MMWR™
Morbidity and Mortality Weekly Report
Weekly May 7, 2004 / Vol. 53 / No. 17

National Stroke Awareness Month — May 2004

May is National Stroke Awareness Month. During 2004, an estimated 700,000 persons in the United States will have a stroke; of these, approximately 160,000 (23%) will die. Nearly half of stroke deaths will occur before patients are transported to hospitals, and 15%–30% of stroke survivors will be disabled permanently (*1*).

Recognition of the warning signs for stroke and immediate calls for emergency medical care are critical first steps toward obtaining appropriate emergency treatment that might prevent death and disability. The five major warning signs of stroke are 1) sudden confusion, trouble speaking or understanding; 2) sudden numbness or weakness of the face, arm, or leg, especially on one side of the body; 3) sudden trouble seeing in one or both eyes; 4) sudden trouble walking, dizziness, or loss of balance or coordination; and 5) sudden, severe headache with no known cause (*1*). In 2001, only 17% of adults recognized all five major signs of stroke and also knew to call 911 for medical assistance. Education campaigns are needed to increase public awareness of the early signs of stroke.

CDC supports programs that emphasize multiple strategies for targeting stroke prevention and for ensuring patients receive quality care. In 2004, CDC also will support stroke-care registries in several states to monitor and enhance improvements in the quality of care for stroke.

Additional information about stroke prevention and the national stroke registry is available at http://www.cdc.gov/cvh. Information about stroke is available at http://www.strokeassociation.org, http://www.stroke.org, and http://www.ninds.nih.gov.

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Awareness of Stroke Warning Signs — 17 States and the U.S. Virgin Islands, 2001

Stroke is the third leading cause of death in the United States (*1*) and a major cause of disabilities among adults (*2*). Since 1900, the number of stroke deaths has declined (*3*), and substantial advances have been made in the diagnosis and treatment of ischemic stroke during the previous decade (*4*); however, the proportion of deaths that occur before patients are transported to hospitals has increased to nearly half of all stroke deaths (*5*). One of the national health objectives for 2010 is to increase the proportion of persons who are aware of the early warning symptoms and signs of stroke (objective no. 12.8) (*6*). To assess public awareness and knowledge of the proper emergency response, CDC analyzed 2001 data from the Behavioral Risk Factor Surveillance System (BRFSS) in 17 states* and the U.S. Virgin Islands (USVI). This report summarizes the results of that analysis, which indicated that public awareness of several stroke signs is high, but the ability to recognize the five major warning signs† is low. Education campaigns are needed to increase public awareness of stroke signs and the necessity of calling 911 when persons are suffering a possible stroke.

* Alabama, Arkansas, Colorado, Connecticut, Hawaii, Louisiana, Maine, Minnesota, Montana, Ohio, South Carolina, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

† Sudden confusion, trouble speaking or understanding; sudden numbness or weakness of the face, arm, or leg, especially on one side of the body; sudden trouble seeing in one or both eyes; sudden trouble walking, dizziness, or loss of balance or coordination; and sudden, severe headache with no known cause.

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The *MMWR* series of publications is published by the Epidemiology Program Office, 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].

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized, civilian U.S. population aged ≥18 years. In 2001, the 17 states and USVI included a module in their surveys regarding symptoms of heart attack and stroke and the first action to take if someone were having a heart attack or stroke (*7*). The median response rate was 53.3% (range: 38.9%–70.8%). A total of 61,019 persons responded to questions about whether the following were warning signs of stroke: sudden confusion, trouble speaking or understanding; sudden numbness or weakness of face, arm, or leg; sudden trouble seeing in one or both eyes; sudden trouble walking, dizziness, or loss of balance or coordination; or sudden, severe headache with no known cause. An incorrect sign (i.e., sudden chest pain) was included to assess and account for the possibility that respondents would answer "yes" to all items in a series of closed-ended questions. Respondents also were asked to identify from the following the first action they would take if they thought someone was having a heart attack or stroke: take the person a hospital, advise the person to call a doctor, call 911, call a spouse or family member, or do something else. Data were weighted according to 2001 state population estimates. Prevalence estimates and 95% confidence intervals (CI) were calculated by using SUDAAN to account for the complex survey design.

In 2001, public awareness of the major warning signs of stroke was high (Table 1). Signs recognized most commonly as someone possibly having a stroke were sudden numbness or weakness of the face, arm, or leg (94.1%); sudden confusion, trouble speaking or understanding (87.9%); and sudden trouble walking, dizziness, or loss of balance or coordination (85.9%). Signs least likely recognized as someone possibly having a stroke were sudden trouble seeing in one or both eyes (68.1%) and sudden, severe headache with no known cause (61.3%). Approximately 37.8% of respondents incorrectly reported sudden chest pain was a sign of stroke. A total of 86.1% of respondents reported they would call 911 if they thought someone was having a heart attack or stroke.

Awareness of individual warning signs of stroke varied by state. The proportion of persons recognizing sudden, severe headache with no known cause as a warning sign ranged from 54.9% in Maine to 68.1% in West Virginia. In addition, the proportion of persons responding correctly that a 911 call was the first action to take if the respondent recognized signs that someone was possibly having a heart attack or stroke ranged from 80.4% in Montana to 89.7% in Connecticut.

Recognition of the correct stroke warning signs (i.e., identifying the five major stroke warning signs and being aware that sudden chest pain was not a stroke sign) was low (19.6%) among respondents (Table 2). In addition, only 17.2% of

TABLE 1. Percentage of persons recognizing correct and incorrect stroke warning signs and action taken during a possible stroke, by area — Behavioral Risk Factor Surveillance System, 17 states and the U.S. Virgin Islands, 2001

State	No.*	Sudden confusion or trouble speaking %	(95% CI†)	Sudden numbness/ weakness of face, arm, leg %	(95% CI)	Sudden trouble seeing in one or both eyes %	(95% CI)	Sudden trouble walking, dizziness, loss of balance %	(95% CI)	Sudden, severe headache with no known cause %	(95% CI)	Sudden chest pain (incorrect) %	(95% CI)	Would call 911 if someone were possibly having a heart attack or stroke %	(95% CI)
Alabama	2,722	(90.2)	(±1.3)	(95.4)	(±1.0)	(70.8)	(±1.9)	(87.8)	(±1.4)	(67.9)	(±2.0)	(38.3)	(±2.1)	(85.4)	(±1.5)
Arkansas	2,826	(86.2)	(±1.5)	(92.6)	(±1.1)	(61.1)	(±2.0)	(84.4)	(±1.6)	(58.8)	(±2.0)	(35.9)	(±2.0)	(82.3)	(±1.6)
Colorado	2,009	(85.9)	(±1.8)	(91.9)	(±1.4)	(69.2)	(±2.3)	(85.7)	(±1.8)	(63.3)	(±2.3)	(35.9)	(±2.3)	(87.0)	(±1.6)
Connecticut	7,518	(85.2)	(±1.0)	(92.0)	(±0.9)	(64.0)	(±1.3)	(82.4)	(±1.1)	(55.3)	(±1.3)	(35.9)	(±1.3)	(89.7)	(±0.8)
Hawaii	4,492	(84.8)	(±1.5)	(91.7)	(±1.2)	(71.4)	(±1.8)	(84.8)	(±1.5)	(65.5)	(±1.9)	(58.7)	(±2.0)	(88.4)	(±1.4)
Louisiana	4,732	(84.4)	(±1.2)	(91.2)	(±0.9)	(64.8)	(±1.5)	(82.1)	(±1.2)	(62.9)	(±1.5)	(46.7)	(±1.6)	(81.0)	(±1.2)
Maine	2,375	(88.6)	(±1.5)	(94.7)	(±1.1)	(63.7)	(±2.2)	(84.8)	(±1.6)	(54.9)	(±2.2)	(35.3)	(±2.1)	(83.3)	(±1.7)
Minnesota	3,928	(90.8)	(±1.1)	(96.3)	(±0.7)	(75.1)	(±1.5)	(90.6)	(±1.0)	(64.7)	(±1.7)	(36.1)	(±1.7)	(90.1)	(±1.0)
Montana	3,333	(91.1)	(±1.4)	(94.7)	(±0.9)	(73.1)	(±2.1)	(89.0)	(±1.4)	(65.8)	(±2.3)	(44.4)	(±2.3)	(80.4)	(±1.8)
Ohio	3,316	(88.5)	(±1.5)	(94.0)	(±1.2)	(65.3)	(±2.0)	(84.8)	(±1.6)	(57.6)	(±2.0)	(34.5)	(±2.0)	(86.0)	(±1.6)
South Carolina	3,023	(85.8)	(±1.5)	(94.7)	(±1.0)	(62.6)	(±2.0)	(82.0)	(±1.7)	(56.6)	(±2.0)	(37.2)	(±2.0)	(86.2)	(±1.5)
Tennessee	2,716	(88.6)	(±1.5)	(94.0)	(±1.0)	(69.9)	(±2.0)	(83.4)	(±1.6)	(62.7)	(±2.2)	(37.2)	(±2.1)	(86.8)	(±1.5)
Utah	3,596	(86.4)	(±1.5)	(94.0)	(±1.0)	(66.9)	(±2.0)	(86.7)	(±1.4)	(61.3)	(±2.1)	(33.3)	(±2.0)	(85.5)	(±1.5)
Virginia	2,857	(87.4)	(±1.6)	(94.6)	(±1.1)	(69.9)	(±2.0)	(87.5)	(±1.4)	(61.9)	(±2.1)	(38.7)	(±2.1)	(85.3)	(±1.5)
West Virginia	3,035	(92.6)	(±1.1)	(95.5)	(±0.9)	(72.4)	(±1.8)	(90.1)	(±1.2)	(68.1)	(±1.9)	(44.7)	(±2.0)	(83.1)	(±1.5)
Wisconsin	3,344	(89.9)	(±1.3)	(96.5)	(±0.7)	(71.0)	(±1.9)	(90.0)	(±1.2)	(61.3)	(±2.0)	(36.2)	(±1.9)	(88.6)	(±1.3)
Wyoming	2,994	(87.6)	(±1.3)	(93.2)	(±1.1)	(66.6)	(±1.9)	(87.2)	(±1.3)	(60.4)	(±2.0)	(33.0)	(±1.9)	(84.7)	(±1.5)
U.S. Virgin Islands	2,153	(72.5)	(±2.5)	(86.0)	(±1.9)	(45.2)	(±1.9)	(73.7)	(±2.4)	(47.9)	(±2.7)	(46.2)	(±2.7)	(72.1)	(±2.4)
Total	**61,019**	**(87.9)**	**(±0.4)**	**(94.1)**	**(±0.3)**	**(68.1)**	**(±0.6)**	**(85.9)**	**(±0.4)**	**(61.3)**	**(±0.6)**	**(37.8)**	**(±0.6)**	**(86.1)**	**(±0.4)**

* Number of respondents.
† Confidence interval.

persons were both aware of all correct stroke signs and reported that they would first call 911 if they thought someone was having a heart attack or stroke. Awareness of all correct stroke warning signs and calling 911 was lower in USVI (5.9%) than in the states (range: 11.8% [Hawaii]–21.7% [Alabama]).

Reported by: *JB Croft, PhD, KJ Greenlund, PhD, C Ayala, PhD, NL Keenan, PhD, ZJ Zheng, PhD, GA Mensah, MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

Editorial Note: Immediate emergency transport to the hospital and timely appropriate care can reduce disability and death associated with stroke. The public should be aware of the major warning signs of stroke and take prompt action for a stroke patient. The findings in this report indicate that, in 2001, although recognition of several individual signs was high, recognition of all five major warning signs and the need to call 911 immediately for care was low. These estimates of stroke signs awareness and the need for urgent action suggest that state and local public health efforts must improve public awareness of stroke urgency if the 2010 national health objective (*6*) is to be achieved. State variations in public awareness might reflect past education efforts by some state health departments, the American Stroke Association, and the National Institute of Neurological Disorders and Stroke; however, greater efforts are needed.

TABLE 2. Percentage of persons recognizing all correct stroke warning signs and who reportedly would take action to call 911 if someone were possibly having a stroke, by area — Behavioral Risk Factor Surveillance System,17 states and the U.S. Virgin Islands, 2001

Area	No.*	All correct stroke signs reported (%)	(95% CI†)	All correct signs and action to call 911 reported (%)	(95% CI)
Alabama	2,722	(24.8)	(±1.8)	(21.7)	(±1.7)
Arkansas	2,826	(15.7)	(±1.5)	(13.1)	(±1.3)
Colorado	2,009	(19.8)	(±1.9)	(17.6)	(±1.8)
Connecticut	7,518	(18.9)	(±1.1)	(17.2)	(±1.0)
Hawaii	4,492	(13.3)	(±1.3)	(11.8)	(±1.2)
Louisiana	4,732	(14.7)	(±1.1)	(11.9)	(±1.0)
Maine	2,375	(18.1)	(±1.8)	(15.4)	(±1.6)
Minnesota	3,928	(22.8)	(±1.4)	(21.1)	(±1.4)
Montana	3,333	(18.7)	(±1.8)	(15.0)	(±1.6)
Ohio	3,316	(18.5)	(±1.6)	(16.4)	(±1.5)
South Carolina	3,023	(15.4)	(±1.4)	(13.6)	(±1.3)
Tennessee	2,716	(19.7)	(±1.7)	(16.9)	(±1.6)
Utah	3,596	(18.1)	(±1.6)	(15.8)	(±1.5)
Virginia	2,857	(22.0)	(±1.7)	(19.3)	(±1.6)
West Virginia	3,035	(18.5)	(±1.5)	(15.7)	(±1.4)
Wisconsin	3,344	(22.9)	(±1.7)	(20.4)	(±1.6)
Wyoming	2,994	(19.7)	(±1.5)	(16.9)	(±1.4)
U.S. Virgin Islands	2,153	(7.5)	(±1.3)	(5.9)	(±1.2)
Total	**61,019**	**(19.6)**	**(±0.5)**	**(17.2)**	**(±0.4)**

* Number of respondents.
† Confidence interval.

The findings in this report are subject to at least three limitations. First, BRFSS data are based on self reports and are subject to social desirability and recall biases. Second, using closed-ended questions with fixed responses resulted in higher estimates of stroke sign recognition than using open-ended questions in which a respondent provides an answer but no choices are available to prompt the respondent (*8*); therefore, these estimates for individual signs probably overestimate the true prevalence of awareness. Finally, BRFSS excludes households without telephones.

Stroke is an emergency event requiring immediate action. Friends, relatives, and co-workers of persons at high risk (i.e., those with uncontrolled high blood pressure or a history of transient ischemic attacks, atrial fibrillation, diabetes, stroke, or heart attack) and the general public need to be aware of the major warning signs and be willing to call 911 for emergency help. Education efforts to increase public recognition of stroke warning signs can reduce delays in arriving at an emergency department (*9*). These educational messages should be promoted in community settings (e.g., health-provider offices, schools, and worksites) or on grocery bags, pharmacy bags, or billboards to increase public awareness of major stroke warning signs and action.

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Spina Bifida and Anencephaly Before and After Folic Acid Mandate — United States, 1995–1996 and 1999–2000

Neural tube defects (NTDs) are serious birth defects of the spine (e.g., spina bifida) and the brain (e.g., anencephaly) that occur during early pregnancy, often before a woman knows she is pregnant; 50%–70% of these defects can be prevented if a woman consumes sufficient folic acid daily before conception and throughout the first trimester of her pregnancy (*1*). In 1992, to reduce the number of cases of spina bifida and other NTDs, the U.S. Public Health Service (USPHS) recommended that all women capable of becoming pregnant consume 400 μg of folic acid daily. Three approaches to increase folic acid consumption were cited: 1) improve dietary habits, 2) fortify foods with folic acid, and 3) use dietary supplements containing folic acid (*1*). Mandatory fortification of cereal grain products went into effect in January 1998; during October 1998–December 1999, the reported prevalence of spina bifida declined 31%, and the prevalence of anencephaly declined 16% (*2*). Other studies have indicated similar trends (*3*). To update the estimated numbers of NTD-affected pregnancies and births, CDC recently analyzed data from 23 population-based surveillance systems that include prenatal ascertainment of these birth defects. This report summarizes the results of that analysis, which indicate that the estimated number of NTD-affected pregnancies in the United States declined from 4,000 in 1995–1996 to 3,000 in 1999–2000. This decline in NTD-affected pregnancies highlights the partial success of the U.S. folic acid fortification program as a public health strategy. To reduce further the number of NTD-affected pregnancies, all women capable of becoming pregnant should follow the USPHS recommendation and consume 400 μg of folic acid every day.

The numbers of annual NTD-affected birth defects were calculated from a 24-month prefortification period (1995–1996) and a 24-month postfortification period (1999–2000). To calculate the number of NTD-affected pregnancies (including live births, stillbirths, fetal deaths, and elective terminations), CDC estimated prevalence for spina bifida and anencephaly obtained from eight population-based surveillance systems that collect data systematically from sources that perform diagnostic prenatal ultrasounds as part of their surveillance programs (*2*). The numbers of spina bifida–affected pregnancies and anencephaly-affected pregnancies were calculated separately and then added together to provide an estimated total of NTD-affected pregnancies. Because the eight systems did not separate prenatally ascertained pregnancies from births, fetal deaths, and elective terminations, the

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remaining 15 population-based birth defects surveillance systems, which do not collect prenatally ascertained cases, were used to estimate the number of live births, stillbirths, and fetal deaths (occurring at ≥20 weeks' gestation) affected by NTDs (*2*). Previously published research on the ascertainment of NTD-affected pregnancies indicated that 9%–42% of such pregnancies were diagnosed prenatally (*4*).

The number of live births used as the denominator for calculating the prevalence estimates is published by CDC's National Center for Health Statistics (*5*). In 1999, approximately 6.9 million pregnancies occurred in the United States, resulting in 4.0 million births, 1.3 million induced abortions, and 1.0 million fetal deaths (*6*). In one study, 87% of fetal deaths occurred during the embryonic period, when a diagnosis of an NTD would rarely be made or included in existing birth defect surveillance systems (*7*). Adjusting the denominator for those remaining (13%) fetal losses occurring at 14–20 weeks only slightly modified the prevalence and numbers of cases determined in the calculations.

On the basis of data from the eight systems with prenatal ascertainment, an estimated 2,490 spina bifida–affected pregnancies and 1,640 anencephaly-affected pregnancies occurred annually before fortification of food with folic acid (Table). The total annual average number of NTD-affected pregnancies was 4,130. After fortification, an estimated 1,640 spina bifida–affected pregnancies and 1,380 anencephaly-affected pregnancies occurred, for an annual average of 3,020 NTD-affected pregnancies (a 27% decline). On the basis of data from the 15 systems without prenatal ascertainment, an estimated 1,980 spina bifida–affected births and 970 anencephaly-affected births occurred annually before fortification, for an annual average total of 2,950 NTD-affected live births, stillbirths, and fetal deaths at ≥20 weeks' gestation. After fortification, an estimated 1,340 births affected by spina bifida and 840 births affected by anencephaly occurred, for a total of 2,180 NTD-affected live births and stillbirths per year (a 26% decline). The difference between the number of cases reported from systems with and without prenatal ascertainment suggests that an estimated 1,180 fetal deaths (occurring at <20 weeks) or elective terminations occurred before fortification, compared with 840 after fortification.

Reported by: *P Mersereau, MN, K Kilker, Battelle Centers for Public Health Research and Evaluation; H Carter, MPH, E Fassett, MS, Assoc for Teachers of Preventive Medicine, Atlanta, Georgia. J Williams, MSN, A Flores, MPH, C Prue, PhD, L Williams, MPH, C Mai, MPH, J Mulinare, MD, Div of Birth Defects and Developmental Disabilities, National Center on Birth Defects and Developmental Disabilities, CDC.*

Editorial Note: The estimated decrease in the number of NTD-affected pregnancies after fortification highlights the success of folic acid fortification as a public health strategy. Periodic estimates of the number of NTD-affected pregnancies and births in the United States are needed to track the effects of ongoing and future public health activities. Although behavior changes (e.g., reported increased use of folic acid supplements) provide indirect evidence of the success of the folic acid mandate, the ultimate measure of success is the extent of the decline of NTD-affected pregnancies and births.

The observed decrease in NTD-affected pregnancies of approximately 26% is less than what was estimated from research trials (*1*). More effort is needed if the 2010 national health objective of reducing the occurrence of spina bifida and other NTDs by 50% (objective no. 16-15) is to be achieved (*8*).

The findings in this report are subject to at least two limitations. First, prevalence data were derived from surveillance systems. Because data collection is ongoing and data from the most recent years are likely to be incomplete because of reporting lags, only data through 2000 were used to calculate estimates. Second, because ascertainment of prenatally diagnosed cases varies by surveillance system, the number of cases probably is underestimated. However, prevalence of pregnancies or infants affected by NTDs collected for several years can provide reasonable estimates if the data are not too recent. The calculated prevalence data cover approximately one half of annual U.S. births in addition to prenatally diagnosed and electively terminated cases from eight surveillance systems (*3*).

TABLE. Estimated average annual numbers* of spina bifida and anencephaly cases based on prevalence† from surveillance systems with and without prenatal ascertainment — United States 1995–1996 and 1999–2000

	Prefortification (1995–1996)					Postfortification (1999–2000)				
	Spina bifida		Anencephaly			Spina bifida		Anencephaly		
Category	Prevalence	No.	Prevalence	No.	Total	Prevalence	No.	Prevalence	No.	Total
Systems with prenatal ascertainment§	6.4	2,490	4.2	1,640	**4,130**	4.1	1,640	3.5	1,380	**3,020**
Systems without prenatal ascertainment¶	5.1	1,980	2.5	970	**2,950**	3.4	1,340	2.1	840	**2,180**
Fetal deaths and elective terminations**					**1,180**					**840**

* Per 10,000 live births.
† Numbers of neural tube defect–affected pregnancies and births determined as prevalence multiplied by the average total number of U.S. births during prefortification and postfortification years (1995–1996 and 1999–2000, respectively). Total U.S. births derived from National Vital Statistics System (*5*).
§ Estimated total number of pregnancies, including live births, stillbirths, prenatally diagnosed cases, and elective terminations.
¶ Estimated total number of live births, stillbirths, and fetal deaths at ≥20 weeks.
** Fetal deaths and elective terminations calculated as difference between systems with and without prenatal ascertainment.

For the numbers of NTDs to be reduced, more effort is needed to increase consumption of 400 μg of folic acid each day by reproductive-aged women. Concerns include not only changing attitudes, knowledge, and behaviors of women, but also those of health-care providers regarding consumption of additional folic acid (e.g., folic acid–containing supplements or fortified breakfast cereals). Taking a vitamin with folic acid or eating a breakfast cereal fortified with 400 μg of folic acid per serving every day (*9*) are important components of the birth defects prevention efforts for women of childbearing age, regardless of pregnancy intention.

Health-care providers can have a substantial impact on the increased use of folic acid–containing supplements. A total of 88% of women of reproductive age reported that they would take a folic acid–containing supplement if their health-care providers recommended it; however, only 37% of women reported that their health-care providers currently made that recommendation to them (Porter Novelli International, unpublished data, 2002). Ongoing monitoring of rates of NTDs and the assessment of the level of blood folates will help to quantify the effectiveness of the primary prevention effort for these serious birth defects in the United States. Additional studies will be needed to assess whether future NTD-affected pregnancies are the result of other causes besides folic acid insufficiency or a failure to consume the recommended amount of folic acid.

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Lyme Disease — United States, 2001–2002

Lyme disease (LD) is caused by the spirochete *Borrelia burgdorferi* and is transmitted through the bite of *Ixodes* spp. ticks. CDC began LD surveillance in 1982, and the Council of State and Territorial Epidemiologists designated LD a nationally notifiable disease in 1991. This report summarizes the analysis of 40,792 cases of LD reported to CDC during 2001–2002. The results of that analysis indicate that annual LD incidence increased 40% during this period. The continued emergence of LD underscores the need for persons in areas where LD is endemic to reduce their risk for infection through integrated pest management, landscaping practices, repellent use, and prompt removal of ticks.

For surveillance purposes, a case of LD is defined as physician-diagnosed erythema migrans (EM) ≥5 cm in diameter or at least one objective manifestation of late LD (e.g., musculoskeletal, cardiovascular, or neurologic) with laboratory confirmation of *B. burgdorferi* infection using a two-tiered assay (*1*). National, state, and age-specific incidence was calculated by using U.S. Census Bureau data for 2001 and 2002; incidence by county was calculated by using U.S. Census data for 2000.

In 2001, a total of 17,029 cases of LD were reported to CDC by 43 states and the District of Columbia, yielding a national incidence of 6.0 cases per 100,000 population. In 2002, the number of reported cases increased 40% to 23,763 cases, yielding a national incidence of 8.2 cases per 100,000 population (Table, Figure 1). All states except Hawaii, Montana, and Oklahoma reported cases during 2002.

Twelve states reported an incidence of LD that was higher than the national average in both 2001 and 2002: Connecticut, Delaware, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Wisconsin. These 12 states account for 95% of cases reported nationally (Table, Figure 2).

During 2000–2001, LD case reports increased in 15 states, decreased in 26 states, and remained the same in nine states. During 2001–2002, LD case reports increased in 39 states, decreased in seven states, and remained the same in four states. Only one state, Arkansas, reported a decrease for both 2001 and 2002.

Counties reporting ≥15 cases accounted for >90% of all cases reported in both years. During 2001–2002, the number of counties reporting ≥15 cases increased from 123 to 151. In 2001, a total of 35 counties in seven states (Connecticut, Delaware, Massachusetts, New Jersey, New York, Pennsylvania, and Rhode Island) reported >100 cases. In 2002, a total of 53 counties in 10 states (i.e., the seven states from 2001

TABLE. Number of reported cases of Lyme disease, by area, 1993–2002, and incidence*, 2001–2002 — United States

Area	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total	Incidence 2001	Incidence 2002
Alabama	4	6	12	9	11	24	20	6	10	11	**113**	0.22	0.25
Alaska	0	0	0	0	2	1	0	2	2	3	**10**	0.32	0.47
Arizona	0	0	1	0	4	1	3	2	3	4	**18**	0.06	0.07
Arkansas	8	15	11	27	27	8	7	7	4	3	**117**	0.15	0.11
California	134	68	84	64	154	135	139	96	95	97	**1,066**	0.28	0.28
Colorado	0	1	0	0	0	0	3	0	0	1	**5**	0.00	0.02
Connecticut	1,350	2,030	1,548	3,104	2,297	3,434	3,215	3,773	3,597	4,631	**28,979**	105.02	133.82
Delaware	143	106	56	173	109	77	167	167	152	194	**1,344**	19.09	24.03
District of Columbia	2	9	3	3	10	8	6	11	17	25	**94**	2.97	4.38
Florida	30	28	17	55	56	71	59	54	43	79	**492**	0.26	0.47
Georgia	44	127	14	1	9	5	0	0	0	2	**202**	0.00	0.02
Hawaii	1	0	0	1	0	0	0	0	0	0	**2**	0.00	0.00
Idaho	2	3	0	2	4	7	3	4	5	4	**34**	0.38	0.30
Illinois	19	24	18	10	13	14	17	35	32	47	**229**	0.26	0.37
Indiana	32	19	19	32	33	39	21	23	26	21	**265**	0.43	0.34
Iowa	8	17	16	19	8	27	24	34	36	42	**231**	1.23	1.43
Kansas	54	17	23	36	4	13	16	17	2	7	**189**	0.07	0.26
Kentucky	16	24	16	26	20	27	19	13	23	25	**209**	0.57	0.61
Louisiana	3	4	9	9	13	15	9	8	8	5	**83**	0.18	0.11
Maine	18	33	45	63	34	78	41	71	108	219	**710**	8.39	16.92
Maryland	180	341	454	447	494	659	899	688	608	738	**5,508**	11.31	13.52
Massachusetts	148	247	189	321	291	699	787	1,158	1,164	1,807	**6,811**	18.25	28.11
Michigan	23	33	5	28	27	17	11	23	21	26	**214**	0.21	0.26
Minnesota	141	208	208	251	256	261	283	465	461	867	**3,401**	9.27	17.27
Mississippi	0	0	17	24	27	17	4	3	8	12	**112**	0.28	0.42
Missouri	108	102	53	52	28	12	72	47	37	41	**552**	0.66	0.72
Montana	0	0	0	0	0	0	0	0	0	0	**0**	0.00	0.00
Nebraska	6	3	6	5	2	4	11	5	4	6	**52**	0.23	0.35
Nevada	5	1	6	2	2	6	2	4	4	2	**34**	0.19	0.09
New Hampshire	15	30	28	47	39	45	27	84	129	261	**705**	10.24	20.47
New Jersey	786	1,533	1,703	2,190	2,041	1,911	1,719	2,459	2,020	2,349	**18,711**	23.81	27.35
New Mexico	2	5	1	1	1	4	1	0	1	1	**17**	0.05	0.05
New York	2,818	5,200	4,438	5,301	3,327	4,640	4,402	4,329	4,083	5,535	**44,073**	21.48	28.89
North Carolina	86	77	84	66	34	63	74	47	41	137	**709**	0.50	1.65
North Dakota	2	0	0	2	0	0	1	2	0	1	**8**	0.00	0.16
Ohio	30	45	30	32	40	47	47	61	44	82	**458**	0.39	0.72
Oklahoma	19	99	63	42	45	13	8	1	0	0	**290**	0.00	0.00
Oregon	8	6	20	19	20	21	15	13	15	12	**149**	0.43	0.31
Pennsylvania	1,085	1,438	1,562	2,814	2,188	2,760	2,781	2,343	2,806	3,989	**23,766**	22.84	32.34
Rhode Island	272	471	345	534	442	789	546	675	510	852	**5,436**	48.16	79.65
South Carolina	9	7	17	9	3	8	6	25	6	26	**116**	0.15	0.63
South Dakota	0	0	0	0	1	0	0	0	0	2	**3**	0.00	0.26
Tennessee	20	13	28	24	45	47	59	28	31	28	**323**	0.54	0.48
Texas	48	56	77	97	60	32	72	77	75	139	**733**	0.35	0.64
Utah	2	3	1	1	1	0	2	3	1	5	**19**	0.04	0.22
Vermont	12	16	9	26	8	11	26	40	18	37	**203**	2.94	6.00
Virginia	95	131	55	57	67	73	122	149	156	259	**1,164**	2.17	3.55
Washington	9	4	10	18	11	7	14	9	9	11	**102**	0.15	0.18
West Virginia	50	29	26	12	10	13	20	35	16	26	**237**	0.89	1.44
Wisconsin	401	409	369	396	480	657	490	631	597	1,090	**5,520**	11.05	20.03
Wyoming	9	5	4	3	3	1	3	3	1	2	**34**	0.20	0.40
Total	**8,257**	**13,043**	**11,700**	**16,455**	**12,801**	**16,801**	**16,273**	**17,730**	**17,029**	**23,763**	**153,852**	**5.98**	**8.24**

* Per 100,000 population.

plus Maine, Minnesota, and New Hampshire) reported >100 cases. For both 2001 and 2002, the highest incidence of LD was reported from Columbia County, New York, with 1,026 and 1,583 cases per 100,000 population, respectively.

Combining data for both years, information on patient age and sex was available for 99% of patients. Patient ages ranged from <1 to 101 years and followed a bimodal distribution, with incidence peaks among children aged 5–14 years (9.9 cases per 100,000 population per year) and adults aged 50–59 years (9.2 cases per 100,000 population per year). Overall, 21,525 (53%) of 40,440 patients were male. Demographic features differed for states with above- and below-average incidence. Among 12 states with above-average incidence, the modal age of patients was 6 years; 54% were males. Among 38 states with below-average incidence, the modal age of patients was 44 years; 47% were males.

FIGURE 1. Number of reported cases of Lyme disease, by year — United States, 1991–2002

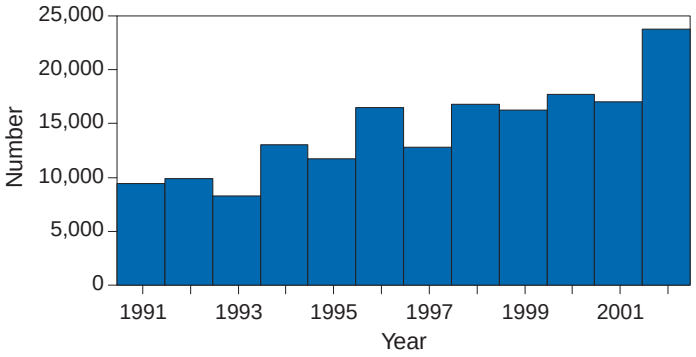
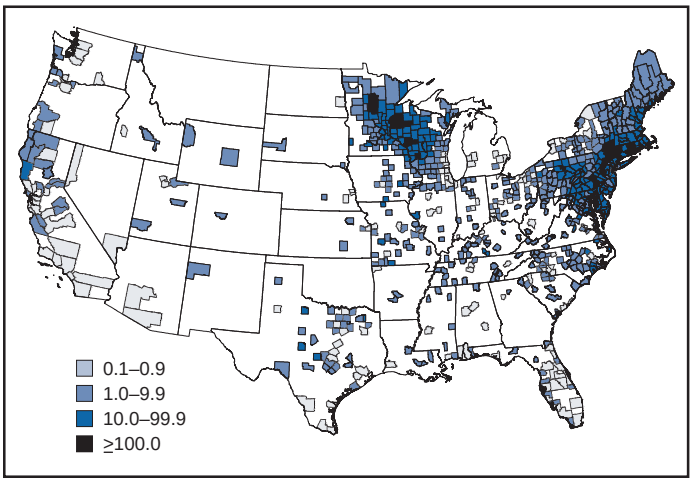


FIGURE 2. Incidence* of Lyme disease, by county of residence — United States, 2002



* Per 100,000 population.

A total of 83% of reports for 2001 and 2002 had a date of illness onset provided. Patients were most likely to have illness in May (7%), June (28%), July (31%), or August (12%). Fewer than 7% were reported to have illness onset during December–March. Among 31,120 patients for whom at least one clinical finding was indicated, a history of EM was reported for 21,126 (68%) patients, arthritis for 10,126 (33%) patients, Bell's palsy for 2,510 (8%) patients, and radiculopathy for 1,009 (3%) patients. Meningitis, encephalitis, and heart block were reported in ≤1% of patients.

Reported by: *State and District of Columbia health departments. RM Bacon, MS, PS Mead, MD, JL Kool, MD, AS Postema, MPH, Div of Vector-Borne Infectious Diseases, National Center for Infectious Diseases; JE Staples, MD, EIS Officer, CDC.*

Editorial Note: During 2002, a total of 23,763 LD cases were reported to CDC, more than in any previous year. Analysis of 2001 and 2002 data indicates that, as in previous years, most cases occur in northeastern, mid-Atlantic, and north central states, and the largest proportion of cases are reported among persons aged 5–14 years and 50–59 years. Factors potentially contributing to the increase in reported cases include growing populations of deer that support the *Ixodes* tick vector, increased residential development of wooded areas, tick dispersal to new areas, improved disease recognition in areas where LD is endemic, and enhanced reporting.

Surveillance for LD is subject to several limitations. Studies from the early 1990s suggested that LD cases were underreported by six to 12-fold in some areas where LD is endemic (*2,3*); the current degree of underreporting for national data is unknown. In addition, differences in the demographics of reported cases among states with above- and below-average incidence suggest variation in diagnostic and reporting practices among states. Clinicians are reminded that the LD case definition was developed for surveillance purposes and might not be appropriate for clinical management of individual patients (*1*).

In February 2002, the only Food and Drug Administration–approved LD vaccine for humans was withdrawn from the market, reportedly because of poor sales. However, several other effective preventive measures remain available to persons living in areas where LD is endemic (*4*). Personal protective measures, such as repellent use and routine tick checks, are key components of primary prevention (Box). Removing infected ticks within 48 hours of attachment can reduce the likelihood of transmission (*5*), and prompt antimicrobial prophylaxis of tick bites, although controversial, might be beneficial under certain circumstances (*6*). Exposure to ticks in peridomestic and recreational areas can be reduced 50%–90% through simple landscaping practices, such as removing brush and leaf litter or creating a buffer zone of wood chips or gravel between forest and lawn or recreational areas (*4,7*) (Figure 3). Correctly timed applications of pesticides to yards once or twice a year can decrease the number of nymphal ticks 68%–100% (*8,9*). In addition to these interventions, several novel approaches to LD prevention are under investigation or will soon be available. These include bait boxes and "four-poster" devices that deliver acaricides to rodents and deer without harming them, and the use of biologic agents, such as fungi that kill *Ixodes* ticks (*4,10*).

BOX. Epidemiology, diagnosis, treatment, and prevention of Lyme disease (LD)

Epidemiology
- LD is a zoonotic disease caused by the spirochete *Borrelia burgdorferi* and is transmitted to humans through the bite of *Ixodes* spp. ticks.
- Cases in the United States are reported most frequently by northeastern, mid-Atlantic, and north central states.

Clinical findings
- Early localized LD occurs 3–30 days after the tick bite; symptoms include erythema migrans (EM), often accompanied by mild systemic symptoms such as muscle aches, fever, headache, and lymphadenopathy.
- Early disseminated disease occurs 1–4 months after the tick bite; symptoms include cranial-nerve facial palsy, meningitis, radiculopathy, and heart block.
- Late disease usually begins 3–4 months after the tick bite; symptoms include arthritis in large joints, severe headaches, encephalitis, and cognitive disorders.

Diagnosis
- Diagnosis is based primarily on clinical findings.
- Laboratory confirmation is most valuable in patients with disseminated disease. Patients with early LD or EM often have false-negative tests.
- When indicated, CDC recommends a two-tiered assay, involving a screening test (i.e., enzyme-linked immunosorbent assay or immunofluorescent assay) and confirmation test (e.g., Western blot).
- *Borrelia* spp. also can be cultured by using a special medium (e.g., modified Barbour-Stoenner-Kelly medium).
- Polymerase chain reaction has not been standardized for routine diagnosis of LD.

Treatment*
- Early localized LD is treated by administering doxycycline or amoxicillin orally for 14–21 days.
- Early disseminated and late LD are treated for 14–28 days with either oral or parental therapy, depending on symptoms; ceftriaxone is the preferred parental therapy.

Reporting
- Cases should be reported to the state health department.
- CDC's surveillance case definition† is for public health purposes and should not be used as absolute diagnostic criteria.

Prevention
- No LD vaccine for humans is available in the United States.
- Prevention should focus on reducing exposure to ticks through landscaping practices, pesticides, and personal protective measures (e.g., tick checks and repellent).

* Detailed treatment guidelines in *Clinical Infectious Disease* 2000;31:S1–S14.
† Available at http://www.cdc.gov/ncidod/dvbid/lyme/casedef2.htm.

FIGURE 3. Exposure to ticks can be reduced by creating a buffer zone of wood chips or gravel between forest and lawn or recreational areas

Photo/KC Stafford, Connecticut Agricultural Experiment Station

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Impact of Heat Waves on Mortality — Rome, Italy, June–August 2003

During June–August 2003, record high temperatures were reported across Europe; Italy was one of the countries most affected. To assess the impact of the summer 2003 heat waves on mortality, the Rome Local Health Authority analyzed temperature and daily mortality data for June–August 2003. This report summarizes the results of that analysis, which indicated that an estimated 1,094 excess deaths occurred during three major heat wave periods in 2003, an increase of 23% compared with the average annual number of deaths during 1995–2002. Improvements have been made in warning systems and prevention programs that target persons at high risk to reduce excess mortality during future heat waves.

Data on daily deaths during June–August 2003 were obtained from the Mortality Registry Office of Rome. Deaths caused by injury and poisoning (*International Classification of Deaths, Ninth Revision*: 800–999) and deaths that occurred outside Rome were excluded from the analysis. Maximum apparent temperature (MAT)* was defined as an index of human discomfort on the basis of air temperature and dew point temperature (*1*). A major heat wave period was defined as MAT >90th annual percentile and an increase of 4° F (2° C) compared with the previous day. Daily excess mortality was defined as the difference between the number of deaths observed on a given day and the smoothed average daily value for the reference period (1995–2002). Confidence limits were determined by assuming a Poisson distribution. Association between excess mortality and socioeconomic status was evaluated for the census tract of residence by using a deprivation index based on education, occupation, unemployment, number of family members, overcrowding, and household ownership (*2*).

During June–August 2003, the mean daily temperature was 5° F (3° C) above the mean for the reference period, and MAT was 95° F (35° C), compared with 88° F (31° C) for the reference period. During June–August 2003, MAT was >91° F (>33° C) (90th annual percentile) on 55 days (72%), compared with 35% of days during the reference period. Three major heat wave periods occurred during June–August 2003. The first episode (June 9–July 2) registered a mean MAT of 97° F (36° C), with peaks of 100° F (38° C) and 104° F (40° C); the second episode (July 10–30) had a mean MAT of 97° F (36° C) and registered two peaks >104° F (>40° C); and the third episode (August 3–13) was shorter but registered a mean MAT of 100° F (38° C), with 3 days >104° F (>40° C).

* Calculated as $-2.653 + 0.994Ta + 0.0153 (Td^2)$.

TABLE. Number and daily mean of deaths reported and expected and number of estimated excess deaths, by selected characteristics — Rome, Italy, June–August 2003

Characteristic	No. deaths reported		No. deaths expected		Estimated no. excess deaths	Variation*	
	Total	Daily mean	Total	Daily mean		%	(95% CI†)
Age group (yrs)§	**5,894**	64.1	**4,800**	52.2	1,094	22.8	(19.7–25.9)
0–64	**840**	9.1	**870**	9.5	-30	-3.5	(-10.0–3.1)
65–74	**1,150**	12.5	**1,084**	11.8	66	6.1	(0.0–12.2)
75–84	**1,919**	20.9	**1,484**	16.1	435	29.3	(23.6–35.1)
≥85	**1,985**	21.6	**1,362**	14.8	623	45.7	(39.3–52.1)
Sex§							
Male	**2,689**	29.2	**2,379**	25.9	310	13.0	(8.7–17.3)
Female	**3,205**	34.8	**2,421**	26.3	784	32.4	(27.8–37.0)
Location of death¶							
In hospital	**2,223**	36.4	**2,088**	34.2	135	6.4	(2.0–10.9)
Out of hospital	**1,170**	19.2	**954**	15.6	216	22.6	(15.6–29.7)
Socioeconomic level¶**							
High	**824**	13.5	**778**	12.8	46	5.9	(-1.3–13.2)
Medium high	**1,227**	20.1	**1,195**	19.6	32	2.7	(-3.1–8.4)
Medium low	**1,144**	18.8	**1,016**	16.6	128	12.7	(6.1–19.2)
Low	**789**	12.9	**670**	11.0	119	17.8	(9.5–26.0)

* Number of excess deaths multiplied by 100, divided by number of deaths expected.
† Confidence interval.
§ Data for June–August 2003.
¶ Data for June–July 2003.
** A factor analysis was used that divided persons on the basis of the 20th, 50th, and 80th percentiles into four socioeconomic categories as shown.

Daily mortality trends followed temperature trends, with peaks in deaths occurring on the same day as or ≤2 days from peaks in MAT. During June–August 2003, both temperatures and mortality trends were consistently above the long-term trend, and total mortality was 22.8% higher than expected, with an estimated 1,094 excess deaths (Table). The first heat wave was associated with an increase in mortality of 352, with peaks in mortality of 87 deaths on June 14 (daily excess mortality: 58%) and 88 deaths on June 26 (daily excess mortality: 54%), corresponding to peaks in MAT of 100° F (38° C) and 104° F (40° C), respectively. During the second heat wave, 319 excess deaths occurred; a peak in mortality (89 deaths) occurred on July 25 (daily excess mortality: 68%), with a lag of 1 day. A second peak in mortality (84 deaths) occurred on July 27 (daily excess mortality: 55%), coinciding with the peak MAT (106° F [41° C]). During the third heat wave, 170 excess deaths were reported. Peaks in mortality occurred on August 8 and August 12, with 77 (excess mortality: 48%) and 78 (excess mortality: 59%) daily deaths registered ≤2 days after peaks in MAT (102° F [39° C] and 106° F [41° C]).

Excess mortality occurred only among persons aged ≥65 years and increased with age, with the greatest impact on persons aged ≥85 years (623 deaths; excess mortality: 45.7%) (Table). The greatest increase in mortality occurred among females (estimated daily excess: 35%), reflecting the higher proportion of women aged ≥85 years (age distribution: women, 72%; men, 28%). A higher excess mortality was observed for out-of-hospital deaths (22.6%) than for in-hospital deaths (6.4%). Excess mortality was associated with socioeconomic status, with an excess mortality of 5.9% among persons in the highest level and 17.8% among those in the lowest level (Table).

Reported by: *P Michelozzi, MS, F de' Donato, MS, G Accetta, PhD, F Forastiere, PhD, M D'Ovidio, MS, C Perucci, MD, Dept of Epidemiology, Rome Local Health Authority, Italy. L Kalkstein, PhD, Center for Climatic Research, Univ of Delaware, Newark, New Jersey.*

Editorial Note: During summer 2003, the early onset of hot weather, unusually high temperatures, and prolonged heat-stress conditions caused extreme peaks in mortality throughout Europe. The total number of heat-related deaths that occurred during the summer 2003 heat wave is unknown. However, excess mortality data from five countries (France, Italy, Portugal, Spain, and the United Kingdom) indicate that the potential impact of heat waves on health was underestimated and that health authorities were unprepared to cope with this emergency.

During June–August 2003, record excess mortality occurred in Rome during three intense heat waves. The greatest increase in mortality occurred among persons aged ≥65 years living in the most economically disadvantaged areas of the city. The high number of excess deaths in this population might reflect the number of elderly persons of low socioeconomic status who remained in the city during the summer. Other

socioeconomic factors that might have an impact on health include poor housing quality, absence of air conditioning, lack of access to social and health services, and individual behaviors (e.g., alcohol consumption and taking medication). Although the third heat wave was shorter, it was more intense, with higher temperatures. Lower peaks in mortality observed during the third wave might be attributed to a reduction in the susceptible population, as observed in other cities (*3*).

Episodes of heat-related mortality in Rome have been reported in previous summers (*4*). In 1999, Rome was included in a World Meteorological Organization project on cities at high risk for heat-related morbidity and mortality. In 2002, the city implemented a heat health-watch warning system (HHWWS) for the prevention of heat-related deaths during heat waves (*9,10*) and a public health intervention program targeted at persons at high risk (e.g., persons aged ≥65 years and those suffering from chronic disease) during extreme weather conditions (*5,6*). In 2001, of the estimated 2.7 million persons living in Rome, 486,000 (18%) were aged ≥65 years (National Italian Institute of Statistics, unpublished data, 2001), and the mean annual number of deaths recorded was 26,000 (*7,8*).

Rome's HHWWS analyzes meteorological forecast data during May–September to predict oppressive air masses and related excess mortality and issues an alarm when these two conditions are forecast. The alarm is upgraded to an emergency when these conditions persist for >2 consecutive days. During summer 2003, the HHWWS called an alarm on 23 days (25%) and an emergency on 20 days (22%). During heat waves, warning bulletins are posted on a municipal website and disseminated to health authorities. Guidelines for the general population and for patients suffering from specific diseases were developed in collaboration with the Association for General Practitioners. The plan is activated on alarm and emergency days to alert public and private subjects (e.g., clinicians, nursing homes, social centers for the elderly, and hospitals) and to provide information to the public (*3*). A telephone assistance service for elderly persons is available 24 hours a day, 7 days a week. This service provides regular check-in calls, counseling, home delivery of food and medicine, and other services to registered users. A network of social services, volunteers, and street units trained to handle emergencies is activated during the summer months. The Rome Municipality continuously informs elderly persons on the location of social centers and public buildings with air conditioning.

In Italy, as in most of Europe, the increasing proportion of elderly persons and the possible effects of global warming could make the susceptible population more vulnerable to heat waves, leading to increased heat-related mortality. To prepare for possible heat waves in 2004, Rome health authorities have improved the technical capacity of the HHWWS and strengthened municipal prevention programs targeting susceptible populations.

Acknowledgment

The authors acknowledge the assistance of the National Center for Environmental Health, CDC.

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Notice to Readers

Alcohol and Other Drug-Related Birth Defects Awareness Week, May 9–15, 2004

The National Council on Alcoholism and Drug Dependence has designated May 9–15, 2004, as Alcohol and Other Drug-Related Birth Defects Awareness Week. This week is a reminder that alcohol and drug use during pregnancy can be detrimental to a mother and her child. Prenatal alcohol use can result in a spectrum of adverse conditions. One of the most severe outcomes is fetal alcohol syndrome (FAS), which includes facial malformations, growth deficits, and central nervous system problems.

Many children do not meet the clinical diagnosis for FAS but experience neurodevelopmental deficits, growth problems, and selected birth defects as a result of prenatal alcohol exposure. Various terms have been used to describe these conditions. Recently, a panel sponsored by the National Organization on FAS (NOFAS) met to reach consensus on the definition of Fetal Alcohol Spectrum Disorders (FASD). Panel participants included representatives from key U.S. federal agencies and Health Canada. FASD is an umbrella term describing the range of effects that can occur in a person whose mother drank alcohol during pregnancy. These effects can include physical, mental, behavioral, and/or learning disabilities with possible lifelong implications. The term FASD is not intended for use as a clinical diagnosis.

The U.S. Preventive Services Task Force recently released a report calling for the use of screening and behavioral counseling interventions to reduce alcohol misuse among adults, including pregnant women, in primary care settings (*1*). Implementation of such evidence-based programs targeting women of childbearing age is a public health imperative for preventing prenatal alcohol exposure. Additional information is available from CDC at http://www.cdc.gov/ncbddd/fas, the National Institute on Alcohol Abuse and Alcoholism at http://www.niaaa.nih.gov, the Substance Abuse and Mental Health Services Administration at http://www.samhsa.gov, and NOFAS at http://www.nofas.org.

Reference

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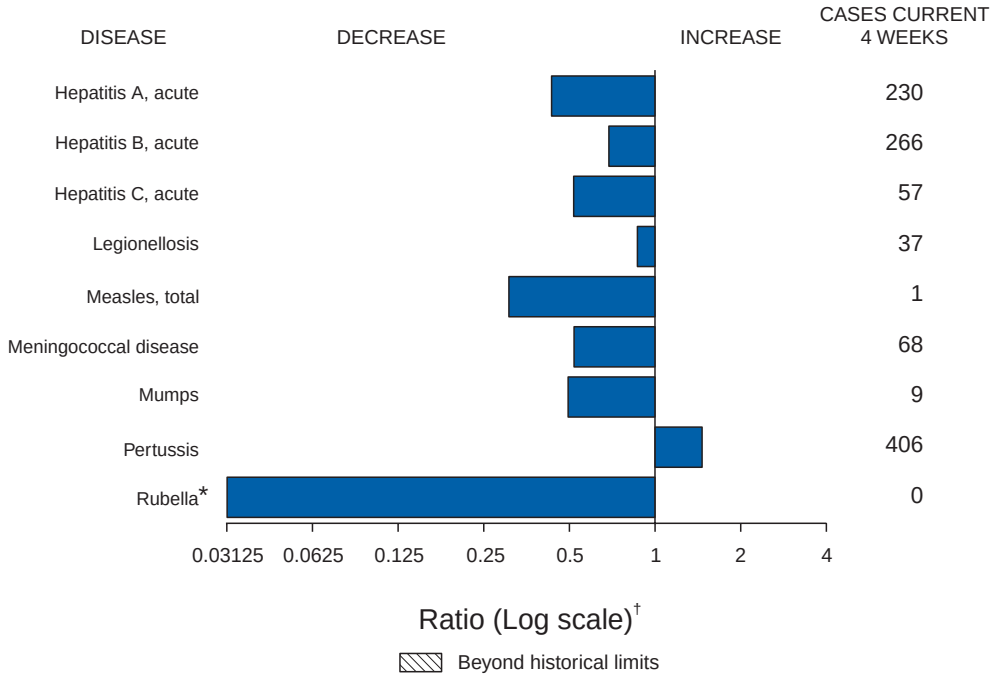
Erratum: Vol. 53, No. 15

In the report, "Workers' Memorial Day, April 28, 2004," the description of the establishment of the National Institute for Occupational Safety and Health (NIOSH) was inaccurate. NIOSH was created in 1970 within the U.S. Department of Health and Human Services (then the U.S. Department of Health, Education, and Welfare). NIOSH became part of CDC in 1973.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals May 1, 2004, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 17 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 May 1, 2004 (17th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	18	33
Botulism:	-	-	HIV infection, pediatric†§	52	80
foodborne	5	5	Measles, total	7¶	16**
infant	21	24	Mumps	50	72
other (wound & unspecified	3	6	Plague	-	-
Brucellosis†	23	25	Poliomyelitis, paralytic	-	-
Chancroid	10	18	Psittacosis†	2	3
Cholera	2	1	Q fever†	9	21
Cyclosporiasis†	36	13	Rabies, human	-	-
Diphtheria	-	-	Rubella	14	4
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE)†	12	16	SARS-associated coronavirus disease† ††	-	6
human monocytic (HME)†	13	12	Smallpox† §§	-	NA
human, other and unspecified	-	5	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† §§	4	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† §§	-	NA
eastern equine†	-	-	Streptococcal toxic-shock syndrome†	35	76
Powassan†	-	-	Tetanus	3	1
St. Louis†	2	-	Toxic-shock syndrome	40	44
western equine†	-	-	Trichinosis	2	-
Hansen disease (leprosy)†	23	28	Tularemia†	6	4
Hantavirus pulmonary syndrome†	3	5	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 26, 2004.
¶ Of seven cases reported, four were indigenous, and three were imported from another country.
** Of 16 cases reported, 11 were indigenous, and five 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 May 1, 2004, and April 26, 2003 (17th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		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	8,910	13,563	260,600	278,610	1,528	1,138	751	596	5	-
NEW ENGLAND	311	485	9,195	9,018	-	-	41	41	-	-
Maine	5	23	564	613	N	N	8	2	-	-
N.H.	11	12	535	508	-	-	12	5	-	-
Vt.	7	6	355	346	-	-	5	6	-	-
Mass.	84	226	4,571	3,378	-	-	10	21	-	-
R.I.	32	29	1,114	1,060	-	-	1	5	-	-
Conn.	172	189	2,056	3,113	N	N	5	2	-	-
MID. ATLANTIC	1,283	2,988	34,434	33,592	-	-	122	93	-	-
Upstate N.Y.	134	140	6,980	5,833	N	N	29	23	-	-
N.Y. City	380	1,623	10,185	11,436	-	-	27	35	-	-
N.J.	386	540	4,404	4,711	-	-	7	3	-	-
Pa.	383	685	12,865	11,612	N	N	59	32	-	-
E.N. CENTRAL	806	1,232	43,992	51,143	5	2	172	140	1	-
Ohio	229	155	9,773	14,179	-	-	48	20	1	-
Ind.	117	178	5,828	5,486	N	N	25	9	-	-
Ill.	279	556	10,995	15,948	-	-	12	24	-	-
Mich.	132	277	13,021	9,924	5	2	41	26	-	-
Wis.	49	66	4,375	5,606	-	-	46	61	-	-
W.N. CENTRAL	228	209	15,556	16,095	4	1	84	53	1	-
Minn.	48	56	2,764	3,563	N	N	36	27	-	-
Iowa	11	27	1,087	1,624	N	N	12	7	-	-
Mo.	107	83	6,409	5,853	3	1	15	6	1	-
N. Dak.	10	-	369	430	N	N	-	1	-	-
S. Dak.	-	4	849	784	-	-	9	9	-	-
Nebr.¶	6	18	1,590	1,533	1	-	3	2	-	-
Kans.	46	21	2,488	2,308	N	N	9	1	-	-
S. ATLANTIC	3,510	3,883	48,781	51,940	-	1	161	87	2	-
Del.	42	80	1,915	2,044	N	N	-	1	-	-
Md.	343	407	6,264	5,258	-	1	8	7	-	-
D.C.	149	382	1,127	1,147	-	-	1	-	-	-
Va.	141	297	7,430	5,696	-	-	19	9	-	-
W. Va.	30	22	883	825	N	N	2	-	-	-
N.C.	243	438	9,037	7,536	N	N	31	10	-	-
S.C.¶	204	213	6,182	4,942	-	-	5	2	2	-
Ga.	509	492	2,945	10,948	-	-	54	31	-	-
Fla.	1,849	1,552	12,998	13,544	N	N	41	27	-	-
E.S. CENTRAL	446	619	16,084	18,098	N	N	35	40	-	-
Ky.	42	67	1,836	2,734	N	N	9	9	-	-
Tenn.	187	269	7,279	6,165	N	N	12	12	-	-
Ala.	127	142	3,503	4,841	-	-	9	16	-	-
Miss.	90	141	3,466	4,358	N	N	5	3	-	-
W.S. CENTRAL	1,307	1,632	34,426	34,375	1	6	22	13	1	-
Ark.	43	47	2,668	2,197	1	-	8	2	-	-
La.	281	192	8,215	6,052	N	N	-	-	1	-
Okla.	37	74	3,193	3,384	N	N	7	3	-	-
Tex.	946	1,319	20,350	22,742	-	6	7	8	-	-
MOUNTAIN	257	524	13,157	16,931	945	803	37	27	-	-
Mont.	-	8	409	723	N	N	4	3	-	-
Idaho	2	6	981	864	N	N	4	6	-	-
Wyo.	2	4	357	339	-	-	2	1	-	-
Colo.	48	127	2,542	4,364	N	N	19	6	-	-
N. Mex.	20	42	1,459	2,472	7	1	1	1	-	-
Ariz.	109	217	5,148	5,113	908	787	5	2	-	-
Utah	17	29	845	1,067	10	2	1	6	-	-
Nev.	59	91	1,416	1,989	20	13	1	2	-	-
PACIFIC	762	1,991	44,975	47,418	571	325	77	102	-	-
Wash.	127	160	5,639	5,029	N	N	4	-	-	-
Oreg.	53	87	1,979	2,498	-	-	10	10	-	-
Calif.	543	1,702	36,100	36,930	571	325	62	92	-	-
Alaska	8	9	1,246	1,191	-	-	-	-	-	-
Hawaii	31	33	11	1,770	-	-	1	-	-	-
Guam	1	1	-	-	-	-	-	-	-	-
P.R.	143	325	553	735	N	N	N	N	-	-
V.I.	2	9	20	113	-	-	-	-	-	-
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 monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 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 May 1, 2004, and April 26, 2003 (17th Week)*

Reporting area	*Escherichia coli*, 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	322	325	40	61	38	21	4,576	4,865	90,872	104,044
NEW ENGLAND	22	18	2	9	7	2	411	369	2,184	2,282
Maine	-	3	-	-	-	-	43	37	90	56
N.H.	3	5	1	1	-	-	13	18	41	43
Vt.	-	-	-	-	-	-	26	26	26	30
Mass.	7	4	-	4	7	2	215	187	1,065	857
R.I.	2	1	-	-	-	-	33	33	311	314
Conn.	10	5	1	4	-	-	81	68	651	982
MID. ATLANTIC	22	37	1	2	9	7	1,009	1,020	11,140	13,172
Upstate N.Y.	8	10	1	-	3	4	331	241	2,359	2,244
N.Y. City	4	3	-	-	-	-	308	385	3,240	4,382
N.J.	2	4	-	-	2	-	91	145	1,711	2,922
Pa.	8	20	-	2	4	3	279	249	3,830	3,624
E.N. CENTRAL	61	84	10	14	4	4	550	875	17,656	22,206
Ohio	18	17	-	9	4	4	236	254	4,806	7,266
Ind.	9	9	-	-	-	-	-	-	2,039	2,089
Ill.	10	20	-	1	-	-	60	267	4,533	6,828
Mich.	11	16	2	-	-	-	171	205	5,057	4,084
Wis.	13	22	8	4	-	-	83	149	1,221	1,939
W.N. CENTRAL	61	43	8	7	7	6	559	457	5,084	5,351
Minn.	23	15	4	5	-	-	191	133	1,052	874
Iowa	9	4	-	-	-	-	72	64	160	324
Mo.	8	15	4	1	2	-	165	153	2,595	2,775
N. Dak.	2	1	-	-	3	1	10	14	39	19
S. Dak.	2	2	-	-	-	-	19	14	90	50
Nebr.	9	5	-	1	-	-	50	43	318	486
Kans.	8	1	-	-	2	5	52	36	830	823
S. ATLANTIC	33	24	14	19	4	1	763	736	21,852	25,335
Del.	-	-	N	N	N	N	32	15	637	812
Md.	3	1	-	-	-	1	28	36	2,689	2,491
D.C.	1	1	-	-	-	-	22	13	738	816
Va.	1	4	5	-	-	-	120	76	2,983	2,694
W. Va.	1	1	-	-	-	-	9	8	255	273
N.C.	-	-	4	8	-	-	N	N	4,905	4,133
S.C.	1	-	-	-	-	-	16	36	2,848	2,870
Ga.	11	6	2	2	-	-	195	246	1,510	5,268
Fla.	15	11	3	9	4	-	341	306	5,287	5,978
E.S. CENTRAL	11	15	1	-	5	-	94	98	7,225	8,916
Ky.	4	4	1	-	3	-	N	N	762	1,145
Tenn.	3	8	-	-	2	-	42	44	2,609	2,642
Ala.	1	2	-	-	-	-	52	54	2,045	2,929
Miss.	3	1	-	-	-	-	-	-	1,809	2,200
W.S. CENTRAL	18	14	-	2	1	-	78	69	12,746	13,792
Ark.	2	2	-	-	-	-	36	39	1,241	1,213
La.	-	1	-	-	-	-	8	6	3,729	3,441
Okla.	4	2	-	-	-	-	34	24	1,380	1,290
Tex.	12	9	-	2	1	-	-	-	6,396	7,848
MOUNTAIN	50	36	3	7	1	1	381	388	3,227	3,556
Mont.	2	-	-	-	-	-	11	15	13	47
Idaho	6	9	1	4	-	-	49	46	25	29
Wyo.	-	1	-	-	-	-	4	5	19	16
Colo.	24	14	1	1	1	1	124	116	834	980
N. Mex.	3	1	-	2	-	-	17	17	179	418
Ariz.	4	8	N	N	N	N	69	69	1,458	1,348
Utah	6	3	-	-	-	-	76	81	102	91
Nev.	5	-	1	-	-	-	31	39	597	627
PACIFIC	44	54	1	1	-	-	731	853	9,758	9,434
Wash.	8	16	-	-	-	-	72	68	863	933
Oreg.	7	10	1	1	-	-	124	91	248	308
Calif.	23	28	-	-	-	-	485	641	8,432	7,680
Alaska	1	-	-	-	-	-	22	27	214	179
Hawaii	5	-	-	-	-	-	28	26	1	334
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	-	29	7	33	52	80
V.I.	-	-	-	-	-	-	-	-	4	31
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 May 1, 2004, and April 26, 2003 (17th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	698	603	6	8	38	43	75	75	1,736	2,030
NEW ENGLAND	58	45	1	1	3	3	2	1	313	65
Maine	6	2	-	-	-	-	-	1	8	1
N.H.	11	5	-	-	2	-	-	-	6	4
Vt.	4	6	-	-	-	-	-	-	5	3
Mass.	25	21	1	1	-	3	2	-	263	34
R.I.	1	1	-	-	-	-	-	-	6	4
Conn.	11	10	-	-	1	-	-	-	25	19
MID. ATLANTIC	134	101	-	-	3	1	19	14	197	417
Upstate N.Y.	49	30	-	-	3	1	2	3	28	33
N.Y. City	22	17	-	-	-	-	5	4	68	154
N.J.	25	21	-	-	-	-	2	2	42	71
Pa.	38	33	-	-	-	-	10	5	59	159
E.N. CENTRAL	109	96	-	1	9	3	16	20	152	197
Ohio	52	23	-	-	2	-	9	5	17	34
Ind.	17	14	-	-	3	1	1	-	9	12
Ill.	19	44	-	-	-	-	5	13	54	63
Mich.	9	7	-	1	4	2	-	-	56	64
Wis.	12	8	-	-	-	-	1	2	16	24
W.N. CENTRAL	33	41	1	-	2	4	2	4	56	56
Minn.	13	16	-	-	2	4	-	-	11	14
Iowa	1	-	1	-	-	-	-	-	13	13
Mo.	10	16	-	-	-	-	1	4	18	13
N. Dak.	2	1	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	2	-
Nebr.	4	-	-	-	-	-	-	-	7	3
Kans.	3	7	-	-	-	-	1	-	4	13
S. ATLANTIC	188	121	-	-	7	4	16	8	328	484
Del.	10	-	-	-	-	-	4	-	6	3
Md.	30	27	-	-	2	3	-	-	52	48
D.C.	-	-	-	-	-	-	-	-	3	14
Va.	12	12	-	-	-	-	-	2	24	31
W. Va.	8	3	-	-	-	-	3	-	2	5
N.C.	19	10	-	-	1	-	-	-	22	26
S.C.	-	2	-	-	-	-	-	-	12	22
Ga.	64	25	-	-	-	-	9	4	127	193
Fla.	45	42	-	-	4	1	-	2	80	142
E.S. CENTRAL	24	40	-	1	-	2	5	5	55	58
Ky.	-	3	-	-	-	1	-	-	9	10
Tenn.	16	20	-	-	-	1	4	3	31	26
Ala.	8	15	-	1	-	-	1	1	5	9
Miss.	-	2	-	-	-	-	-	1	10	13
W.S. CENTRAL	25	35	-	-	3	4	-	3	112	189
Ark.	-	4	-	-	-	1	-	-	30	10
La.	3	12	-	-	-	1	-	3	2	17
Okla.	22	19	-	-	3	2	-	-	15	4
Tex.	-	-	-	-	-	-	-	-	65	158
MOUNTAIN	97	71	2	3	11	10	11	9	171	130
Mont.	-	-	-	-	-	-	-	-	3	1
Idaho	2	-	-	-	-	-	1	-	8	6
Wyo.	-	-	-	-	-	-	-	-	1	1
Colo.	29	14	-	-	-	-	5	4	26	16
N. Mex.	17	11	-	-	4	2	2	1	4	8
Ariz.	37	36	-	3	6	5	1	2	102	74
Utah	6	6	2	-	-	1	1	2	22	9
Nev.	6	4	-	-	1	2	1	-	5	15
PACIFIC	30	53	2	2	-	12	4	11	352	434
Wash.	3	3	2	-	-	2	1	1	16	22
Oreg.	18	16	-	-	-	-	-	3	21	27
Calif.	3	31	-	2	-	10	2	7	306	378
Alaska	1	-	-	-	-	-	1	-	3	4
Hawaii	5	3	-	-	-	-	-	-	6	3
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	7	25
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 May 1, 2004, and April 26, 2003 (17th 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	1,794	2,133	370	382	315	328	126	149	2,045	2,369
NEW ENGLAND	75	107	1	-	5	11	5	5	179	223
Maine	1	-	-	-	-	-	1	-	30	-
N.H.	16	4	-	-	-	-	1	1	11	5
Vt.	1	1	1	-	-	1	-	-	8	3
Mass.	56	76	-	-	2	5	-	2	62	121
R.I.	1	3	-	-	1	1	1	-	18	48
Conn.	-	23	U	U	2	4	2	2	50	46
MID. ATLANTIC	257	294	35	44	72	64	27	30	1,564	1,796
Upstate N.Y.	30	23	3	6	15	19	8	6	594	581
N.Y. City	20	106	-	-	3	7	3	7	-	3
N.J.	117	79	-	-	18	5	7	6	348	406
Pa.	90	86	32	38	36	33	9	11	622	806
E.N. CENTRAL	128	152	19	54	72	75	15	15	32	61
Ohio	51	47	2	3	36	30	7	2	26	10
Ind.	8	4	1	-	5	4	1	1	-	4
Ill.	-	-	2	11	2	13	-	4	-	-
Mich.	69	80	14	39	27	22	6	6	-	-
Wis.	-	21	-	1	2	6	1	2	6	47
W.N. CENTRAL	141	96	168	86	8	11	4	4	32	23
Minn.	12	8	1	1	-	2	2	2	9	16
Iowa	4	4	-	-	2	4	1	-	5	2
Mo.	110	66	167	85	4	2	1	-	16	4
N. Dak.	1	-	-	-	1	1	-	-	-	-
S. Dak.	-	1	-	-	1	-	-	-	-	-
Nebr.	8	11	-	-	-	1	-	2	1	-
Kans.	6	6	-	-	-	1	-	-	1	1
S. ATLANTIC	592	554	62	57	82	96	21	34	200	183
Del.	14	2	-	-	6	-	N	N	31	36
Md.	55	36	6	5	11	16	4	3	103	106
D.C.	5	1	1	-	-	1	-	-	2	2
Va.	64	37	9	-	6	6	1	4	8	10
W. Va.	2	7	3	-	2	-	1	1	1	-
N.C.	57	50	5	3	8	9	4	7	33	17
S.C.	33	53	1	16	1	4	-	2	1	1
Ga.	181	166	7	5	8	10	5	8	1	4
Fla.	181	202	30	28	40	50	6	9	20	7
E.S. CENTRAL	164	122	27	39	11	11	6	4	5	18
Ky.	14	23	12	7	2	-	2	-	2	2
Tenn.	54	40	6	3	7	7	4	-	2	5
Ala.	18	25	-	4	2	1	-	3	-	-
Miss.	78	34	9	25	-	3	-	1	1	11
W.S. CENTRAL	33	309	30	69	19	20	11	20	2	33
Ark.	15	34	-	3	-	-	-	-	-	-
La.	8	52	11	49	1	1	-	1	-	4
Okla.	10	16	2	-	2	2	-	1	-	-
Tex.	-	207	17	17	16	17	11	18	2	29
MOUNTAIN	161	190	14	9	22	18	6	10	5	3
Mont.	-	8	2	1	-	-	-	1	-	-
Idaho	3	2	-	1	1	2	1	-	-	1
Wyo.	3	7	-	-	4	1	-	-	1	-
Colo.	24	31	4	3	3	4	1	4	-	-
N. Mex.	5	12	-	-	-	1	-	1	-	-
Ariz.	82	95	2	3	5	5	-	4	1	-
Utah	17	12	-	-	8	3	-	-	3	1
Nev.	27	23	6	1	1	2	4	-	-	1
PACIFIC	243	309	14	24	24	22	31	27	26	29
Wash.	22	22	3	3	4	2	5	1	3	-
Oreg.	26	46	4	4	N	N	4	1	8	9
Calif.	185	233	5	16	20	20	22	25	15	19
Alaska	9	2	-	-	-	-	-	-	-	1
Hawaii	1	6	2	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	9	48	-	-	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 May 1, 2004, and April 26, 2003 (17th 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	301	324	587	691	2,512	2,075	1,083	2,206	147	98
NEW ENGLAND	24	8	26	32	577	212	143	134	6	-
Maine	1	1	7	5	-	1	13	11	-	-
N.H.	-	2	3	3	19	14	6	6	-	-
Vt.	1	-	1	-	20	23	6	10	-	-
Mass.	15	5	15	20	520	158	55	53	6	-
R.I.	2	-	-	1	9	1	10	14	-	-
Conn.	5	-	-	3	9	15	53	40	-	-
MID. ATLANTIC	60	76	71	74	693	194	127	263	13	9
Upstate N.Y.	13	14	18	13	523	77	98	88	1	-
N.Y. City	23	41	13	16	-	23	-	1	2	4
N.J.	10	7	15	11	61	34	-	62	2	4
Pa.	14	14	25	34	109	60	29	112	8	1
E.N. CENTRAL	18	35	82	111	292	142	7	10	8	1
Ohio	6	6	33	28	139	74	3	4	5	1
Ind.	-	-	10	16	22	18	2	2	1	-
Ill.	2	16	8	34	-	-	1	1	-	-
Mich.	5	10	25	20	33	14	1	3	2	-
Wis.	5	3	6	13	98	36	-	-	-	-
W.N. CENTRAL	20	9	32	52	142	100	119	204	5	3
Minn.	8	6	9	13	28	33	17	7	-	-
Iowa	1	2	6	8	21	33	18	23	-	1
Mo.	3	-	9	22	71	22	3	2	5	2
N. Dak.	2	-	-	-	5	1	19	17	-	-
S. Dak.	1	-	1	1	7	2	10	43	-	-
Nebr.	1	-	1	4	-	1	15	39	-	-
Kans.	4	1	6	4	10	8	37	73	-	-
S. ATLANTIC	99	81	114	126	158	142	532	906	89	75
Del.	4	-	2	7	6	1	18	-	-	-
Md.	23	22	4	11	34	16	50	118	5	11
D.C.	4	5	4	1	1	-	-	-	-	-
Va.	8	7	7	6	39	33	121	174	-	1
W. Va.	-	2	3	1	2	1	20	23	-	-
N.C.	5	6	15	16	29	54	209	229	76	47
S.C.	5	1	9	10	10	5	46	52	2	8
Ga.	14	12	14	15	17	11	64	122	4	5
Fla.	36	26	56	59	20	21	4	188	2	3
E.S. CENTRAL	7	8	24	31	27	39	37	68	18	10
Ky.	1	1	3	3	4	8	7	10	-	-
Tenn.	1	3	9	8	15	19	13	51	10	3
Ala.	4	2	6	8	4	8	17	6	2	-
Miss.	1	2	6	12	4	4	-	1	6	7
W.S. CENTRAL	25	38	56	87	81	104	54	537	3	-
Ark.	1	2	12	7	6	5	17	25	-	-
La.	2	2	12	27	2	4	-	-	-	-
Okla.	1	1	3	6	10	4	37	77	3	-
Tex.	21	33	29	47	63	91	-	435	-	-
MOUNTAIN	12	11	31	32	308	367	21	26	1	-
Mont.	-	-	1	2	4	-	3	2	-	-
Idaho	-	1	3	2	14	9	-	1	-	-
Wyo.	-	-	2	2	3	117	-	-	-	-
Colo.	5	8	14	5	180	119	-	-	1	-
N. Mex.	1	-	4	3	34	19	-	-	-	-
Ariz.	1	1	4	14	47	71	18	23	-	-
Utah	3	1	3	-	22	25	-	-	-	-
Nev.	2	-	-	4	4	7	-	-	-	-
PACIFIC	36	58	151	146	234	775	43	58	4	-
Wash.	2	8	10	12	111	123	-	-	-	-
Oreg.	5	5	31	29	81	94	-	-	2	-
Calif.	28	45	105	97	35	557	35	53	2	-
Alaska	-	-	1	2	3	-	8	5	-	-
Hawaii	1	-	4	6	4	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	2	5	1	-	16	23	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 May 1, 2004, and April 26, 2003 (17th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	7,620	8,317	2,990	6,178	1,815	2,489	1,003	982	178	217
NEW ENGLAND	353	395	66	97	79	247	11	42	4	1
Maine	22	24	1	4	3	13	-	-	-	-
N.H.	23	30	3	2	9	15	-	-	N	N
Vt.	17	12	1	3	4	11	5	5	1	1
Mass.	206	226	44	61	58	111	N	N	N	N
R.I.	25	17	3	3	5	1	6	-	3	-
Conn.	60	86	14	24	-	96	-	37	U	U
MID. ATLANTIC	963	1,041	362	503	264	419	58	55	40	35
Upstate N.Y.	244	190	160	85	101	152	26	25	29	24
N.Y. City	271	325	99	136	36	61	U	U	U	U
N.J.	171	175	61	123	45	90	N	N	N	N
Pa.	277	351	42	159	82	116	32	30	11	11
E.N. CENTRAL	1,083	1,180	241	482	310	633	224	192	61	82
Ohio	293	350	55	85	118	138	172	131	39	49
Ind.	97	90	44	34	33	52	52	61	15	10
Ill.	282	403	81	252	29	178	-	-	-	-
Mich.	208	159	34	73	118	176	N	N	N	N
Wis.	203	178	27	38	12	89	N	N	7	23
W.N. CENTRAL	549	449	109	212	149	154	94	90	20	18
Minn.	135	126	13	30	69	67	-	-	17	15
Iowa	95	89	29	12	N	N	N	N	N	N
Mo.	163	119	32	73	35	33	5	6	3	1
N. Dak.	13	10	1	3	5	8	-	3	-	2
S. Dak.	23	20	6	8	8	14	1	-	-	-
Nebr.	44	36	7	60	8	17	-	-	N	N
Kans.	76	49	21	26	24	15	88	81	N	N
S. ATLANTIC	1,834	1,939	949	2,006	440	407	502	479	4	5
Del.	24	24	6	94	4	4	6	-	N	N
Md.	143	195	34	180	82	119	-	3	-	-
D.C.	12	10	16	20	2	3	2	-	3	-
Va.	199	170	30	84	23	36	N	N	N	N
W. Va.	29	18	-	-	11	16	45	23	1	5
N.C.	234	312	126	226	48	36	N	N	U	U
S.C.	95	108	132	84	23	13	31	74	N	N
Ga.	356	265	215	429	162	88	175	128	N	N
Fla.	742	837	390	889	85	92	243	251	N	N
E.S. CENTRAL	407	468	168	306	87	83	56	64	2	-
Ky.	80	82	26	40	29	21	15	6	N	N
Tenn.	122	161	65	99	58	62	41	58	N	N
Ala.	131	142	56	106	-	-	-	-	N	N
Miss.	74	83	21	61	-	-	-	-	-	-
W.S. CENTRAL	481	801	477	1,501	84	123	25	44	42	49
Ark.	78	84	15	19	4	3	5	15	4	4
La.	36	140	34	170	-	1	20	29	6	10
Okla.	65	63	113	216	24	32	N	N	21	20
Tex.	302	514	315	1,096	56	87	N	N	11	15
MOUNTAIN	647	551	238	291	221	204	14	14	5	27
Mont.	50	31	3	1	-	-	-	-	-	-
Idaho	45	60	4	7	3	10	N	N	N	N
Wyo.	19	8	1	1	5	-	4	2	-	-
Colo.	160	156	51	47	71	61	-	-	3	25
N. Mex.	53	47	35	59	35	53	5	12	-	-
Ariz.	202	158	113	148	91	75	-	-	N	N
Utah	67	54	13	14	15	4	3	-	2	2
Nev.	51	37	18	14	1	1	2	-	-	-
PACIFIC	1,303	1,493	380	780	181	219	19	2	-	-
Wash.	79	139	19	64	20	-	-	-	N	N
Oreg.	90	139	18	25	N	N	N	N	N	N
Calif.	1,019	1,131	327	677	129	183	N	N	N	N
Alaska	30	30	3	4	-	-	-	-	N	N
Hawaii	85	54	13	10	32	36	19	2	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	40	193	1	2	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 May 1, 2004, and April 26, 2003 (17th Week)*

Reporting area	Syphilis: Primary & secondary		Syphilis: Congenital		Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	2,103	2,310	72	158	2,408	3,631	76	101	5,763	6,082
NEW ENGLAND	41	62	1	-	96	100	8	9	305	1,480
Maine	-	3	-	-	-	-	-	-	43	477
N.H.	1	8	-	-	6	4	-	-	-	-
Vt.	-	-	-	-	-	3	-	-	262	306
Mass.	29	40	-	-	70	46	8	4	-	80
R.I.	3	4	-	-	10	14	-	2	-	2
Conn.	8	7	1	-	10	33	-	3	-	615
MID. ATLANTIC	280	256	11	25	585	615	15	17	20	8
Upstate N.Y.	28	6	2	1	61	56	2	3	-	-
N.Y. City	139	141	6	15	304	340	4	9	-	-
N.J.	57	57	3	9	125	106	5	4	-	-
Pa.	56	52	-	-	95	113	4	1	20	8
E.N. CENTRAL	220	314	27	31	253	314	3	12	2,569	2,345
Ohio	68	72	1	2	59	53	1	-	737	478
Ind.	16	12	7	6	13	40	-	2	-	-
Ill.	72	117	1	10	152	145	-	5	-	-
Mich.	56	104	18	13	8	61	2	5	1,720	1,472
Wis.	8	9	-	-	21	15	-	-	112	395
W.N. CENTRAL	38	68	-	3	98	143	2	1	109	14
Minn.	5	21	-	-	40	51	1	1	-	-
Iowa	2	5	-	-	7	10	-	-	N	N
Mo.	22	26	-	3	27	40	1	-	2	-
N. Dak.	-	-	-	-	2	-	-	-	67	14
S. Dak.	-	-	-	-	3	9	-	-	40	-
Nebr.	4	1	-	-	6	5	-	-	-	-
Kans.	5	15	-	-	13	28	-	-	-	-
S. ATLANTIC	593	605	9	30	459	686	12	23	903	920
Del.	4	4	-	-	-	-	-	-	6	3
Md.	109	98	2	6	65	60	2	5	-	-
D.C.	23	12	-	-	-	-	-	-	10	7
Va.	16	28	1	1	56	66	4	10	270	229
W. Va.	1	-	-	-	6	6	-	-	488	609
N.C.	48	59	1	5	58	66	2	4	-	-
S.C.	42	41	-	4	60	44	-	-	129	72
Ga.	95	145	-	5	11	158	2	2	-	-
Fla.	255	218	5	9	203	286	2	2	-	-
E.S. CENTRAL	106	111	3	7	157	206	2	2	2	-
Ky.	17	17	-	1	24	31	-	-	-	-
Tenn.	47	43	1	1	42	67	2	1	-	-
Ala.	33	42	1	4	58	77	-	1	-	-
Miss.	9	9	1	1	33	31	-	-	2	-
W.S. CENTRAL	353	275	16	21	160	592	6	3	722	1,212
Ark.	15	13	-	-	43	32	-	-	-	-
La.	75	33	-	-	-	-	-	-	3	7
Okla.	7	17	2	-	42	40	-	-	-	-
Tex.	256	212	14	21	75	520	6	3	719	1,205
MOUNTAIN	115	104	5	18	72	97	6	4	1,133	103
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	8	4	-	-	-	1	-	-	-	-
Wyo.	1	-	-	-	1	1	-	-	14	15
Colo.	-	12	-	3	24	27	3	3	878	-
N. Mex.	20	21	-	4	-	6	-	-	27	-
Ariz.	79	62	5	11	33	46	1	1	-	-
Utah	3	1	-	-	14	9	1	-	214	88
Nev.	4	4	-	-	-	7	1	-	-	-
PACIFIC	357	515	-	23	528	878	22	30	-	-
Wash.	26	20	-	-	61	74	1	-	-	-
Oreg.	9	15	-	-	21	29	1	2	-	-
Calif.	322	475	-	23	406	721	15	28	-	-
Alaska	-	-	-	-	8	21	-	-	-	-
Hawaii	-	5	-	-	32	33	5	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	44	67	-	8	14	33	-	-	97	215
V.I.	-	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 May 1, 2004 (17th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	475	346	88	18	9	14	42
Boston, Mass.	110	81	19	3	2	5	15
Bridgeport, Conn.	20	19	1	-	-	-	1
Cambridge, Mass.	25	22	2	-	-	1	2
Fall River, Mass.	23	15	5	3	-	-	2
Hartford, Conn.	57	39	8	5	5	-	6
Lowell, Mass.	18	15	2	-	1	-	1
Lynn, Mass.	17	13	3	1	-	-	1
New Bedford, Mass.	26	20	3	2	-	1	3
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	52	30	17	-	-	5	1
Somerville, Mass.	8	6	1	1	-	-	-
Springfield, Mass.	42	30	10	-	1	1	4
Waterbury, Conn.	27	19	5	2	-	1	3
Worcester, Mass.	50	37	12	1	-	-	3
MID. ATLANTIC	2,149	1,512	429	121	45	41	136
Albany, N.Y.	62	51	9	-	-	2	4
Allentown, Pa.	19	16	3	-	-	-	2
Buffalo, N.Y.	75	51	18	2	1	3	5
Camden, N.J.	37	17	10	6	-	4	6
Elizabeth, N.J.	17	13	3	1	-	-	-
Erie, Pa.	41	36	3	-	2	-	1
Jersey City, N.J.	44	27	11	5	-	1	-
New York City, N.Y.	986	710	197	54	16	8	61
Newark, N.J.	62	24	20	8	8	2	8
Paterson, N.J.	U	U	U	U	U	U	U
Philadelphia, Pa.	410	260	95	28	13	14	19
Pittsburgh, Pa.§	28	19	7	2	-	-	3
Reading, Pa.	33	26	4	2	1	-	3
Rochester, N.Y.	133	105	20	5	2	1	12
Schenectady, N.Y.	17	14	2	1	-	-	1
Scranton, Pa.	37	31	6	-	-	-	-
Syracuse, N.Y.	87	64	12	6	1	4	8
Trenton, N.J.	23	17	4	1	-	1	2
Utica, N.Y.	17	15	2	-	-	-	-
Yonkers, N.Y.	21	16	3	-	1	1	1
E.N. CENTRAL	2,068	1,456	420	104	43	43	150
Akron, Ohio	53	29	17	1	2	4	6
Canton, Ohio	28	20	5	1	1	1	3
Chicago, Ill.	342	228	82	20	4	6	29
Cincinnati, Ohio	44	28	11	-	2	3	2
Cleveland, Ohio	254	187	50	12	4	1	7
Columbus, Ohio	176	124	34	9	4	5	12
Dayton, Ohio	131	96	25	6	2	2	14
Detroit, Mich.	164	100	46	13	2	3	15
Evansville, Ind.	48	37	7	2	1	1	2
Fort Wayne, Ind.	57	46	7	1	2	1	9
Gary, Ind.	27	15	5	5	2	-	1
Grand Rapids, Mich.	54	39	5	4	4	2	5
Indianapolis, Ind.	200	133	45	11	7	4	10
Lansing, Mich.	52	43	4	2	1	2	6
Milwaukee, Wis.	127	89	24	10	1	3	9
Peoria, Ill.	41	32	4	1	3	1	3
Rockford, Ill.	72	55	14	2	1	-	2
South Bend, Ind.	43	37	5	1	-	-	4
Toledo, Ohio	88	65	19	2	-	2	6
Youngstown, Ohio	67	53	11	1	-	2	5
W.N. CENTRAL	663	407	166	40	25	25	39
Des Moines, Iowa	63	42	15	4	2	-	5
Duluth, Minn.	31	24	7	-	-	-	1
Kansas City, Kans.	36	17	14	2	1	2	2
Kansas City, Mo.	98	53	31	5	2	7	5
Lincoln, Nebr.	30	22	6	1	1	-	2
Minneapolis, Minn.	68	38	15	8	-	7	6
Omaha, Nebr.	73	43	17	5	5	3	3
St. Louis, Mo.	98	63	24	3	6	2	7
St. Paul, Minn.	48	35	7	2	3	1	1
Wichita, Kans.	118	70	30	10	5	3	7
S. ATLANTIC	1,261	776	331	92	41	21	69
Atlanta, Ga.	166	100	47	15	3	1	3
Baltimore, Md.	176	102	50	15	5	4	10
Charlotte, N.C.	110	73	20	7	7	3	13
Jacksonville, Fla.	150	95	38	8	5	4	9
Miami, Fla.	121	75	31	11	3	1	5
Norfolk, Va.	58	33	15	5	1	4	1
Richmond, Va.	51	31	14	2	2	2	5
Savannah, Ga.	40	27	8	3	2	-	3
St. Petersburg, Fla.	74	46	19	5	3	1	6
Tampa, Fla.	196	119	58	12	7	-	9
Washington, D.C.	100	63	25	8	3	1	4
Wilmington, Del.	19	12	6	1	-	-	1
E.S. CENTRAL	894	591	177	80	31	14	66
Birmingham, Ala.	195	134	31	19	6	4	19
Chattanooga, Tenn.	63	44	9	5	4	1	1
Knoxville, Tenn.	111	84	20	7	-	-	-
Lexington, Ky.	52	36	10	3	2	1	5
Memphis, Tenn.	160	111	27	11	9	2	15
Mobile, Ala.	85	55	18	7	3	2	5
Montgomery, Ala.	52	34	13	4	1	-	10
Nashville, Tenn.	176	93	49	24	6	4	11
W.S. CENTRAL	1,585	1,009	350	127	60	39	73
Austin, Tex.	79	46	19	7	5	2	2
Baton Rouge, La.	48	18	16	7	5	2	1
Corpus Christi, Tex.	58	38	11	6	3	-	3
Dallas, Tex.	186	120	37	15	8	6	16
El Paso, Tex.	97	73	13	3	5	3	3
Ft. Worth, Tex.	147	96	37	10	2	2	6
Houston, Tex.	400	234	93	42	17	14	18
Little Rock, Ark.	74	42	25	3	1	3	2
New Orleans, La.	36	22	12	2	-	-	-
San Antonio, Tex.	272	200	42	15	10	5	18
Shreveport, La.	64	38	20	3	1	2	4
Tulsa, Okla.	124	82	25	14	3	-	-
MOUNTAIN	1,025	675	235	73	19	23	68
Albuquerque, N.M.	119	78	26	12	2	1	4
Boise, Idaho	56	31	18	5	-	2	3
Colo. Springs, Colo.	72	49	17	2	1	3	3
Denver, Colo.	90	45	24	13	1	7	5
Las Vegas, Nev.	237	167	54	11	1	4	18
Ogden, Utah	31	20	6	4	1	-	4
Phoenix, Ariz.	130	79	34	15	2	-	6
Pueblo, Colo.	23	16	6	1	-	-	4
Salt Lake City, Utah	87	66	9	2	5	5	7
Tucson, Ariz.	180	124	41	8	6	1	14
PACIFIC	1,710	1,208	335	103	36	28	191
Berkeley, Calif.	13	7	5	1	-	-	1
Fresno, Calif.	127	85	27	6	7	2	11
Glendale, Calif.	27	22	4	1	-	-	5
Honolulu, Hawaii	81	58	15	4	-	4	4
Long Beach, Calif.	69	60	7	1	-	1	14
Los Angeles, Calif.	419	297	80	25	13	4	70
Pasadena, Calif.	24	17	5	1	1	-	5
Portland, Oreg.	198	146	35	10	4	3	15
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	156	103	36	10	3	4	16
San Francisco, Calif.	138	84	29	18	3	4	16
San Jose, Calif.	167	113	44	5	2	3	15
Santa Cruz, Calif.	24	19	4	1	-	-	1
Seattle, Wash.	104	82	12	6	3	1	8
Spokane, Wash.	64	46	11	7	-	-	6
Tacoma, Wash.	99	69	21	7	-	2	4
TOTAL	11,830¶	7,980	2,531	758	309	248	834

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.

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☆U.S. Government Printing Office: 2004-633-140/00010 Region IV ISSN: 0149-2195