
La.	4	4	32	36	10	10	-	2	5	-
Okla.	7	4	8	14	33	66	90	166	70	40
Tex.	75	94	40	84	482	471	786	790	5	14
MOUNTAIN	38	34	56	68	1,161	783	191	162	25	8
Mont.	-	-	3	4	40	5	22	20	3	1
Idaho	1	1	6	6	34	68	7	15	4	2
Wyo.	-	1	3	2	28	123	5	6	4	2
Colo.	13	19	13	19	565	269	42	38	2	2
N. Mex.	2	1	7	8	125	61	4	5	2	-
Ariz.	10	7	12	21	190	118	100	60	2	-
Utah	7	4	5	-	149	106	8	14	8	1
Nev.	5	1	7	8	30	33	3	4	-	-
PACIFIC	129	150	239	274	1,275	1,950	144	196	5	1
Wash.	16	21	28	26	577	580	-	-	-	-
Oreg.	15	9	53	48	337	391	6	6	3	-
Calif.	94	113	149	182	333	963	130	182	2	1
Alaska	1	1	3	7	9	7	8	8	-	-
Hawaii	3	6	6	11	19	9	-	-	-	-
Guam	-	1	-	-	-	1	-	-	-	-
P.R.	-	1	5	9	4	2	46	64	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 16, 2004, and October 11, 2003 (41st Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		<i>Streptococcus pneumoniae</i> , invasive			
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Drug resistant, all ages		Age <5 years	
							Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	30,902	33,890	8,976	18,481	3,674	4,663	1,744	1,600	531	546
NEW ENGLAND	1,680	1,725	239	267	154	401	26	79	55	7
Maine	77	107	4	6	8	24	2	-	3	-
N.H.	116	122	7	7	16	27	-	-	N	N
Vt.	48	60	2	7	8	18	7	6	1	4
Mass.	969	1,009	151	178	105	179	N	N	44	N
R.I.	99	103	18	13	17	11	17	10	7	3
Conn.	371	324	57	56	-	142	-	63	U	U
MID. ATLANTIC	4,435	3,972	938	1,905	600	810	108	104	88	80
Upstate N.Y.	989	920	370	353	199	306	44	55	60	59
N.Y. City	1,006	1,100	305	327	83	118	U	U	U	U
N.J.	716	665	179	306	139	154	-	-	6	2
Pa.	1,724	1,287	84	919	179	232	64	49	22	19
E.N. CENTRAL	3,949	4,561	811	1,524	733	1,103	382	353	131	240
Ohio	1,064	1,116	141	257	196	262	269	231	65	77
Ind.	467	458	179	128	86	107	113	122	30	24
Ill.	1,072	1,570	251	822	156	278	-	-	-	96
Mich.	708	642	106	209	252	314	N	N	N	N
Wis.	638	775	134	108	43	142	N	N	36	43
W.N. CENTRAL	1,656	2,002	280	626	221	287	16	13	74	59
Minn.	479	451	52	87	126	139	-	-	54	42
Iowa	379	309	61	57	N	N	N	N	N	N
Mo.	519	739	131	302	54	64	11	9	12	2
N. Dak.	37	29	3	6	11	15	-	3	2	4
S. Dak.	98	97	9	16	15	20	5	1	-	-
Nebr.	127	131	22	78	13	24	-	-	6	5
Kans.	17	246	2	80	2	25	N	N	-	6
S. ATLANTIC	8,722	8,297	2,190	5,596	816	767	925	864	40	17
Del.	81	88	6	157	3	6	4	1	N	N
Md.	630	683	112	516	130	188	-	18	29	-
D.C.	50	34	32	64	9	8	5	-	3	7
Va.	968	830	130	345	63	91	N	N	N	N
W. Va.	172	107	5	-	20	31	90	59	8	10
N.C.	1,254	1,019	270	825	104	92	N	N	U	U
S.C.	765	604	275	395	37	37	69	123	N	N
Ga.	1,587	1,607	552	1,005	261	151	274	195	N	N
Fla.	3,215	3,325	808	2,289	189	163	483	468	N	N
E.S. CENTRAL	2,063	2,349	634	771	184	165	114	116	2	-
Ky.	284	329	58	106	53	41	24	15	N	N
Tenn.	512	616	317	256	131	124	89	101	N	N
Ala.	589	585	213	254	-	-	-	-	N	N
Miss.	678	819	46	155	-	-	1	-	2	-
W.S. CENTRAL	2,651	5,038	1,994	4,748	226	229	49	62	103	86
Ark.	428	657	57	94	16	6	7	19	8	7
La.	584	741	227	395	2	1	42	43	24	17
Okla.	336	386	380	686	55	72	N	N	36	42
Tex.	1,303	3,254	1,330	3,573	153	150	N	N	35	20
MOUNTAIN	1,907	1,780	636	971	423	386	31	5	38	57
Mont.	172	87	4	2	-	1	-	-	-	-
Idaho	131	144	12	25	8	18	N	N	N	N
Wyo.	46	71	5	6	7	2	9	4	-	-
Colo.	464	403	133	242	122	110	-	-	35	44
N. Mex.	209	216	99	194	68	93	5	-	-	9
Ariz.	547	533	298	406	177	132	N	N	N	N
Utah	201	179	39	39	38	28	15	1	3	4
Nev.	137	147	46	57	3	2	2	-	-	-
PACIFIC	3,839	4,166	1,254	2,073	317	515	93	4	-	-
Wash.	455	453	92	139	53	56	-	-	N	N
Oreg.	348	353	59	192	N	N	N	N	N	N
Calif.	2,704	3,136	1,055	1,697	169	356	N	N	N	N
Alaska	48	56	5	8	-	-	-	-	N	N
Hawaii	284	168	43	37	95	103	93	4	-	-
Guam	-	37	-	33	-	-	-	-	-	-
P.R.	190	521	7	25	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 16, 2004, and October 11, 2003 (41st Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Primary & secondary		Congenital		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003						
UNITED STATES	5,763	5,480	268	348	8,004	9,739	224	299	14,146	12,603
NEW ENGLAND	156	163	4	-	283	335	19	25	591	2,442
Maine	2	7	-	-	-	19	-	-	180	643
N.H.	4	16	3	-	12	11	-	2	-	-
Vt.	-	-	-	-	-	8	-	-	411	556
Mass.	98	103	-	-	180	173	13	14	-	136
R.I.	21	18	-	-	29	42	1	2	-	5
Conn.	31	19	1	-	62	82	5	7	-	1,102
MID. ATLANTIC	759	667	38	54	1,579	1,744	51	70	73	30
Upstate N.Y.	79	31	3	8	197	227	9	12	-	-
N.Y. City	454	374	12	29	787	898	16	34	-	-
N.J.	124	136	22	17	331	341	13	20	-	-
Pa.	102	126	1	-	264	278	13	4	73	30
E.N. CENTRAL	649	725	48	61	931	909	17	32	4,375	4,247
Ohio	170	165	1	3	155	157	5	2	1,077	967
Ind.	44	35	8	11	101	101	-	4	-	-
Ill.	265	303	12	18	415	436	-	16	-	-
Mich.	147	207	27	28	193	165	10	10	2,906	2,594
Wis.	23	15	-	1	67	50	2	-	392	686
W.N. CENTRAL	125	122	5	4	293	367	8	6	129	42
Minn.	15	37	1	-	138	148	4	2	-	-
Iowa	5	8	-	-	29	25	-	2	N	N
Mo.	78	46	2	4	85	97	2	1	5	-
N. Dak.	-	2	-	-	3	-	-	-	81	42
S. Dak.	-	2	-	-	8	16	-	-	43	-
Nebr.	5	5	-	-	27	16	2	1	-	-
Kans.	22	22	2	-	3	65	-	-	-	-
S. ATLANTIC	1,497	1,442	39	70	1,520	1,895	39	44	1,864	1,741
Del.	8	5	1	-	-	-	-	-	4	24
Md.	283	249	6	11	189	187	11	9	-	-
D.C.	66	41	1	-	65	-	-	-	20	25
Va.	83	67	2	1	189	197	6	14	479	475
W. Va.	2	2	-	-	15	16	-	-	1,107	1,013
N.C.	146	126	9	16	232	245	6	7	N	N
S.C.	97	81	6	10	149	127	-	-	254	204
Ga.	253	383	1	13	11	410	6	5	-	-
Fla.	559	488	13	19	670	713	10	9	-	-
E. S. CENTRAL	317	255	17	11	429	525	7	5	-	-
Ky.	34	30	1	1	87	93	3	-	-	-
Tenn.	103	107	8	2	156	179	4	2	-	-
Ala.	138	96	6	6	153	173	-	3	-	-
Miss.	42	22	2	2	33	80	-	-	-	-
W.S. CENTRAL	952	720	43	63	749	1,460	14	29	5,159	3,646
Ark.	34	40	-	2	87	71	-	-	-	-
La.	216	120	-	1	-	-	-	-	46	12
Okla.	20	52	2	1	125	116	1	1	-	-
Tex.	682	508	41	59	537	1,273	13	28	5,113	3,634
MOUNTAIN	283	251	45	29	381	353	6	6	1,955	455
Mont.	-	-	-	-	4	5	-	-	-	-
Idaho	16	7	2	2	4	8	-	1	-	-
Wyo.	3	-	-	-	2	3	-	-	28	42
Colo.	28	27	-	3	85	77	1	3	1,498	-
N. Mex.	46	51	1	6	18	38	-	-	81	2
Ariz.	154	151	42	18	175	170	2	2	-	-
Utah	7	5	-	-	33	30	1	-	348	411
Nev.	29	10	-	-	60	22	2	-	-	-
PACIFIC	1,025	1,135	29	56	1,839	2,151	63	82	-	-
Wash.	105	61	-	-	180	192	6	3	-	-
Oreg.	24	37	-	-	65	85	2	3	-	-
Calif.	890	1,030	28	55	1,472	1,738	49	75	-	-
Alaska	-	1	-	-	31	46	-	-	-	-
Hawaii	6	6	1	1	91	90	6	1	-	-
Guam	-	1	-	-	-	41	-	-	-	114
P.R.	112	164	5	13	60	86	-	-	217	454
V.I.	4	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending October 16, 2004 (41st Week)

Reporting Area	All causes, by age (years)							Reporting Area	All causes, by age (years)							P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1	P&I [†] Total		All Ages	≥65	45-64	25-44	1-24	<1		
NEW ENGLAND	537	383	99	30	13	12	51	S. ATLANTIC	1,068	635	262	103	27	41	59	
Boston, Mass.	135	83	29	11	7	5	15	Atlanta, Ga.	156	82	37	19	6	12	4	
Bridgeport, Conn.	20	17	1	1	-	1	2	Baltimore, Md.	143	75	41	16	5	6	19	
Cambridge, Mass.	21	15	3	3	-	-	2	Charlotte, N.C.	82	56	19	4	-	3	4	
Fall River, Mass.	26	20	6	-	-	-	3	Jacksonville, Fla.	129	82	30	10	5	2	5	
Hartford, Conn.	52	37	11	2	2	-	8	Miami, Fla.	91	49	21	17	1	3	4	
Lowell, Mass.	21	18	3	-	-	-	2	Norfolk, Va.	37	21	6	3	2	5	1	
Lynn, Mass.	10	9	1	-	-	-	1	Richmond, Va.	54	27	18	6	1	2	3	
New Bedford, Mass.	20	15	3	1	1	-	3	Savannah, Ga.	62	50	10	1	-	1	3	
New Haven, Conn.	35	22	7	3	-	3	3	St. Petersburg, Fla.	U	U	U	U	U	U	U	
Providence, R.I.	41	28	10	2	1	-	2	Tampa, Fla.	199	129	43	15	7	5	12	
Somerville, Mass.	5	4	-	1	-	-	-	Washington, D.C.	100	53	36	9	-	2	3	
Springfield, Mass.	52	43	7	1	-	1	4	Wilmington, Del.	15	11	1	3	-	-	1	
Waterbury, Conn.	27	21	4	2	-	-	2	E.S. CENTRAL	841	557	175	58	28	23	52	
Worcester, Mass.	72	51	14	3	2	2	4	Birmingham, Ala.	101	64	18	8	7	4	-	
MID. ATLANTIC	2,347	1,664	476	137	34	36	128	Chattanooga, Tenn.	109	79	18	5	3	4	9	
Albany, N.Y.	65	50	12	2	-	1	2	Knoxville, Tenn.	101	72	19	6	3	1	4	
Allentown, Pa.	21	16	3	2	-	-	-	Lexington, Ky.	63	41	14	1	5	2	3	
Buffalo, N.Y.	93	70	17	4	1	1	7	Memphis, Tenn.	149	100	28	13	5	3	15	
Camden, N.J.	16	8	7	-	-	1	1	Mobile, Ala.	100	69	21	8	-	2	5	
Elizabeth, N.J.	17	13	3	1	-	-	1	Montgomery, Ala.	94	62	24	6	1	1	6	
Erie, Pa.	40	33	6	1	-	-	1	Nashville, Tenn.	124	70	33	11	4	6	10	
Jersey City, N.J.	40	24	10	5	1	-	-	W.S. CENTRAL	1,467	937	325	128	47	30	78	
New York City, N.Y.	1,352	923	301	80	22	26	62	Austin, Tex.	77	45	19	8	2	3	4	
Newark, N.J.	52	25	14	7	2	4	1	Baton Rouge, La.	61	46	10	5	-	-	-	
Paterson, N.J.	U	U	U	U	U	U	U	Corpus Christi, Tex.	37	27	8	-	1	1	-	
Philadelphia, Pa.	302	233	49	18	2	-	13	Dallas, Tex.	179	105	47	12	8	7	9	
Pittsburgh, Pa. [‡]	30	24	3	2	-	1	2	El Paso, Tex.	92	63	20	9	-	-	6	
Reading, Pa.	24	19	2	2	1	-	2	Ft. Worth, Tex.	105	64	24	10	5	2	5	
Rochester, N.Y.	126	90	25	6	3	2	15	Houston, Tex.	350	194	93	43	13	7	23	
Schenectady, N.Y.	23	18	4	1	-	-	2	Little Rock, Ark.	72	50	10	3	3	6	4	
Scranton, Pa.	27	22	4	-	1	-	3	New Orleans, La.	24	24	-	-	-	-	-	
Syracuse, N.Y.	40	32	6	1	1	-	8	San Antonio, Tex.	290	196	62	18	12	2	17	
Trenton, N.J.	20	15	4	1	-	-	-	Shreveport, La.	50	32	9	6	1	2	4	
Utica, N.Y.	30	25	3	2	-	-	3	Tulsa, Okla.	130	91	23	14	2	-	6	
Yonkers, N.Y.	29	24	3	2	-	-	5	MOUNTAIN	971	637	208	82	23	21	58	
E.N. CENTRAL	1,870	1,274	405	111	35	45	131	Albuquerque, N.M.	117	77	25	8	4	3	7	
Akron, Ohio	48	33	8	3	1	3	4	Boise, Idaho	37	26	5	4	2	-	2	
Canton, Ohio	47	38	7	2	-	-	3	Colorado Springs, Colo.	59	35	17	3	1	3	3	
Chicago, Ill.	244	151	65	15	7	6	17	Denver, Colo.	104	60	25	11	3	5	6	
Cincinnati, Ohio	105	63	25	2	6	9	10	Las Vegas, Nev.	233	157	52	16	3	5	9	
Cleveland, Ohio	200	130	51	15	3	1	9	Ogden, Utah	21	15	4	2	-	-	1	
Columbus, Ohio	156	108	31	11	2	4	17	Phoenix, Ariz.	121	74	29	14	3	1	13	
Dayton, Ohio	104	77	17	5	3	2	4	Pueblo, Colo.	38	28	8	2	-	-	3	
Detroit, Mich.	154	89	49	8	4	4	14	Salt Lake City, Utah	94	61	17	12	2	2	7	
Evansville, Ind.	44	34	8	1	1	-	5	Tucson, Ariz.	147	104	26	10	5	2	7	
Fort Wayne, Ind.	59	43	9	7	-	-	3	PACIFIC	1,378	940	298	90	25	25	104	
Gary, Ind.	6	4	2	-	-	-	-	Berkeley, Calif.	11	9	1	1	-	-	1	
Grand Rapids, Mich.	62	42	9	7	1	3	1	Fresno, Calif.	88	62	21	3	2	-	8	
Indianapolis, Ind.	177	112	49	11	-	5	10	Glendale, Calif.	11	10	-	-	-	1	2	
Lansing, Mich.	56	42	7	2	5	-	3	Honolulu, Hawaii	73	53	16	3	-	1	7	
Milwaukee, Wis.	116	84	23	7	1	1	11	Long Beach, Calif.	65	46	10	7	1	1	9	
Peoria, Ill.	60	44	6	5	1	4	5	Los Angeles, Calif.	190	118	44	17	6	5	11	
Rockford, Ill.	50	40	8	1	-	1	5	Pasadena, Calif.	28	23	5	-	-	-	1	
South Bend, Ind.	44	36	6	1	-	1	3	Portland, Oreg.	124	88	31	3	2	-	7	
Toledo, Ohio	93	69	17	7	-	-	3	Sacramento, Calif.	167	107	42	13	2	3	10	
Youngstown, Ohio	45	35	8	1	-	1	4	San Diego, Calif.	122	85	22	10	1	4	10	
W.N. CENTRAL	525	354	112	33	15	11	37	San Francisco, Calif.	114	75	27	10	1	1	11	
Des Moines, Iowa	29	25	1	2	1	-	1	San Jose, Calif.	117	86	24	3	3	1	9	
Duluth, Minn.	22	17	2	2	1	-	3	Santa Cruz, Calif.	19	12	5	2	-	-	1	
Kansas City, Kans.	26	11	9	3	2	1	4	Seattle, Wash.	110	71	21	10	4	4	11	
Kansas City, Mo.	111	70	30	6	3	2	5	Spokane, Wash.	58	38	15	3	1	1	3	
Lincoln, Nebr.	30	24	4	2	-	-	2	Tacoma, Wash.	81	57	14	5	2	3	3	
Minneapolis, Minn.	74	44	19	5	1	5	5	TOTAL	11,004 [§]	7,381	2,360	772	247	244	698	
Omaha, Nebr.	76	56	15	1	3	1	5									
St. Louis, Mo.	35	19	10	4	1	1	2									
St. Paul, Minn.	61	43	11	6	-	1	3									
Wichita, Kans.	61	45	11	2	3	-	7									

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.

[§] Total includes unknown ages.

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

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-96, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone 888-232-3228.

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

All *MMWR* references are available on the Internet at <http://www.cdc.gov/mmwr>. Use the search function to find specific articles.

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

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