



# MMWR<sup>TM</sup>

## Morbidity and Mortality Weekly Report

Weekly

February 15, 2002 / Vol. 51 / No. 6

### Barriers to Dietary Control Among Pregnant Women with Phenylketonuria — United States, 1998–2000

Newborns in the United States are screened for phenylketonuria (PKU), a metabolic disorder that when left untreated is characterized by elevated blood phenylalanine (phe) levels and severe mental retardation (MR). An estimated 3,000–4,000 U.S.-born women of reproductive age with PKU have not gotten severe MR because as newborns their diets were severely restricted in the intake of protein-containing foods and were supplemented with medical foods (e.g., amino acid-modified formula and modified low-protein foods) (1–4). When women with PKU do not adhere to their diet before and during pregnancy, infants born to them have a 93% risk for MR and a 72% risk for microcephaly (5–6). These risks result from the toxic effects of high maternal blood phe levels during pregnancy, not because the infant has PKU (5–6). The restricted diet, which should be maintained for life, often is discontinued during adolescence (5–10). This report describes the pregnancies of three women with PKU and underscores the importance of overcoming the barriers to maintaining the recommended dietary control of blood phe levels before and during pregnancy. For maternal PKU-associated MR to be prevented, studies are needed to determine effective approaches to overcoming barriers to dietary control.

During the fall of 2000, CDC conducted an interview-based study of women with PKU who were aged  $\geq 18$  years and pregnant during 1998–2000 (index pregnancy), regardless of dietary management or pregnancy outcome. Women were recruited from three metabolic clinics that provided services funded by state and private sources and were interviewed using a structured questionnaire that was completed in person or by telephone. Medical records were requested to document timing of diet initiation, control of blood phe levels

(defined as 2–6 mg/dL), and pregnancy outcome. The study protocol was approved by CDC's Institutional Review Board, and informed consent was obtained from each respondent.

A total of 30 women met the interview criteria; two could not be contacted. Of the 28 remaining women, 24 were interviewed (17 in person and seven by telephone). The median age was 28 years (range: 22–38 years); 75% were married, 96% were white, and 50% had a high school education or less. A total of 51 pregnancies had occurred among 24 women. Among the 24 index pregnancies, 18 (75%) resulted in live-born infants; 11 (46%) pregnancies were intended.

The use of formula-based medical foods before conception was reported more often among the 11 women who were trying to conceive than among those who were not (risk ratio=3.5; 95% confidence interval=1.6–10.2). Use of modified, low-protein medical foods to diversify the diet was reported only among women trying to conceive. No difference was reported in avoiding high-protein foods between women who were and who were not trying to conceive. One woman remained on the restricted diet throughout adulthood; 23 women had been off the diet for 6–24 years (average: 16 years). At the time of the interview, 17 (71%) women were not using medical foods (65% because of the unpleasant taste). A total of 22 women had resumed the diet before or during their index pregnancy, eight (33%) women had contacted the metabolic clinic

#### INSIDE

- 120 Measles — United States, 2000
- 123 State-Specific Mortality from Sudden Cardiac Death — United States, 1999
- 126 Notices to Readers

CENTERS FOR DISEASE CONTROL AND PREVENTION

SAFER • HEALTHIER • PEOPLE<sup>TM</sup>

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* 2002;51:[inclusive page numbers].

#### Centers for Disease Control and Prevention

Jeffrey P. Koplan, M.D., M.P.H.  
*Director*

David W. Fleming, M.D.  
*Deputy Director for Science and Public Health*

Dixie E. Snider, Jr., M.D., M.P.H.  
*Associate Director for Science*

#### Epidemiology Program Office

Stephen B. Thacker, M.D., M.Sc.  
*Director*

#### Office of Scientific and Health Communications

John W. Ward, M.D.  
*Director*

*Editor, MMWR Series*

David C. Johnson  
*Acting Managing Editor, MMWR (Weekly)*

Jill Crane  
Jeffrey D. Sokolow, M.A.  
*Writers/Editors, MMWR (Weekly)*

Lynda G. Cupell  
Beverly J. Holland  
*Visual Information Specialists*

Michele D. Renshaw  
Erica R. Shaver  
*Information Technology Specialists*

#### Division of Public Health Surveillance and Informatics

##### Notifiable Disease Morbidity and 122 Cities Mortality Data

Carol M. Knowles  
Deborah A. Adams  
Felicia J. Connor  
Patsy A. Hall  
Mechele A. Hester  
Pearl C. Sharp

before conception, and 11 (46%) had contacted the metabolic clinic after conception but by week 10 of gestation. Of the 22 medical records available, 12 (55%) records indicated controlled blood phe levels before 10 weeks of gestation.

All of the women expressed confidence in their metabolic clinic staff's knowledge of a phe-restricted diet and maternal PKU; eight (33%) perceived that their obstetricians were knowledgeable about maternal PKU. Approximately equal numbers of women used public assistance and private insurance to cover the costs associated with clinic visits (Table 1). Costs of medical foods were more often covered by public assistance than by private insurance (Table 1). Among the 13 women who used public assistance, nine (69%) reported that proof of pregnancy was required to receive services. When the data were stratified by state of residence, women in state C had the lowest rate of live births resulting from their pregnancies, lowest use of formula before pregnancy, fewest women achieving metabolic control before 10 weeks' gestation, and longest commutes to a metabolic clinic (Table 2). These differences were not significant by Fisher exact test.

### Case Reports

**Case 1.** A woman aged 21 years discontinued formula use in early adolescence and lost contact with the metabolic clinic. Although she was aware of the need to follow the diet during pregnancy, she did not seek care when she became pregnant. PKU was listed in her prenatal medical records; however, her obstetrician did not refer her to a metabolic clinic or a maternal-fetal specialist and did not recommend dietary intervention or regular monitoring of her phe levels. Her pregnancy resulted in an infant with microcephaly and developmental delay.

**Case 2.** A woman aged 21 years discontinued formula use in early adulthood because of limited financial resources. She reported willingness to adhere to the diet during pregnancy, but lack of transportation, financial constraints, and inability to take time off from work prohibited her from accessing care at the nearest metabolic clinic, which was 3 hours away. She met with local health department staff several months into

**TABLE 1. Number and percentage of women with phenylketonuria reporting coverage for metabolic clinic visits during pregnancy and use of formula and low-protein foods, by type of financial assistance — Selected states, 1998–2000**

Assistance	Clinic visits		Formula		Low-protein foods	
	No.*	(%)	No.	(%)	No.	(%)
Public	10	( 50)	13	( 65)	6	( 50)
Private	12	( 60)	6	( 30)	2	( 17)
Other	0	( 0)	1	( 5)	4	( 33)
<b>Total</b>	<b>20</b>	<b>(100)</b>	<b>20</b>	<b>(100)</b>	<b>12</b>	<b>(100)</b>

\* Two women reported using both public assistance and private insurance.

**TABLE 2. Number and percentage of live-born infants, prepregnancy formula use, range and average travel time to metabolic clinic, and blood phenylalanine level control at <10 weeks' gestation among women with phenylketonuria — Selected states, 1998–2000**

State	No. of participants	Live-born infants		Pregpregnancy formula use		Travel time to metabolic clinic (hrs)		Blood phenylalanine level control at <10 weeks' gestation	
		No.	(%)	No.	(%)	Range	Average	No.	(%)*
A	6	5	(83)	2	(33)	0.25–2.50	1.00	3	(50)
B	8	7	(88)	5	(63)	0.25–1.50	1.00	6	(86)
C	10	6	(60)	1	(10)	0.25–5.00	2.75	3	(33)

\* Percentages reflect denominator of medical records received from each state (A=6, B=7, and C=9).

the pregnancy to acquire formula. PKU was included in her prenatal medical records, and she was referred to a maternal-fetal specialist; however, her blood phe levels were not monitored, and she was not referred to a metabolic clinic. Her pregnancy resulted in an infant with microcephaly.

**Case 3.** A woman aged 27 years remained on the PKU diet throughout adulthood, planned her pregnancy, and had her blood phe levels in control before conception. Her private insurance covered part of her diet-related medical treatment costs. She estimated that out-of-pocket expenses for the portion of the metabolic clinic visits not paid by insurance were \$2,300 during her pregnancy. Her insurer denied coverage for formula, low-protein foods, and blood tests to examine her full amino acid profile. The metabolic clinic provided the formula without reimbursement from the insurance company. Her pregnancy resulted in a healthy infant.

**Reported by:** *PM Fernhoff, MD, R Singh, PhD, Div of Medical Genetics, Dept of Pediatrics, Emory Univ School of Medicine, Atlanta, Georgia. S Waisbren, PhD, F Robr, MS, Children's Hospital, Boston, Massachusetts. DM Frazier, PhD, Div of Genetics and Metabolism, Univ of North Carolina, Chapel Hill. SA Rasmussen, MD, AA Kenneson, PhD, MA Honein, PhD, National Center on Birth Defects and Developmental Disabilities; ML Gwinn, MD, Office of Genetics and Disease Prevention, National Center for Environmental Health; and AS Brown, PhD, JM Morris, PhD, P MacDonald, PhD, EIS officers, CDC.*

**Editorial Note:** This report highlights some barriers that prevent metabolic control of blood phe levels before pregnancy among women with PKU. Two thirds of the women in this study had not followed the diet before becoming pregnant. This demonstrates limited adherence to prepregnancy medical recommendations among these women. Women also reported limited confidence in obstetricians' knowledge of maternal PKU management and inconsistencies between medical recommendations and health insurance coverage. Following the lifelong diet also was complicated by the unpleasant taste of medical foods.

The findings in this report are subject to at least three limitations. First, the sample size was small and consisted mostly of women who received dietary management from metabolic clinics during pregnancy. These women might have had access to more resources or been more willing to adhere to medical recommendations than women who had not received such care. Second, at the time of the interviews, most of the women were not following their diets; persons with PKU who are not on the diet might have difficulties with concentration and memory that could compromise the accuracy of their responses. Third, the three clinics participating in this study do not represent all U.S. metabolic clinics.

To improve pregnancy outcomes for women with PKU, health-care providers should be trained to advise women to plan their pregnancies, return to diet, and stay on the diet for life. Additional evaluation is needed to ascertain the knowledge needed by obstetricians to guide women with PKU; third-party payers could identify disparities in financial assistance available to pregnant women with PKU and determine the most cost-effective approaches. Additional examination of these barriers would allow public health programs to establish effective methods to reduce obstacles and improve pregnancy outcomes for women with PKU.

#### References

1. American College of Obstetrics and Gynecology Committee on Genetics Opinion. Maternal phenylketonuria. *Int J Gynaecol Obstet* 2001;72:83–4.
2. Luder AS, Greene CL. Maternal phenylketonuria and hyperphenylalaninemia: implications for medical practice in the United States. *Am J Obstet Gynecol* 1989;161:1102–5.
3. MacCready RA. Admissions of phenylketonuric patients to residential institutions before and after screening programs of the newborn infant. *J Pediatr* 1974;85:383–5.
4. Koch R, Levy HL, Matalon R, Rouse B, Hanley W, Azen C. The North American collaborative study of maternal phenylketonuria. *Am J Dis Child* 1993;147:1224–30.
5. Lenke RR, Levy HL. Maternal phenylketonuria and hyperphenylalaninemia: an international survey of the outcome of untreated and treated pregnancies. *N Engl J Med* 1980;303:1202–8.

6. Platt LD, Koch R, Hanley WB, et al. The international study of pregnancy outcome in women with maternal phenylketonuria: report of a 12-year study. *Am J Obstet Gynecol* 2000;182:326–33.
7. National Institutes of Health. Phenylketonuria: screening and management. National Institutes of Health consensus statement online 2000. Bethesda, Maryland: National Institutes of Health. October 16–18, 2000; vol. 17, no. 3:1–28. Available at [http://odp.od.nih.gov/consensus/cons/113/113\\_statement.htm](http://odp.od.nih.gov/consensus/cons/113/113_statement.htm). Accessed July 2001.
8. Schuett VE, Gurda RF, Brown ES. Diet discontinuation policies and practices of PKU clinics in the United States. *Am J Public Health* 1980;70:498–503.
9. Waisbren SE, Schnell RR, Levy HL. Diet termination in children with phenylketonuria: a review of psychological assessments used to determine outcome. *J Inher Metab Dis* 1980;3:149–53.
10. Kirkman HN, Frazier DM. Maternal PKU: thirteen years after epidemiological projections. *Inter Peds* 1996;11:279–83.

## Measles — United States, 2000

In 2000, a provisional total of 86 confirmed measles cases were reported to CDC by state and local health departments, representing a record low and a 14% decrease from the 100 cases reported in each of the previous 2 years (1,2). This report describes the epidemiology of measles in the United States during 2000 and documents the continued absence of endemic measles and the continued risk for internationally imported measles cases that might result in indigenous transmission.

Following state laws and regulations, health-care providers, laboratories, and other health-care personnel report confirmed measles cases to state public health departments; this information is forwarded to CDC (3). Data on vaccination status, age, complications, setting of transmission, and serologic confirmation of cases also are collected.

Of the 86 reported measles cases, 26 (30%) were internationally imported\*. Of the 60 indigenous cases, 18 were import-linked, nine were imported virus, and 33 were of unknown source. Importation-associated cases (i.e., imported, import-linked, and imported virus cases) accounted for 62% of all reported cases.

\***Imported**=cases among persons who were infected outside the United States; **Indigenous**=cases in persons infected in the United States. Indigenous cases are subclassified into three groups: **import-linked**=cases epidemiologically linked to an imported case (virologic evidence of importation is not required for this classification); **imported virus**=cases that cannot be linked epidemiologically to an imported case but for which imported virus has been isolated from the case or from an epidemiologically linked case; and **unknown source**=all other cases acquired in the United States for which no epidemiologic link or virologic evidence has been found to indicate importation.

The proportion of cases classified as “internationally imported” cases has been relatively stable since 1998 (Figure 1). Of the 26 imported cases, 14 occurred in United States residents who had traveled abroad and 12 in international visitors. Measles was imported from 10 countries. The largest numbers of imported cases reported were from Japan (seven cases) and Korea and Ethiopia (four each). The states reporting the most imported measles cases were New York (eight cases), California (six), and Hawaii and Vermont (three each). Four counties had more than one imported case in 2000.

On average, imported cases resulted in <1 import-linked case (range: 0–5). Measles virus was isolated from eight chains of transmission linked to an imported measles case (including three chains of one case). In each chain, the viral genotype sequenced was consistent with the genotype of virus known to be circulating in the source country of the imported case. Virologic evidence of importation was found in five chains of transmission (nine cases) that were not linked epidemiologically to imported cases. Genotype D5 was cultured from two isolated cases and genotypes G2, H1, and H2 were each isolated from one chain of transmission. These genotypes are known to circulate in Japan, China, and Vietnam, respectively. The lack of any consistently repeating genotype indicates that there is no endemic genotype. Therefore, all indigenous cases with genotype information and no epidemiologic link to an imported case were classified as imported virus cases.

During 2000, a total of 20 states reported confirmed measles cases. Three states accounted for 57% of cases: New York (23 [13 from New York City]), California (19), and Nevada (seven). The remaining 17 states each reported from one to three measles cases. Of the 3,140 counties in the United States, 41 (1%) reported a confirmed measles case; seven counties (<1%) reported more than three cases.

In 2000, 68 (79%) of the 86 reported cases occurred during weeks 1–26, and 18 (21%) occurred during weeks 27–52. The median number of cases per week was one (range: 0–9). During 18 weeks, no cases were reported. During 17 additional weeks, all reported cases were import-associated. During five periods of 4 weeks, all reported cases were import-associated (Figure 2).

Ten cases (12% of total cases) were in infants aged <12 months, 27 (31%) in children aged 1–4 years, 17 (20%) in persons aged 5–19 years, 20 (23%) in persons aged 20–34 years, and 12 (14%) in persons aged ≥35 years. Of the 86 patients, 23 (27%) had a documented history of measles vaccination; 40 (46%) had not been vaccinated, nine of these were aged <12 months; and 23 (27%) patients had unknown

FIGURE 1. Number and percentage of internationally imported measles cases — United States, 1991–2000

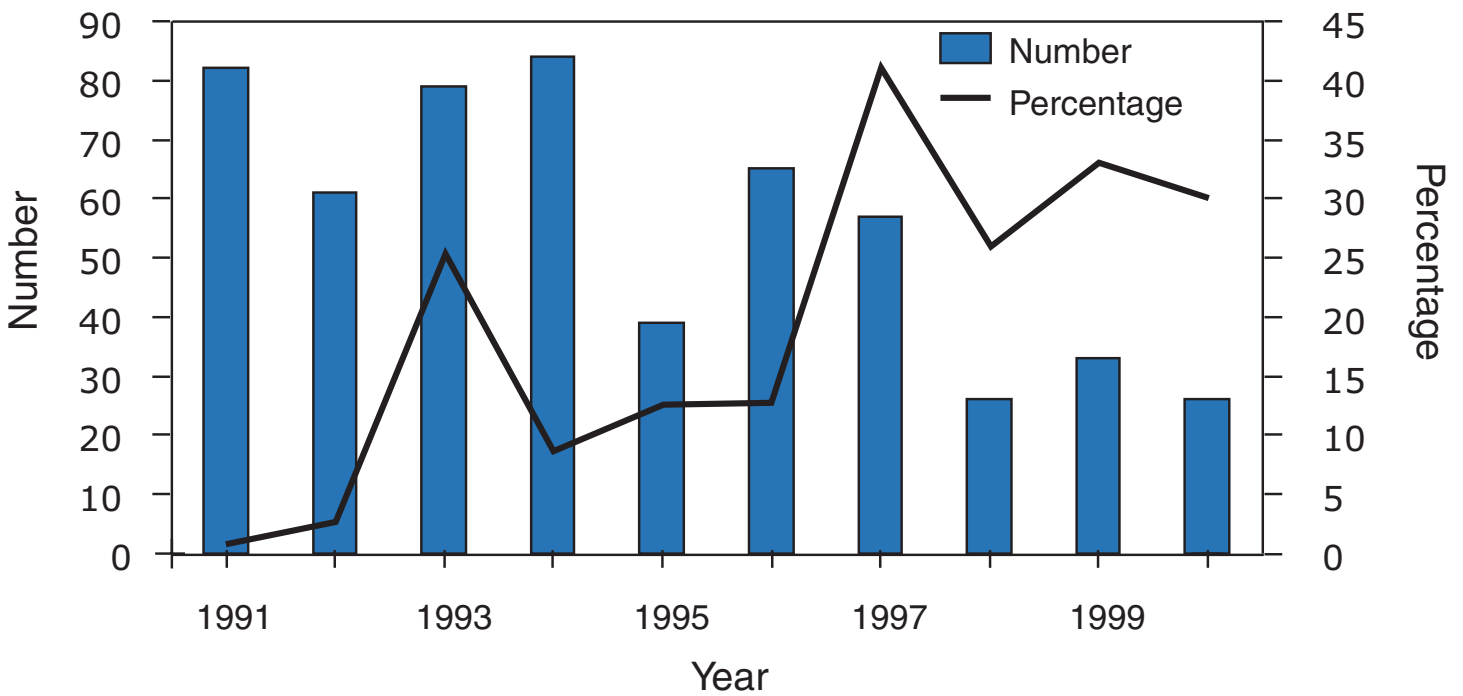
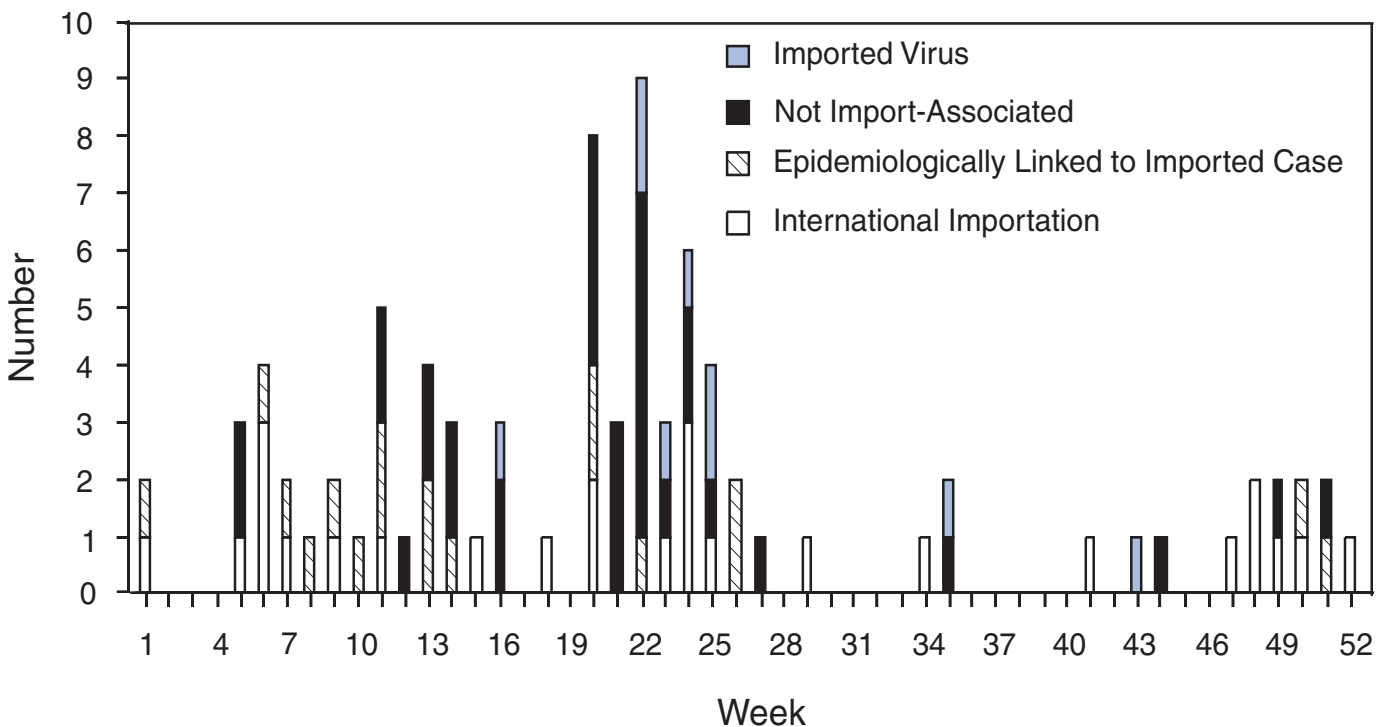


FIGURE 2. Number of measles cases, by importation status and week of rash onset — United States, 2000





vaccination status. Among 48 cases in persons for whom vaccine was recommended and vaccination status was known, 24 (50%) were unvaccinated.

Of 71 cases in U.S. residents (57 indigenous and 14 imported), 54 (77%) occurred in vaccine-eligible persons. Of these residents, 20 (37%) were known to be vaccinated, 20 (37%) were not vaccinated, and 14 (26%) had unknown vaccination status.

In 2000, 10 measles outbreaks (i.e., three or more confirmed cases) occurred in nine states accounting for 48 (56%) of the 86 cases. An epidemiologic link to an imported case was documented in five of the 10 outbreaks.

The largest outbreaks occurred in New York: one in Oswego/Onondaga counties involving nine persons and a second in Kings County involving eight persons. The Oswego/Onondaga outbreak occurred in a high school; the source of infection was unknown. Of the six high school students eligible for vaccination, five had been vaccinated. Each of these students had received a single dose of measles vaccine, which was in compliance with state requirements at that time. The outbreak in Kings County occurred in a religious community in Brooklyn following an imported case from the United Kingdom. Two cases were in infants aged <12 months. Among the six patients who were vaccine eligible, three were unvaccinated.

One outbreak in 2000 illustrates the difficulty in linking indigenous cases to their imported source. A U.S. resident and Olympic athlete aged 24 years developed prodromal measles symptoms while competing in an athletic event in Utah. The athlete had no known exposure to measles; however, 2 weeks before arriving in Utah, she had participated in an athletic competition in Japan. Following the competition in Utah, the athlete flew to Italy and subsequently developed a rash consistent with measles. The team physician notified CDC of the case from Italy. On return to the United States, the athlete tested IgM positive for measles. Three confirmed measles cases were linked epidemiologically to the athletic event in Utah. No viral strain was obtained from any of the cases.

**Reported by:** *M Papania, MD, S Redd, W Bellini, PhD, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Epidemiology and Surveillance Div, National Immunization Program; and B Lee, MD, EIS Officer, CDC.*

**Editorial Note:** Measles is still endemic in many countries and results in approximately 800,000 deaths per year (4). However, the reported incidence of measles in the United States has been <1 case per million for the past 4 years (1). The high percentage of cases resulting from importations and

very limited indigenous spread from these imported cases also has continued over the same period. The consistently small number of unknown source cases suggests that measles is no longer endemic in the United States. However, unknown source cases continue to occur sporadically. Many of these cases, especially isolated cases, might be misclassifications resulting from false-positive laboratory tests. However, even among true measles cases, it is impossible to identify the imported case in every chain of transmission.

The outbreak in Utah demonstrates the difficulty in linking every case to an imported source. CDC was informed of the case only because it occurred in an Olympic athlete. The case was not reported as a U.S. case because rash onset and diagnosis had occurred in Italy. If the team physician had not called from Italy to report this case, the three associated cases in Utah would have been classified as unknown source cases. Because most visits to the United States are of a relatively short duration, many persons shedding measles virus might leave the country before the rash begins and before measles is diagnosed. Many other international visitors who develop measles in the United States might choose to return home before they seek care because they are unfamiliar with the U.S. health-care system or lack valid health insurance in the United States. In both situations, the imported case would not be detected except under special circumstances.

Difficulty in epidemiologically linking every case to an imported source highlights the crucial role of virologic surveillance in monitoring the absence of endemic measles. Collection of viral specimens is an important part of any measles case investigation. Worldwide, during large outbreaks (5,6) or in areas where disease is endemic (7,8), one measles genotype is usually found. Since 1992 in the United States, no genotypes have been found consistently, and when genotypic data are available, all isolates from imported cases have the genotype found in the country of origin (5,9).

Imported measles cases consistently test the level of population immunity to measles in the United States. The average of less than one import-linked case following an international importation suggests that the level of population immunity is high, probably as a result of successful vaccination efforts in the United States. First-dose vaccination coverage among preschool children has been  $\geq 90\%$  for the past 4 years (10). Two doses of measles vaccine are required for school-aged children in 49 states (CDC, unpublished data, 2002). Sustaining high levels of vaccination is important in limiting indigenous spread of measles from imported cases and preventing measles from becoming re-established as an endemic disease in the United States.

## Acknowledgement

This report is based on data contributed by state and local health departments.

## References

1. CDC. Measles—United States, 1999. MMWR 2000;49:557–60.
2. CDC. Epidemiology of measles—United States, 1998. MMWR 1999;48:749–52.
3. CDC. Case definitions for public health surveillance. MMWR 1990;39(No. RR-13).
4. World Health Organization. World health report 2001: mental health: new understanding, new hope. Geneva Switzerland: World Health Organization, 2001.
5. Rota JS, Heath JL, Rota PA, et al. Molecular epidemiology of measles virus: identification of pathways of transmission and implications for measles elimination. J Infect Dis 1996;173:32–7.
6. Barrero PR, de Wolff CD, Passeggi CA, Mistchenko AS. Sequence analysis of measles virus hemagglutinin isolated in Argentina during the 1997–1998 outbreak. J Med Virol 2000;60:91–6.
7. Liffick SL, Thi Thoung N, Xu W, et al. Genetic characterization of contemporary wild-type measles viruses from Vietnam and the People's Republic of China: identification of two genotypes within clade H(1). Virus Res 2001;77:81–7.
8. Truong AT, Kreis S, Ammerlaan W, et al. Genotypic and antigenic characterization of hemagglutinin proteins of African measles virus isolates. Virus Res 1999;62:89–95.
9. Rota JS, Rota PA, Redd SB, Redd SC, Pattamadilok S, Bellini WJ. Genetic analysis of measles viruses isolated in the United States, 1995–1996. J Infect Dis 1998;177:204–8.
10. CDC. National, state, and urban area vaccination coverage levels among children aged 19–35 months—United States, 2000. MMWR 2001;50:637–41.

## State-Specific Mortality from Sudden Cardiac Death — United States, 1999

Each year in the United States, 400,000–460,000 persons die of unexpected sudden cardiac death (SCD) in an emergency department (ED) or before reaching a hospital (1). Based on the latest U.S. mortality data, this report summarizes and analyzes 1999 national and state-specific SCD data. Reducing the proportion of out-of-hospital\* SCDs would decrease the overall incidence of premature death in the United States. Heart attacks are the major cause of SCD; approximately 70% of SCDs are caused by coronary heart disease. National efforts are needed to increase public awareness of heart attack symptoms and signs and to reduce delay time to treatment.

National and state mortality statistics for this report were based on data from death certificates filed in state vital statistics offices and were compiled by CDC (2). Demographic data (e.g., age and race/ethnicity) listed on death certificates were reported by funeral directors usually from information provided by the family of the decedent. Causes of death on death certificates were reported by a physician, medical examiner, or coroner. Cardiac disease death was defined as one for which the underlying cause of death was classified and coded using the *International Classification of Diseases (ICD-10), Tenth Revision*, for diseases of the heart (codes I00–I09, I11, I13, and I20–I51) or congenital malformations of the heart (Q20–Q24<sup>†</sup>). SCD was defined for this report as a death from cardiac disease that occurred out-of-hospital or in an ED or one in which the decedent was reported to be “dead on arrival” at a hospital. Populations at risk were defined on the basis of U.S. census bureau estimates of resident populations; age-adjusted death rates were standardized by the direct method to the 2000 projected U.S. population (3).

Among 728,743 cardiac disease deaths that occurred during 1999, a total of 462,340 (63.4%) were SCDs; 120,244 (16.5%) occurred in an ED or were dead on arrival, and 341,780 (46.9%) occurred out-of-hospital. Women had a higher total number of cardiac deaths and higher proportion of out-of-hospital cardiac deaths than men (51.9% of 375,243 and 41.7% of 353,500, respectively), and men had a higher proportion of cardiac deaths that occurred in an ED or were dead on arrival (21.2% of 353,500 and 12.0% of 375,243, respectively) (Table 1). SCDs accounted for 10,460 (75.4%) of all 13,873 cardiac disease deaths in persons aged 35–44 years, and the proportion of cardiac deaths that occurred out-of-hospital increased with age, from 5.8% in persons aged 0–4 years to 61.0% in persons aged ≥85 years. SCDs accounted for 63.7% of all cardiac deaths among whites, 62.3% among blacks, 59.8% among American Indians/Alaska Natives, 55.8% among Asians/Pacific Islanders, and 54.2% among Hispanics. Whites had the highest proportion of cardiac deaths out-of-hospital, and blacks had the highest proportion of cardiac deaths in an ED or dead on arrival (Table 1).

<sup>†</sup> Diseases of the heart (ICD-10 codes I00–I09, I11, I13, and I20–I51) represent certain disease types (e.g., coronary heart disease, cardiomyopathy, dysrhythmias, and conduction system disorders, hypertensive heart disease, carditis and valvular heart disease, pulmonary heart disease, and heart failure). Congenital malformations of the heart (Q20–Q24) represent other disease types (e.g., congenital malformations of cardiac chambers and connections, cardiac septa, and pulmonary, tricuspid, and aortic and mitral valves). These codes are comparable to the ICD-9 codes of 390–398, 402, 404–429, and 745–746.

\*A death that occurs in a nursing home, residence, and other unspecified place outside of a hospital.

**TABLE 1. Number of cardiac deaths\* and proportion of cardiac deaths, by location of death and selected characteristics — United States, 1999**

Characteristic	No.	Location of death			Data missing
		In-hospital	Emergency department/DOA <sup>†</sup>	Out-of-hospital	
<b>Sex</b>					
Men	353,500	36.6%	21.2%	41.7%	0.5%
Women	375,243	35.6%	12.0%	51.9%	0.5%
<b>Age Group (yrs)</b>					
0–4	2,508	77.4%	16.1%	5.8%	0.8%
5–14	436	47.0%	38.8%	13.1%	1.2%
15–24	1,291	33.7%	43.6%	21.8%	0.9%
25–34	3,311	28.0%	40.2%	31.0%	0.8%
35–44	13,873	23.8%	40.3%	35.1%	0.8%
45–54	35,216	26.2%	37.8%	35.4%	0.6%
55–64	64,322	33.8%	30.7%	34.9%	0.6%
65–74	129,414	41.2%	22.0%	36.3%	0.5%
75–84	226,326	41.3%	14.0%	44.2%	0.5%
≥85	251,999	31.1%	7.5%	61.0%	0.4%
<b>Race/Ethnicity</b>					
White	637,977	35.9%	15.4%	48.3%	0.4%
Black	79,153	36.9%	25.0%	37.3%	0.8%
American Indian/ Alaska Native	2,434	39.9%	18.5%	41.3%	0.3%
Asian/ Pacific Islander	9,179	43.7%	19.8%	36.0%	0.5%
Hispanic					
No	699,764	35.8%	16.4%	47.3%	0.5%
Yes	26,358	45.4%	18.1%	36.1%	0.4%
<b>Total</b>	<b>728,743</b>	<b>36.1%</b>	<b>16.5%</b>	<b>46.9%</b>	<b>0.5%</b>

\* *International Classification of Disease, Tenth Revision*, codes I00-I09, I11, I13, I20-I51, and Q20-Q24.

<sup>†</sup> Death occurred in emergency department or dead on arrival to emergency department.

The age-adjusted SCD rate was 47.0% higher among men than women (206.5 and 140.7 per 100,000 population, respectively). Blacks had the highest age-adjusted rates (253.6 in men and 175.3 in women) followed by whites (204.5 in men and 138.4 in women), American Indians/Alaska Natives (132.7 in men and 76.6 in women), and Asians/Pacific Islanders (111.5 in men and 66.5 in women). Non-Hispanics (217.8 in men and 147.3 in women) had higher age-adjusted SCD rates than Hispanics (118.5 in men and 147.3 in women).

In 1999, the state-specific proportion of all cardiac deaths that was SCD ranged from 57.2% (Hawaii) to 72.9% (Wisconsin) (Table 2). Other states with a high proportion of SCDs were Idaho (72.2%), Utah (72.1%), Colorado (71.3%), Oregon (71.0%), Connecticut (70.5%), Rhode Island (70.0%), South Dakota (69.8%), Montana (69.6%), and Vermont (69.5%). Age-adjusted SCD rates (per 100,000 population) in 1999 ranged from 114.6 (Hawaii) to 212.2 (Mississippi).

**Reported by:** ZJ Zheng, MD, JB Croft, PhD, WH Giles, MD, CI Ayala, PhD, KJ Greenlund, PhD, NL Keenan, PhD, L Neff, PhD, WA Wattigney, M.Stat, GA Mensah, MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

**Editorial Note:** Despite advances in the prevention and treatment of heart disease and improvements in emergency transport, the proportion of cardiac deaths classified as “sudden” remains high, probably because of the unexpected nature of SCD and the failure to recognize early warning symptoms and signs of heart disease. The age-adjusted SCD rates and the state-specific variation in the proportion of SCDs suggest a need for increased public awareness of heart attack symptoms and signs. The finding that cardiac deaths out-of-hospital were more likely to occur among women than men is consistent with findings that women more often delay seeking help for heart attack symptoms (4). Early recognition of heart symptoms and signs leads to earlier artery opening treatment or defibrillation that results in less heart damage and deaths. Education and media efforts should inform the public about heart disease symptoms and signs, particularly women and young adults who might dismiss heart disease as a problem of men and the elderly (5). Health-care providers should be alert for atypical symptoms of heart disease among female and young adult patients (6).

The findings in this report are subject to at least three limitations. First, the cause of death information reported on the death certificate by the certifier is not always validated by a medical record or autopsy verification. The reliability and accuracy of the underlying cause of death also depend on the information reported by the certifier and on the state and national nosologists who determine the codes and the underlying causes. Second, because time of onset of disease symptoms and time of death are not available for analysis, the suddenness of death is determined arbitrarily and needs to be validated on the basis of clinical criteria on time frames. Third, data are subject to misclassification of race/ethnicity on death certificates, which might result in underestimating the number of deaths among American Indians/Alaska Natives, Asians/Pacific Islanders, and Hispanics and overestimating the number of deaths among blacks and whites (7).

The proportion of SCDs that occur out-of-hospital has increased since 1989 (1). Death and disability from a heart attack can be reduced if persons having a heart attack can immediately recognize its symptoms (8) and call 9-1-1 for emergency care. These symptoms are chest discomfort or pain; pain or discomfort in one or both arms or in the back, neck, jaw, or stomach; and shortness of breath. Other symptoms are breaking out in a cold sweat, nausea, and light headedness



**TABLE 2. Number of all cardiac deaths, proportion of sudden cardiac deaths (SCDs), age-adjusted and age-specific rates\*, by reporting area — United States, 1999**

Area	All cardiac deaths	SCD								
		%	Age-adjusted		0–34 yrs		Age-specific SCD rates			
			No.	Rate†	No.	Rate	35–64 yrs		≥65 yrs	
							No.	Rate	No.	Rate
Alabama	13,489	62.9	8,481	194.1	113	5.3	1,821	108.3	6,547	1,152.7
Alaska	571	67.3	384	126.9	6	—§	142	58.0	236	679.1
Arizona	10,870	66.1	7,187	154.8	48	2.0	1,076	62.3	6,062	964.3
Arkansas	8,358	57.5	4,808	171.9	58	4.7	894	94.0	3,855	1,066.9
California	72,360	64.8	46,859	164.8	375	2.2	7,364	60.7	39,115	1,072.4
Colorado	6,476	71.3	4,615	140.1	61	3.1	809	48.6	3,745	918.4
Connecticut	9,169	70.5	6,463	170.0	37	2.4	864	67.3	5,562	1,187.0
Delaware	2,020	66.1	1,336	185.3	16	—	218	75.0	1,102	1,122.9
District of Columbia	1,661	65.7	1,091	191.3	10	—	223	105.7	857	1,188.6
Florida	51,608	60.5	31,243	155.0	208	3.1	4,381	77.1	26,648	971.9
Georgia	17,713	63.4	11,224	182.7	169	4.2	2,735	91.4	8,320	1,093.1
Hawaii	2,420	57.2	1,383	114.6	16	—	303	64.8	1,064	657.2
Idaho	2,558	72.2	1,847	160.3	17	—	277	60.1	1,553	1,093.4
Illinois	33,561	65.4	21,924	182.2	245	4.1	3,997	86.8	17,682	1,181.8
Indiana	16,750	61.3	10,272	175.3	106	3.6	1,759	77.5	8,407	1,131.5
Iowa	8,724	66.1	5,768	160.3	26	1.9	735	67.9	5,007	1,168.5
Kansas	7,013	61.8	4,335	146.9	24	1.8	591	59.7	3,720	1,050.6
Kentucky	12,162	58.4	7,103	184.1	73	3.8	1,405	90.4	5,624	1,140.4
Louisiana	12,080	59.3	7,162	183.2	99	4.4	1,703	104.6	5,360	1,068.9
Maine	3,436	66.5	2,286	165.3	11	—	318	62.3	1,957	1,116.0
Maryland	12,144	69.2	8,404	180.8	101	4.0	1,645	79.7	6,646	1,113.3
Massachusetts	15,907	65.8	10,462	150.7	83	2.8	1,449	60.5	8,930	1,038.7
Michigan	27,804	67.8	18,814	196.6	146	3.0	3,430	90.5	15,237	1,245.3
Minnesota	9,595	68.9	6,615	133.8	49	2.1	915	49.9	5,651	965.3
Mississippi	9,374	59.7	5,593	212.2	78	5.4	1,307	130.7	4,208	1,254.3
Missouri	18,052	65.5	11,819	198.9	89	3.4	1,904	91.5	9,826	1,317.7
Montana	2,055	69.6	1,430	149.9	4	—	215	60.0	1,211	1,032.9
Nebraska	4,517	66.6	3,009	156.9	25	3.0	374	60.6	2,610	1,143.3
Nevada	4,255	62.7	2,668	177.6	23	2.6	700	99.0	1,945	937.7
New Hampshire	2,759	68.0	1,875	164.3	11	—	300	63.0	1,564	1,081.7
New Jersey	23,581	57.6	13,571	156.8	93	2.5	1,906	58.6	11,571	1,044.1
New Mexico	3,486	68.1	2,374	156.2	20	2.3	389	59.2	1,964	982.1
New York	59,199	60.2	35,630	184.6	202	2.3	5,269	74.4	30,157	1,241.2
North Carolina	19,299	61.0	11,765	161.3	117	3.1	2,459	83.8	9,189	962.3
North Dakota	1,844	66.1	1,218	155.5	3	—	173	73.6	1,042	1,127.9
Ohio	33,338	64.5	21,514	185.3	156	2.9	3,525	81.7	17,832	1,187.9
Oklahoma	11,308	58.5	6,612	186.1	52	3.2	1,144	90.3	5,415	1,206.8
Oregon	7,306	71.0	5,189	146.8	43	2.7	815	61.9	4,331	995.4
Pennsylvania	41,838	66.1	27,644	189.5	154	2.8	3,986	85.8	23,502	1,237.6
Rhode Island	3,015	70.0	2,110	170.7	10	—	250	68.1	1,850	1,198.6
South Carolina	10,028	62.3	6,247	175.5	92	4.8	1,546	102.8	4,609	973.7
South Dakota	2,031	69.8	1,418	161.7	6	—	200	75.3	1,212	1,149.4
Tennessee	16,358	60.2	9,844	184.6	106	4.0	2,120	97.9	7,618	1,118.7
Texas	43,717	59.5	26,006	162.1	295	2.8	5,192	69.8	20,517	1,017.5
Utah	2,830	72.1	2,039	139.1	30	2.3	284	44.2	1,725	929.4
Vermont	1,349	69.5	938	156.8	8	—	137	55.9	793	1,087.6
Virginia	15,401	59.3	9,130	152.4	106	3.1	1,813	66.8	7,210	930.5
Washington	11,590	67.0	7,763	145.1	55	1.9	1,130	49.9	6,578	1,000.7
West Virginia	6,860	59.0	4,045	193.7	29	3.6	799	110.2	3,217	1,178.8
Wisconsin	13,891	72.9	10,122	179.0	69	2.7	1,349	67.0	8,704	1,258.9
Wyoming	1,013	69.2	701	160.3	3	—	116	60.8	582	1,046.2
Average	728,743	63.4	462,340	175.4	3,976	3.0	78,456	75.4	379,869	1,099.8

\* Per 100,000 population.

† Standardized to the 2000 projected U.S. population.

§ Number too small to calculate rate.

(9). Prevention of the first cardiac event through risk factor reduction (e.g., tobacco control, weight management, physical activity, and control of high blood pressure and cholesterol intake) should continue to be the focus of public health efforts to reduce the number of deaths from heart disease. Education and systems support to promote physician adherence to clinical practice guidelines and more timely access to emergency cardiac care also are important to the prevention and early treatment of a heart attack. Prehospital emergency medical service systems can assist in reducing SCD rates by dispatching appropriately trained and properly equipped response personnel as rapidly as possible in the event of cardiac emergencies. However, national efforts are needed to increase the proportion of the public that can recognize and respond to symptoms and can intervene when someone is having a heart attack, including calling 9-1-1, attempting cardiac resuscitation, and using automated external defibrillators until emergency personnel arrive.

#### References

1. Zheng Z-J, Croft JB, Giles WH, Mensah GA. Sudden cardiac death in the United States, 1989 to 1998. *Circulation* 2001;104:2158-63.
2. Hoyert DL, Arias E, Smith BL, Murphy SL, Kochanek KD. Deaths: final data for 1999. *National vital statistics reports*; vol. 49, no. 8. Hyattsville, Maryland: National Center for Health Statistics, 2001. US Department of Health and Human Services publication no. (PHS) 2001-1120.
3. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected US population. *Healthy people 2010 statistical notes*, no. 20. US Department of Health and Human Services, publication no. (PHS) 2001-1237.
4. Goldberg RJ, Yarzebski J, Lessard D, Gore JM. Decade-long trends and factors associated with time to hospital presentation in patients with acute myocardial infarction: the Worcester heart attack study. *Arch Intern Med* 2000;160:3217-23.
5. Mosca L, Jones WK, King KB, et al. Awareness, perception, and knowledge of heart disease risk and prevention among women in the United States. *Arch Fam Med* 2000;9:506-15.
6. Goldberg RJ, O'Donnell C, Yarzebski J, et al. Sex differences in symptom presentation associated with acute myocardial infarction: a population-based perspective. *Am Heart J* 1998;136:189-95.
7. Rosenberg HM, Maurer JD, Sorlie PD, et al. Quality of death rates by race and Hispanic origin: a summary of current research, 1999. *Vital Health Stat* 1999;2:1-13.
8. Faxon D, Lenfant C. Timing is everything: motivating patients to call 9-1-1 at onset of acute myocardial infarction. *Circulation* 2001;104:1210-1.
9. Ornato JP, Hand MM. Warning signs of a heart attack. *Circulation* 2001;104:1212-3.

#### Notice to Readers

### **American Heart Month — February 2002**

February is American Heart Month. During 2002, an estimated 1.1 million Americans will have a first or recurrent heart attack, and approximately 700,000 will die of heart disease. Among those who die, approximately 60% will die suddenly before they can reach a hospital. Recognizing and responding promptly to heart attack symptoms and receiving the appropriate artery opening treatment within 1 hour of symptom onset can prevent or limit heart damage (1). Early defibrillation within 6 minutes is the best treatment for cardiac arrest.

The American Heart Association, American College of Cardiology, state and federal agencies, and many CDC cardiovascular programs are developing and implementing activities to increase public awareness about the symptoms and signs of a heart attack. For example, during February, the Missouri state health department will promote information about heart attack symptoms at sporting events; the National Heart Attack Alert Program of the National Heart, Lung, and Blood Institute and the American Heart Association are collaborating on a nationwide heart attack education campaign, "Act in Time to Heart Attack Signs," which promotes awareness of heart attack symptoms and the formulation between patient and physician of a heart attack survival plan that emphasizes the importance of calling 9-1-1 as soon as symptoms begin (1).

Additional information is available at the American Heart Association at <http://www.americanheart.org/>, the American College of Cardiology at <http://www.acc.org/>, and the National Heart, Lung, and Blood Institute at <http://www.nhlbi.nih.gov/actintime>. Information about CDC's Cardiovascular Health Program and an interactive mapping of heart disease mortality at state and county levels are available at <http://www.cdc.gov/nccdphp/cvd>.

#### **Reference**

1. Ornato JP, Hand MM. Warning signs of a heart attack. *Circulation* 2001;104:1212-3.

*Notice to Readers***Status of U.S. Department  
of Defense Preliminary Evaluation  
of the Association of Anthrax Vaccination  
and Congenital Anomalies**

The U.S. Department of Defense (DoD), Center for Deployment Health Research at Naval Health Research Center, San Diego, used computerized medical records to conduct a preliminary evaluation of the potential association between the use of anthrax vaccine in the first trimester of pregnancy and the diagnosis of congenital anomalies in children. Review of preliminary data indicated important limitations in computerized medical records that preclude drawing conclusions from this preliminary study. Investigators are conducting a systematic evaluation of original medical records, including vaccination and infant health records. This evaluation will require several months.

Although the Food and Drug Administration-licensed vaccine has not been suspected to be a hazard to reproductive health, no studies of animals or pregnant women have been conducted, and the vaccine is neither recommended nor licensed for use in pregnancy. DoD continues to maintain a policy of avoiding anthrax vaccination of pregnant women. Because of the importance of protecting women of childbearing age from adverse health events, both military and civilian health-care providers should continue to ask women if they are pregnant or intend to become pregnant and should not vaccinate women who state that they are pregnant.

*Notice to Readers***Revision of Guidelines for the Prevention  
of Perinatal Group B Streptococcal  
Disease**

CDC is revising the 1996 guidelines for the prevention of perinatal group B streptococcal disease (1) to include newly available multistate data and to address common clinical questions and challenges that have arisen during implementation of the guidelines. Comments or questions should be sent before March 15, 2002, to [gbs@cdc.gov](mailto:gbs@cdc.gov) or to Group B Strep Prevention Coordinator, CDC, 1600 Clifton Road, MS C-23, Atlanta, GA 30333.

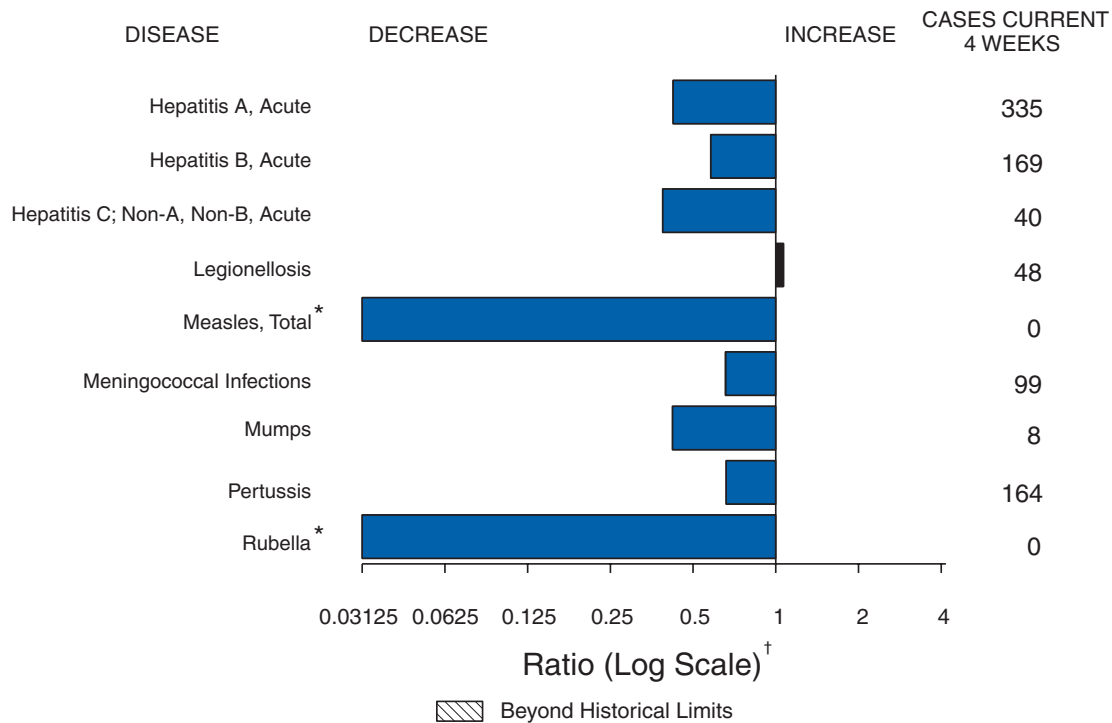
**Reference**

1. CDC. Prevention of perinatal group B streptococcal disease: a public health perspective. *MMWR* 1996;45(No. RR-7).





**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending February 9, 2002, with historical data**



\* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 6 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 February 9, 2002 (6th Week)\***

	Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax	-	-	Encephalitis: West Nile <sup>†</sup>	4	-
Botulism: foodborne	5	5	Hansen disease (leprosy) <sup>†</sup>	3	8
infant	4	6	Hantavirus pulmonary syndrome <sup>†</sup>	-	1
other (wound & unspecified)	1	-	Hemolytic uremic syndrome, postdiarrheal <sup>†</sup>	8	10
Brucellosis <sup>†</sup>	6	5	HIV infection, pediatric <sup>†§</sup>	4	10
Chancroid	2	4	Plague	-	-
Cholera	-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis <sup>†</sup>	10	17	Psittacosis <sup>†</sup>	6	1
Diphtheria	-	-	Q fever <sup>†</sup>	3	-
Ehrlichiosis: human granulocytic (HGE) <sup>†</sup>	5	2	Rabies, human	-	-
human monocytic (HME) <sup>†</sup>	1	2	Streptococcal toxic-shock syndrome <sup>†</sup>	6	12
other and unspecified	-	-	Tetanus	-	5
Encephalitis: California serogroup viral <sup>†</sup>	7	1	Toxic-shock syndrome	12	13
eastern equine <sup>†</sup>	-	-	Trichinosis	2	4
Powassan <sup>†</sup>	-	-	Tularemia <sup>†</sup>	4	1
St. Louis <sup>†</sup>	-	-	Yellow fever	-	-
western equine <sup>†</sup>	-	-			

-: No reported cases.

\* Incidence data for reporting year 2001 and 2002 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 (NCHSTP). Last update January 27, 2002.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\***

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		Escherichia coli			
	Cum. 2002 <sup>§</sup>	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	O157:H7		Shiga Toxin Positive, Serogroup non-O157	
							Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	3,550	4,178	59,866	79,279	183	159	103	103	4	3
NEW ENGLAND	119	87	1,861	2,431	6	4	6	8	-	-
Maine	1	3	147	140	-	-	-	-	-	-
N.H.	2	5	145	138	2	-	-	1	-	-
Vt.	2	5	86	80	-	2	-	-	-	-
Mass.	83	50	1,170	909	1	1	4	7	-	-
R.I.	6	9	313	369	3	1	1	-	-	-
Conn.	25	15	-	795	-	-	1	-	-	-
MID. ATLANTIC	874	2,021	5,210	6,913	14	26	7	12	-	-
Upstate N.Y.	52	489	709	838	1	3	7	8	-	-
N.Y. City	600	1,371	2,568	2,932	8	15	-	-	-	-
N.J.	163	131	224	843	-	2	-	4	-	-
Pa.	59	30	1,709	2,300	5	6	N	N	-	-
E.N. CENTRAL	375	217	8,523	16,458	48	59	29	23	-	-
Ohio	106	37	410	4,642	14	11	8	10	-	-
Ind.	53	26	1,296	1,651	7	6	2	3	-	-
Ill.	175	123	2,578	4,830	3	6	7	5	-	-
Mich.	31	23	3,183	3,327	9	8	5	-	-	-
Wis.	10	8	1,056	2,008	15	28	7	5	-	-
W.N. CENTRAL	47	46	2,251	4,235	9	3	18	9	2	-
Minn.	9	7	664	996	5	-	7	4	2	-
Iowa	15	9	-	319	1	1	6	-	-	-
Mo.	22	6	776	1,490	2	-	2	2	-	-
N. Dak.	-	-	37	110	-	-	-	-	-	-
S. Dak.	-	-	242	225	-	-	-	1	-	-
Nebr.	-	15	-	359	-	2	-	-	-	-
Kans.	1	9	532	736	1	-	3	2	-	-
S. ATLANTIC	1,156	709	11,248	14,646	52	21	16	10	1	1
Del.	23	14	181	331	-	-	1	-	-	-
Md.	143	39	1,477	1,701	1	2	-	-	-	-
D.C.	19	61	301	343	1	1	-	-	-	-
Va.	113	88	1,593	1,487	-	2	1	1	-	1
W. Va.	8	4	266	261	-	-	-	-	-	-
N.C.	64	33	2,447	1,664	7	2	3	6	-	-
S.C.	112	50	1,215	2,554	-	-	-	1	-	-
Ga.	377	104	1,128	3,255	38	6	10	1	1	-
Fla.	297	316	2,640	3,050	5	8	1	1	-	-
E.S. CENTRAL	158	126	5,359	5,589	8	3	-	4	-	-
Ky.	16	18	782	948	1	-	-	-	-	-
Tenn.	86	58	1,815	1,758	1	-	-	2	-	-
Ala.	20	25	1,811	1,435	5	2	-	2	-	-
Miss.	36	25	951	1,448	1	1	-	-	-	-
W.S. CENTRAL	401	385	10,872	12,193	4	4	-	10	-	-
Ark.	14	19	409	1,066	2	1	-	-	-	-
La.	75	117	2,044	2,001	1	1	-	-	-	-
Okla.	7	20	992	1,214	1	1	-	2	-	-
Tex.	305	229	7,427	7,912	-	1	-	8	-	-
MOUNTAIN	121	144	4,383	4,112	6	10	9	6	1	1
Mont.	3	1	139	55	-	-	1	-	-	-
Idaho	1	-	156	206	2	1	1	2	-	-
Wyo.	1	-	80	92	-	-	-	-	1	-
Colo.	21	51	552	1,240	1	4	2	2	-	1
N. Mex.	6	10	706	705	-	3	2	-	-	-
Ariz.	52	37	1,254	1,146	-	1	1	2	-	-
Utah	7	9	880	67	2	1	-	-	-	-
Nev.	30	36	616	601	1	-	2	-	-	-
PACIFIC	299	443	10,159	12,702	36	29	18	21	-	1
Wash.	-	28	1,450	1,598	10	U	4	2	-	-
Oreg.	76	18	-	747	6	3	5	-	-	1
Calif.	220	396	7,976	9,600	20	26	9	15	-	-
Alaska	-	1	343	262	-	-	-	-	-	-
Hawaii	3	-	390	495	-	-	-	4	-	-
Guam	1	1	-	-	-	-	N	N	-	-
P.R.	68	48	-	367	-	-	-	-	-	-
V.I.	33	1	-	14	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	20	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 year 2001 and 2002 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 January 27, 2002.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\*

Reporting Area	<i>Escherichia coli</i>		Giardiasis	Gonorrhea		<i>Haemophilus influenzae</i> , Invasive			
	Shiga Toxin Positive, Not Serogrouped					All Ages, All Serotypes		Age <5 Years	
	Cum. 2002	Cum. 2001						Serotype B	
						Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1	1	1,105	27,954	39,005	156	164	-	1
NEW ENGLAND	-	-	108	588	681	6	6	-	1
Maine	-	-	18	11	19	1	-	-	-
N.H.	-	-	9	10	13	-	-	-	-
Vt.	-	-	15	13	14	-	-	-	-
Mass.	-	-	33	450	269	5	6	-	1
R.I.	-	-	10	104	95	-	-	-	-
Conn.	-	-	23	-	271	-	-	-	-
MID. ATLANTIC	-	-	214	2,535	3,503	26	29	-	-
Upstate N.Y.	-	-	52	384	486	14	5	-	-
N.Y. City	-	-	85	1,135	1,320	9	10	-	-
N.J.	-	-	-	198	537	-	12	-	-
Pa.	-	-	77	818	1,160	3	2	-	-
E.N. CENTRAL	1	-	237	4,618	8,642	25	29	-	-
Ohio	1	-	97	290	2,524	20	9	-	-
Ind.	-	-	-	599	757	3	3	-	-
Ill.	-	-	31	1,579	2,570	-	11	-	-
Mich.	-	-	86	1,768	2,048	1	3	-	-
Wis.	-	-	23	382	743	1	3	-	-
W.N. CENTRAL	-	-	86	1,165	1,949	2	3	-	-
Minn.	-	-	14	242	332	-	-	-	-
Iowa	-	-	29	-	99	1	-	-	-
Mo.	-	-	19	645	985	1	3	-	-
N. Dak.	-	-	-	-	3	-	-	-	-
S. Dak.	-	-	8	30	27	-	-	-	-
Nebr.	-	-	-	-	155	-	-	-	-
Kans.	-	-	16	248	348	-	-	-	-
S. ATLANTIC	-	-	210	7,076	9,949	50	49	-	-
Del.	-	-	7	141	174	-	-	-	-
Md.	-	-	15	813	1,007	15	10	-	-
D.C.	-	-	6	282	365	-	-	-	-
Va.	-	-	5	1,117	935	2	3	-	-
W. Va.	-	-	2	109	50	-	1	-	-
N.C.	-	-	-	1,588	1,507	3	6	-	-
S.C.	-	-	1	767	2,277	-	1	-	-
Ga.	-	-	102	734	1,836	20	16	-	-
Fla.	-	-	72	1,525	1,798	10	12	-	-
E.S. CENTRAL	-	1	28	3,282	3,816	2	1	-	-
Ky.	-	1	-	332	410	-	-	-	-
Tenn.	-	-	9	1,129	1,255	1	-	-	-
Ala.	-	-	19	1,169	1,194	1	1	-	-
Miss.	-	-	-	652	957	-	-	-	-
W.S. CENTRAL	-	-	9	5,246	6,347	4	2	-	-
Ark.	-	-	9	253	772	-	-	-	-
La.	-	-	-	1,389	1,442	-	-	-	-
Okla.	-	-	-	436	600	4	2	-	-
Tex.	-	-	-	3,168	3,533	-	-	-	-
MOUNTAIN	-	-	105	1,112	1,161	24	31	-	-
Mont.	-	-	3	11	3	-	-	-	-
Idaho	-	-	3	11	12	-	-	-	-
Wyo.	-	-	-	6	11	-	-	-	-
Colo.	-	-	42	323	448	4	6	-	-
N. Mex.	-	-	9	144	134	5	6	-	-
Ariz.	-	-	10	354	324	12	18	-	-
Utah	-	-	21	67	9	3	-	-	-
Nev.	-	-	17	196	220	-	1	-	-
PACIFIC	-	-	108	2,332	2,957	17	14	-	-
Wash.	-	-	22	324	378	-	-	-	-
Oreg.	-	-	66	-	135	12	-	-	-
Calif.	-	-	-	1,890	2,333	-	11	-	-
Alaska	-	-	8	66	30	-	1	-	-
Hawaii	-	-	12	52	81	5	2	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	128	-	-	-	-
V.I.	-	-	-	-	1	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	1	U	-	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\***

Reporting Area	<i>Haemophilus influenzae</i> , Invasive				Hepatitis (Viral, Acute), By Type					
	Age <5 Years				A		B		C; Non-A, Non-B	
	Non-Serotype B		Unknown Serotype		Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001						
UNITED STATES	18	32	-	2	677	1,661	300	627	91	592
NEW ENGLAND	1	2	-	-	34	60	9	16	-	7
Maine	-	-	-	-	1	1	-	1	-	-
N.H.	-	-	-	-	1	2	2	1	-	-
Vt.	-	-	-	-	-	1	1	1	-	2
Mass.	1	2	-	-	15	28	5	4	-	5
R.I.	-	-	-	-	2	2	1	-	-	-
Conn.	-	-	-	-	15	26	-	9	-	-
MID. ATLANTIC	2	3	-	-	56	146	48	159	15	273
Upstate N.Y.	2	-	-	-	9	15	2	4	3	3
N.Y. City	-	2	-	-	9	51	20	74	-	-
N.J.	-	-	-	-	1	60	8	63	10	263
Pa.	-	1	-	-	37	20	18	18	2	7
E.N. CENTRAL	4	6	-	-	73	583	51	62	8	45
Ohio	3	1	-	-	29	28	9	13	1	1
Ind.	1	-	-	-	1	2	-	2	-	-
Ill.	-	4	-	-	17	486	2	2	-	19
Mich.	-	-	-	-	24	57	40	45	7	25
Wis.	-	1	-	-	2	10	-	-	-	-
W.N. CENTRAL	-	-	-	1	33	66	10	25	25	117
Minn.	-	-	-	-	-	1	2	1	-	-
Iowa	-	-	-	-	12	3	4	2	-	-
Mo.	-	-	-	1	3	22	2	16	25	115
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	1	-	-	1	-	-
Nebr.	-	-	-	-	-	15	-	4	-	1
Kans.	-	-	-	-	17	25	2	1	-	1
S. ATLANTIC	5	7	-	-	215	164	75	120	7	6
Del.	-	-	-	-	-	1	-	3	3	1
Md.	-	-	-	-	55	30	14	12	1	1
D.C.	-	-	-	-	8	3	1	2	-	-
Va.	1	-	-	-	2	14	3	9	-	-
W. Va.	-	-	-	-	1	-	2	1	-	-
N.C.	-	-	-	-	31	5	12	25	2	1
S.C.	-	-	-	-	6	9	3	-	-	-
Ga.	1	5	-	-	35	66	12	54	-	1
Fla.	3	2	-	-	77	36	28	14	1	2
E.S. CENTRAL	1	-	-	-	22	29	6	37	12	8
Ky.	-	-	-	-	8	2	3	7	1	-
Tenn.	-	-	-	-	-	13	-	6	2	6
Ala.	1	-	-	-	4	13	3	13	1	-
Miss.	-	-	-	-	10	1	-	11	8	2
W.S. CENTRAL	1	1	-	-	11	289	14	37	-	118
Ark.	-	-	-	-	5	13	12	12	-	1
La.	-	-	-	-	-	13	-	18	-	46
Okla.	1	1	-	-	5	17	1	7	-	-
Tex.	-	-	-	-	1	246	1	-	-	71
MOUNTAIN	3	5	-	1	46	95	26	42	11	6
Mont.	-	-	-	-	2	2	-	-	-	-
Idaho	-	-	-	-	-	8	-	1	-	-
Wyo.	-	-	-	-	2	1	2	-	4	2
Colo.	-	-	-	-	14	14	10	12	6	1
N. Mex.	1	2	-	1	3	3	1	16	-	3
Ariz.	2	3	-	-	11	45	5	8	-	-
Utah	-	-	-	-	4	5	3	-	-	-
Nev.	-	-	-	-	10	17	5	5	1	-
PACIFIC	1	8	-	-	187	229	61	129	13	12
Wash.	-	-	-	-	7	3	2	3	-	-
Oreg.	1	-	-	-	20	1	15	3	5	1
Calif.	-	7	-	-	160	215	44	120	8	11
Alaska	-	-	-	-	-	9	-	1	-	-
Hawaii	-	1	-	-	-	1	-	2	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	5	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	4	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).



**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\***

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	68	78	26	35	344	441	78	131	-	22†
NEW ENGLAND	2	1	1	3	13	75	7	14	-	3
Maine	-	-	1	-	-	-	1	-	-	-
N.H.	1	-	-	-	7	1	4	-	-	-
Vt.	-	1	-	-	-	-	-	-	-	-
Mass.	-	-	-	3	6	26	-	8	-	3
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	1	-	-	-	-	48	2	6	-	-
MID. ATLANTIC	10	14	5	4	258	277	7	30	-	-
Upstate N.Y.	1	1	3	1	164	61	2	1	-	-
N.Y. City	-	1	1	1	-	4	3	18	-	-
N.J.	-	4	-	2	12	78	-	8	-	-
Pa.	9	8	1	-	82	134	2	3	-	-
E.N. CENTRAL	33	34	4	6	8	22	7	28	-	-
Ohio	24	12	3	-	8	8	4	4	-	-
Ind.	1	2	-	-	-	-	-	6	-	-
Ill.	-	5	-	1	-	2	-	7	-	-
Mich.	8	9	1	3	-	-	3	11	-	-
Wis.	-	6	-	2	U	12	-	-	-	-
W.N. CENTRAL	1	6	-	1	5	3	6	3	-	-
Minn.	-	-	-	-	2	3	-	-	-	-
Iowa	-	1	-	-	1	-	2	-	-	-
Mo.	1	3	-	-	2	-	2	3	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	1	-	-	-	-	-	-	-	-
Kans.	-	1	-	1	-	-	2	-	-	-
S. ATLANTIC	11	7	6	3	45	44	28	26	-	3
Del.	2	-	-	-	5	4	-	1	-	-
Md.	3	5	1	1	31	37	9	11	-	3
D.C.	-	-	-	-	2	1	2	2	-	-
Va.	-	1	-	1	-	1	-	6	-	-
W. Va.	N	N	-	-	-	-	-	-	-	-
N.C.	1	-	-	-	-	1	3	1	-	-
S.C.	-	-	2	-	1	-	2	-	-	-
Ga.	2	1	2	1	-	-	6	4	-	-
Fla.	3	-	1	-	6	-	6	1	-	-
E. S. CENTRAL	-	3	-	4	-	2	2	1	-	-
Ky.	-	2	-	1	-	2	-	-	-	-
Tenn.	-	-	-	2	-	-	1	1	-	-
Ala.	-	1	-	1	-	-	1	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	-	2	-	2	1	11	-	2	-	-
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	1	-	-	-	-	-	1	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	1	-	2	1	11	-	1	-	-
MOUNTAIN	4	3	3	1	2	-	3	4	-	1
Mont.	-	-	-	-	-	-	-	1	-	-
Idaho	-	-	-	-	-	-	-	1	-	1
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	1	3	1	1	1	-	2	2	-	-
N. Mex.	1	-	-	-	1	-	-	-	-	-
Ariz.	-	-	2	-	-	-	-	-	-	-
Utah	2	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	1	-	-	-
PACIFIC	7	8	7	11	12	7	18	23	-	15
Wash.	-	1	-	-	-	-	-	-	-	11
Oreg.	N	N	1	1	-	-	-	2	-	2
Calif.	7	7	6	10	12	7	15	19	-	1
Alaska	-	-	-	-	-	-	1	1	-	-
Hawaii	-	-	-	-	N	N	2	1	-	1
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	2	-	-	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 year 2001 and 2002 are provisional and cumulative (year-to-date).

† Of 22 cases reported, 18 were indigenous and four were imported from another country.

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\***

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	160	401	16	16	340	543	286	601
NEW ENGLAND	10	24	1	-	93	96	54	51
Maine	2	-	-	-	3	-	3	10
N.H.	1	1	1	-	-	4	1	-
Vt.	2	-	-	-	15	17	13	9
Mass.	4	17	-	-	75	73	18	13
R.I.	-	-	-	-	-	-	2	7
Conn.	1	6	-	-	-	2	17	12
MID. ATLANTIC	18	56	1	1	14	22	64	81
Upstate N.Y.	4	11	-	-	14	18	49	52
N.Y. City	3	11	-	1	-	3	3	-
N.J.	1	28	-	-	-	-	-	13
Pa.	10	6	1	-	-	1	12	16
E.N. CENTRAL	27	40	1	1	55	76	2	6
Ohio	14	12	-	1	38	55	1	-
Ind.	6	-	-	-	2	1	1	1
Ill.	-	9	-	-	7	1	-	-
Mich.	5	12	1	-	7	5	-	2
Wis.	2	7	-	-	1	14	-	3
W.N. CENTRAL	6	21	1	1	36	25	15	37
Minn.	-	-	-	-	1	-	2	11
Iowa	-	6	-	-	10	3	4	9
Mo.	3	11	-	-	16	14	-	2
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	2	-	-	-	1	2	-	7
Nebr.	-	1	-	-	-	-	-	-
Kans.	1	3	1	1	8	6	9	8
S. ATLANTIC	29	57	3	1	32	24	99	142
Del.	1	-	-	-	1	-	3	-
Md.	1	11	1	1	7	6	2	31
D.C.	-	-	-	-	-	-	-	-
Va.	1	5	1	-	8	-	39	33
W. Va.	-	-	-	-	-	-	10	8
N.C.	3	10	-	-	7	9	39	35
S.C.	1	4	1	-	8	4	6	7
Ga.	7	11	-	-	-	5	-	15
Fla.	15	16	-	-	1	-	-	13
E.S. CENTRAL	8	22	2	-	13	10	11	108
Ky.	-	3	-	-	4	1	1	-
Tenn.	1	7	-	-	7	4	6	106
Ala.	6	8	1	-	2	2	4	2
Miss.	1	4	1	-	-	3	-	-
W.S. CENTRAL	9	99	-	-	17	3	11	108
Ark.	5	6	-	-	5	2	-	-
La.	1	15	-	-	-	-	-	1
Okla.	2	6	-	-	1	1	11	9
Tex.	1	72	-	-	11	-	-	98
MOUNTAIN	19	21	-	1	63	239	13	31
Mont.	-	-	-	-	2	-	-	4
Idaho	-	3	-	-	5	19	-	-
Wyo.	-	-	-	-	1	-	1	9
Colo.	5	7	-	-	35	84	-	-
N. Mex.	-	4	-	1	10	4	-	-
Ariz.	7	3	-	-	4	129	12	18
Utah	3	2	-	-	5	3	-	-
Nev.	4	2	-	-	1	-	-	-
PACIFIC	34	61	7	11	17	48	17	37
Wash.	7	5	-	-	4	5	-	-
Oreg.	7	1	N	N	11	2	-	-
Calif.	18	51	7	7	-	34	6	17
Alaska	1	-	-	-	2	-	11	20
Hawaii	1	4	-	4	-	7	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	11	12
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\***

Reporting Area	Rocky Mountain Spotted Fever		Rubella				Salmonellosis	
	Cum. 2002	Cum. 2001	Rubella		Congenital Rubella		Cum. 2002	Cum. 2001
			Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001		
UNITED STATES	28	6	-	-	-	-	2,085	2,663
NEW ENGLAND	-	-	-	-	-	-	127	141
Maine	-	-	-	-	-	-	21	8
N.H.	-	-	-	-	-	-	4	9
Vt.	-	-	-	-	-	-	6	8
Mass.	-	-	-	-	-	-	63	105
R.I.	-	-	-	-	-	-	5	9
Conn.	-	-	-	-	-	-	28	2
MID. ATLANTIC	4	1	-	-	-	-	169	450
Upstate N.Y.	-	-	-	-	-	-	25	50
N.Y. City	-	-	-	-	-	-	64	103
N.J.	-	-	-	-	-	-	1	184
Pa.	4	1	-	-	-	-	79	113
E.N. CENTRAL	2	2	-	-	-	-	284	370
Ohio	2	-	-	-	-	-	79	103
Ind.	-	1	-	-	-	-	25	19
Ill.	-	1	-	-	-	-	84	122
Mich.	-	-	-	-	-	-	74	61
Wis.	-	-	-	-	-	-	22	65
W.N. CENTRAL	-	-	-	-	-	-	147	152
Minn.	-	-	-	-	-	-	31	51
Iowa	-	-	-	-	-	-	25	15
Mo.	-	-	-	-	-	-	60	43
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	11	13
Nebr.	-	-	-	-	-	-	-	10
Kans.	-	-	-	-	-	-	20	20
S. ATLANTIC	21	3	-	-	-	-	647	581
Del.	-	-	-	-	-	-	6	8
Md.	5	-	-	-	-	-	65	68
D.C.	-	-	-	-	-	-	6	11
Va.	-	-	-	-	-	-	45	56
W. Va.	-	-	-	-	-	-	3	1
N.C.	16	3	-	-	-	-	112	108
S.C.	-	-	-	-	-	-	31	49
Ga.	-	-	-	-	-	-	209	171
Fla.	-	-	-	-	-	-	170	109
E.S. CENTRAL	1	-	-	-	-	-	137	161
Ky.	-	-	-	-	-	-	18	30
Tenn.	1	-	-	-	-	-	32	30
Ala.	-	-	-	-	-	-	58	71
Miss.	-	-	-	-	-	-	29	30
W.S. CENTRAL	-	-	-	-	-	-	50	302
Ark.	-	-	-	-	-	-	27	23
La.	-	-	-	-	-	-	-	44
Okla.	-	-	-	-	-	-	21	7
Tex.	-	-	-	-	-	-	2	228
MOUNTAIN	-	-	-	-	-	-	155	134
Mont.	-	-	-	-	-	-	3	7
Idaho	-	-	-	-	-	-	9	5
Wyo.	-	-	-	-	-	-	4	6
Colo.	-	-	-	-	-	-	53	41
N. Mex.	-	-	-	-	-	-	23	22
Ariz.	-	-	-	-	-	-	27	30
Utah	-	-	-	-	-	-	16	12
Nev.	-	-	-	-	-	-	20	11
PACIFIC	-	-	-	-	-	-	369	372
Wash.	-	-	-	-	-	-	12	13
Oreg.	-	-	-	-	-	-	32	4
Calif.	-	-	-	-	-	-	297	311
Alaska	-	-	-	-	-	-	8	5
Hawaii	-	-	-	-	-	-	20	39
Guam	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	3	73
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	1	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\*

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		<i>Streptococcus pneumoniae</i> , Drug Resistant, Invasive		<i>Streptococcus pneumoniae</i> , Invasive (<5 Years)	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1,105	1,407	328	434	190	295	11	7
NEW ENGLAND	22	17	10	14	1	2	5	-
Maine	1	-	3	4	-	-	-	-
N.H.	1	-	2	2	-	-	-	-
Vt.	-	-	1	3	1	2	5	-
Mass.	19	15	4	5	-	-	-	-
R.I.	-	-	-	-	-	-	-	-
Conn.	1	2	-	-	-	-	-	-
MID. ATLANTIC	34	185	49	90	8	16	1	4
Upstate N.Y.	6	52	23	23	8	16	1	4
N.Y. City	12	52	18	37	-	-	-	-
N.J.	-	49	1	28	-	-	-	-
Pa.	16	32	7	2	-	-	-	-
E.N. CENTRAL	169	218	57	116	9	19	3	3
Ohio	107	49	22	25	-	-	1	-
Ind.	7	25	1	-	9	19	2	3
Ill.	34	82	1	41	-	-	-	-
Mich.	19	46	33	45	-	-	-	-
Wis.	2	16	-	5	-	-	-	-
W.N. CENTRAL	139	175	9	28	18	2	-	-
Minn.	21	86	-	-	-	-	-	-
Iowa	7	18	-	-	-	-	-	-
Mo.	15	44	6	16	1	-	-	-
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	82	1	-	2	-	-	-	-
Nebr.	-	9	-	1	-	1	-	-
Kans.	14	17	3	9	17	1	-	-
S. ATLANTIC	414	158	90	49	129	191	2	-
Del.	2	1	-	-	3	-	-	-
Md.	40	12	12	8	-	-	-	-
D.C.	3	5	2	-	2	1	2	-
Va.	92	10	5	14	-	-	-	-
W. Va.	1	1	-	-	3	3	-	-
N.C.	32	32	22	10	-	-	-	-
S.C.	7	12	2	1	18	40	-	-
Ga.	177	36	35	9	43	64	-	-
Fla.	60	49	12	7	60	83	-	-
E. S. CENTRAL	76	96	10	10	18	37	-	-
Ky.	17	39	1	3	1	4	-	-
Tenn.	6	8	9	7	17	32	-	-
Ala.	30	21	-	-	-	1	-	-
Miss.	23	28	-	-	-	-	-	-
W.S. CENTRAL	45	259	5	60	2	19	-	-
Ark.	16	18	-	-	2	4	-	-
La.	-	24	-	-	-	15	-	-
Okla.	28	1	4	5	-	-	-	-
Tex.	1	216	1	55	-	-	-	-
MOUNTAIN	36	64	44	53	5	9	-	-
Mont.	-	-	-	-	-	-	-	-
Idaho	2	2	-	1	-	-	-	-
Wyo.	-	-	1	-	2	-	-	-
Colo.	10	13	28	34	-	-	-	-
N. Mex.	3	18	15	14	3	9	-	-
Ariz.	10	25	-	3	-	-	-	-
Utah	5	1	-	1	-	-	-	-
Nev.	6	5	-	-	-	-	-	-
PACIFIC	170	235	54	14	-	-	-	-
Wash.	2	19	16	-	-	-	-	-
Oreg.	15	-	-	-	-	-	-	-
Calif.	146	214	30	9	-	-	-	-
Alaska	1	-	-	-	-	-	-	-
Hawaii	6	2	8	5	-	-	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	-	2	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	-	-	U	U
C.N.M.I.	-	U	-	U	-	-	-	U

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

\*Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).



**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 9, 2002, and February 10, 2001 (6th Week)\***

Reporting Area	Syphilis				Tuberculosis		Typhoid Fever	
	Primary & Secondary		Congenital†		Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001				
UNITED STATES	478	519	-	52	392	775	11	25
NEW ENGLAND	6	2	-	-	14	21	3	3
Maine	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	1	-	-
Mass.	6	-	-	-	3	13	2	3
R.I.	-	-	-	-	5	-	-	-
Conn.	-	2	-	-	6	7	1	-
MID. ATLANTIC	23	42	-	9	80	104	2	12
Upstate N.Y.	1	1	-	5	2	16	-	2
N.Y. City	13	24	-	-	52	43	2	1
N.J.	7	3	-	4	-	32	-	9
Pa.	2	14	-	-	26	13	-	-
E.N. CENTRAL	88	74	-	8	78	84	2	3
Ohio	10	5	-	-	17	16	1	1
Ind.	6	11	-	-	11	11	-	-
Ill.	26	31	-	7	44	40	-	1
Mich.	43	25	-	1	-	9	-	1
Wis.	3	2	-	-	6	8	1	-
W.N. CENTRAL	1	11	-	1	37	23	-	1
Minn.	-	10	-	-	19	16	-	-
Iowa	-	-	-	-	-	-	-	-
Mo.	1	1	-	-	18	5	-	1
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	1	-	-
Nebr.	-	-	-	-	-	1	-	-
Kans.	-	-	-	1	-	-	-	-
S. ATLANTIC	118	179	-	14	25	143	2	4
Del.	1	-	-	-	-	-	-	-
Md.	9	28	-	1	2	7	-	2
D.C.	5	1	-	-	-	10	-	-
Va.	4	12	-	-	7	7	-	-
W. Va.	-	-	-	-	5	4	-	-
N.C.	41	50	-	2	7	7	-	-
S.C.	15	27	-	3	2	16	-	-
Ga.	14	22	-	4	2	31	1	2
Fla.	29	39	-	4	-	61	1	-
E. S. CENTRAL	78	58	-	2	27	40	-	-
Ky.	1	5	-	-	8	4	-	-
Tenn.	26	24	-	1	-	7	-	-
Ala.	44	16	-	1	15	24	-	-
Miss.	7	13	-	-	4	5	-	-
W.S. CENTRAL	76	80	-	9	5	163	-	1
Ark.	-	8	-	2	3	13	-	-
La.	19	14	-	-	-	-	-	-
Okla.	8	11	-	1	2	1	-	-
Tex.	49	47	-	6	-	149	-	1
MOUNTAIN	41	21	-	2	18	27	1	-
Mont.	-	-	-	-	-	-	-	-
Idaho	1	-	-	-	-	-	-	-
Wyo.	-	-	-	-	1	-	-	-
Colo.	-	2	-	-	2	9	1	-
N. Mex.	6	1	-	-	4	3	-	-
Ariz.	32	12	-	2	9	7	-	-
Utah	2	4	-	-	2	-	-	-
Nev.	-	2	-	-	-	8	-	-
PACIFIC	47	52	-	7	108	170	1	1
Wash.	5	12	-	-	16	19	-	-
Oreg.	-	2	-	-	4	8	-	-
Calif.	41	36	-	7	64	119	1	1
Alaska	-	-	-	-	9	7	-	-
Hawaii	1	2	-	-	15	17	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	-	41	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	1	U	-	U	8	U	-	U

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

\* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

† Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE III. Deaths in 122 U.S. cities,\* week ending February 9, 2002 (6th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total	Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1			All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	579	409	95	44	16	14	57	S. ATLANTIC	2,081	1,339	470	177	59	34	117
Boston, Mass.	184	133	24	16	5	5	15	Atlanta, Ga.	185	119	44	12	5	5	6
Bridgeport, Conn.	29	19	5	4	-	1	6	Baltimore, Md.	191	123	54	11	1	2	22
Cambridge, Mass.	19	15	4	-	-	-	4	Charlotte, N.C.	71	47	17	7	-	-	10
Fall River, Mass.	31	28	2	-	1	-	3	Jacksonville, Fla.	157	98	44	10	3	2	15
Hartford, Conn.	75	47	19	5	2	2	1	Miami, Fla.	162	110	29	13	7	3	9
Lowell, Mass.	32	23	4	2	3	-	4	Norfolk, Va.	55	32	14	5	3	1	-
Lynn, Mass.	18	13	3	2	-	-	4	Richmond, Va.	82	49	23	4	1	5	11
New Bedford, Mass.	32	24	5	3	-	-	2	Savannah, Ga.	68	52	13	2	-	1	3
New Haven, Conn.	27	15	7	4	-	1	4	St. Petersburg, Fla.	79	63	10	3	2	1	8
Providence, R.I.	U	U	U	U	U	U	U	Tampa, Fla.	217	162	31	19	1	4	18
Somerville, Mass.	6	4	2	-	-	-	1	Washington, D.C.	799	471	189	91	36	10	15
Springfield, Mass.	39	26	6	3	3	1	5	Wilmington, Del.	15	13	2	-	-	-	-
Waterbury, Conn.	25	18	6	1	-	-	-	E.S. CENTRAL	1,077	751	207	74	24	20	107
Worcester, Mass.	62	44	8	4	2	4	8	Birmingham, Ala.	219	156	38	14	5	5	24
MID. ATLANTIC	2,384	1,694	448	169	45	27	155	Chattanooga, Tenn.	73	55	8	6	4	-	10
Albany, N.Y.	52	38	7	2	3	2	5	Knoxville, Tenn.	116	79	23	7	4	3	4
Allentown, Pa.	20	19	-	1	-	-	1	Lexington, Ky.	106	67	29	5	2	3	12
Buffalo, N.Y.	106	76	18	8	3	1	18	Memphis, Tenn.	274	182	66	19	4	3	28
Camden, N.J.	25	14	7	3	1	-	2	Mobile, Ala.	74	56	11	5	1	1	2
Elizabeth, N.J.	20	17	1	2	-	-	-	Montgomery, Ala.	58	45	4	7	1	1	12
Erie, Pa.	40	30	7	3	-	-	3	Nashville, Tenn.	157	111	28	11	3	4	15
Jersey City, N.J.	45	37	4	3	-	1	-	W.S. CENTRAL	1,728	1,183	318	124	50	53	142
New York City, N.Y.	1,323	922	273	96	20	12	58	Austin, Tex.	116	79	26	5	1	5	11
Newark, N.J.	U	U	U	U	U	U	U	Baton Rouge, La.	19	12	6	1	-	-	1
Paterson, N.J.	29	17	6	6	-	-	-	Corpus Christi, Tex.	101	77	19	4	-	1	8
Philadelphia, Pa.	300	212	47	23	12	5	19	Dallas, Tex.	242	161	42	21	8	10	22
Pittsburgh, Pa.‡	56	45	7	2	-	2	7	El Paso, Tex.	96	69	19	7	1	-	2
Reading, Pa.	28	24	1	3	-	-	4	Ft. Worth, Tex.	128	90	19	10	5	4	12
Rochester, N.Y.	145	102	32	8	1	2	18	Houston, Tex.	490	314	94	39	19	24	37
Schenectady, N.Y.	38	28	7	3	-	-	10	Little Rock, Ark.	80	57	13	8	2	-	5
Scranton, Pa.	38	30	6	1	1	-	-	New Orleans, La.	U	U	U	U	U	U	U
Syracuse, N.Y.	60	40	12	2	4	2	6	San Antonio, Tex.	242	181	36	11	9	5	24
Trenton, N.J.	29	20	7	2	-	-	2	Shreveport, La.	61	49	8	3	-	1	7
Utica, N.Y.	30	23	6	1	-	-	2	Tulsa, Okla.	153	94	36	15	5	3	13
Yonkers, N.Y.	U	U	U	U	U	U	U	MOUNTAIN	1,145	813	212	73	26	18	84
E.N. CENTRAL	1,840	1,279	364	119	38	37	140	Albuquerque, N.M.	136	99	25	10	-	2	15
Akron, Ohio	44	36	2	2	3	1	5	Boise, Idaho	46	28	12	5	1	-	2
Canton, Ohio	34	26	5	2	1	-	4	Bo. Springs, Colo.	61	50	8	-	-	3	2
Chicago, Ill.	U	U	U	U	U	U	U	Denver, Colo.	101	68	18	10	3	2	7
Cincinnati, Ohio	98	71	17	2	4	1	14	Las Vegas, Nev.	266	181	58	17	8	2	15
Cleveland, Ohio	157	108	34	12	-	3	14	Ogden, Utah	33	29	2	1	1	-	-
Columbus, Ohio	236	163	45	19	2	7	6	Phoenix, Ariz.	181	120	35	10	8	5	11
Dayton, Ohio	144	103	30	7	1	3	12	Pueblo, Colo.	33	27	4	2	-	-	5
Detroit, Mich.	232	133	62	25	6	6	25	Salt Lake City, Utah	144	110	25	3	3	3	16
Evansville, Ind.	44	33	9	-	1	1	2	Tucson, Ariz.	144	101	25	15	2	1	11
Fort Wayne, Ind.	62	48	11	1	-	2	3	PACIFIC	2,393	1,688	465	137	56	45	170
Gary, Ind.	20	11	4	2	3	-	-	Berkeley, Calif.	19	13	3	1	-	2	-
Grand Rapids, Mich.	100	69	17	7	2	5	11	Fresno, Calif.	85	56	23	4	2	-	5
Indianapolis, Ind.	189	142	34	10	2	1	20	Glendale, Calif.	73	58	10	4	-	1	2
Lansing, Mich.	54	38	9	6	1	-	4	Honolulu, Hawaii	95	69	16	6	2	2	9
Milwaukee, Wis.	106	76	20	6	1	3	13	Long Beach, Calif.	84	63	15	5	1	-	11
Peoria, Ill.	46	29	11	3	1	2	1	Los Angeles, Calif.	1,155	826	204	68	38	19	78
Rockford, Ill.	68	49	13	3	3	-	1	Pasadena, Calif.	25	20	3	1	-	1	3
South Bend, Ind.	54	33	14	3	3	1	1	Portland, Oreg.	150	102	33	7	4	4	9
Toledo, Ohio	80	55	15	6	3	1	1	Sacramento, Calif.	208	150	45	6	2	5	12
Youngstown, Ohio	72	56	12	3	1	-	3	San Diego, Calif.	157	98	40	12	4	1	15
W.N. CENTRAL	594	442	93	32	15	12	51	San Francisco, Calif.	U	U	U	U	U	U	U
Des Moines, Iowa	89	69	18	1	1	-	12	San Jose, Calif.	U	U	U	U	U	U	U
Duluth, Minn.	U	U	U	U	U	U	U	Santa Cruz, Calif.	29	20	7	2	-	-	4
Kansas City, Kans.	12	9	2	-	1	-	1	Seattle, Wash.	129	84	27	13	2	3	9
Kansas City, Mo.	95	77	9	4	2	3	10	Spokane, Wash.	64	43	14	3	-	4	6
Lincoln, Nebr.	70	57	6	4	2	1	10	Tacoma, Wash.	120	86	25	5	1	3	7
Minneapolis, Minn.	16	12	3	-	-	1	-	TOTAL	13,821¶	9,598	2,672	949	329	260	1,023
Omaha, Nebr.	89	62	18	8	-	1	11								
St. Louis, Mo.	98	62	22	7	5	2	-								
St. Paul, Minn.	78	60	12	2	1	3	6								
Wichita, Kans.	47	34	3	6	3	1	1								

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.

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 pages found at these sites.

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 on Friday of each week, send an e-mail message to [listserv@listserv.cdc.gov](mailto: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 C-08, 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.

☆U.S. Government Printing Office: 2002-733-100/69008 Region IV