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# Laboratory-Acquired Meningococcal Disease — United States, 2000

Neisseria meningitidis is a leading cause of bacterial meningitis and sepsis among older children and young adults in the United States. N. meningitidis usually is transmitted through close contact with aerosols or secretions from the human nasopharynx. Although N. meningitidis is regularly isolated in clinical laboratories, it has infrequently been reported as a cause of laboratory-acquired infection. This report describes two probable cases of fatal laboratory-acquired meningococcal disease and the results of an inquiry to identify previously unreported cases. The findings indicate that N. meningitidis isolates pose a risk for microbiologists and should be handled in a manner that minimizes risk for exposure to aerosols or droplets.

### **Case Reports**

Case 1. On July 15, 2000, an Alabama microbiologist aged 35 years presented to the emergency department of hospital A with acute onset of generalized malaise, fever, and diffuse myalgias. The patient was given a prescription for oral antibiotics and released. On July 16, the patient returned to hospital A, became tachycardic and hypotensive, and died 3 hours later. Blood cultures were positive for N. meningitidis serogroup C. Three days before the onset of symptoms, the patient had prepared a Gram's stain from the blood culture of a patient who was subsequently shown to have meningococcal disease; the microbiologist also had handled and subcultured agar plates containing cerebrospinal fluid (CSF) cultures of N. meningitidis serogroup C from the same patient. Co-workers reported that in the laboratory, aspiration of materials from blood culture bottles was performed at the open laboratory bench; biosafety cabinets, eye protection, or masks were not used routinely for this procedure. Results of pulsedfield gel electrophoresis (PFGE) and multilocus enzyme

electrophoresis (MEE) testing at CDC indicated that the two isolates were indistinguishable. The laboratory at hospital A infrequently processed isolates of *N. meningitidis* and had not processed another meningococcal isolate during the previous 4 years.

Case 2. On December 24, 2000, a Michigan microbiologist aged 52 years had acute onset of sore throat, vomiting, headache, and fever; by December 25, the patient had developed a petechial rash on both legs, which quickly evolved to widespread purpura. The patient presented to the emergency department of hospital B and died later that day of overwhelming sepsis. Blood cultures were positive for N. meningitidis serogroup C. The patient was a microbiologist in the state public health laboratory and had worked on several N. meningitidis serogroup C isolates during the 2 weeks before becoming ill. That laboratory had handled a median of four meningococcal isolates per month (range: 0-11) during the previous 4 years. Co-workers reported that the patient had performed slide agglutination testing and recorded colonial morphology using typical biosafety level 2 (BSL 2) precautions; this did not entail the use of a biosafety cabinet. PFGE was performed at the state public health laboratory and at CDC on all four specimens handled by the microbiologist; results of this testing indicated that the isolates from the patient and from one of the recently handled laboratory samples were indistinguishable.

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To detect additional cases, on November 11, 2000, a request for information was posted on selected electronic mail discussion groups (i.e., listservs) to members of several infectious disease, microbiology, and infection control professional organizations. A probable case of laboratory-acquired meningococcal disease was defined as confirmed or probable meningococcal disease (1) in a laboratory scientist who had had occupational exposure to a *N. meningitidis* isolate during the 14 days before onset of illness and who had illness with a serogroup that matched the source isolate. In addition to the two cases described in this report, CDC received an additional 14 reports of probable laboratory-acquired meningococcal disease worldwide during the preceding 15 years; six cases occurred in the United States during 1996-2001. The source isolates from five of these six U.S. cases were from either blood or CSF; the source of the sixth isolate could not be definitively determined but was most likely CSF or middle ear fluid. Of these 16 previously unreported cases, nine (56%) were caused by *N. meningitidis* serogroup B, and seven (44%) were caused by serogroup C; eight cases (50%) were fatal (three from serogroup B and five from serogroup C). Casefatality rates did not differ significantly by serogroups (serogroup C: 71%; serogroup B: 33%; p=0.16). In the 10 cases for which data were available, a median of 4 days (range: 2-10 days) passed between handling the source isolate and symptom onset. Procedures performed on the 16 source isolates included reading plates (50%), making subcultures on agar plates (50%), and performing serogroup identification at the bench (38%). In 15 of the 16 cases, the laboratory reportedly did not perform procedures within a biosafety cabinet. All 16 cases occurred among workers in the microbiology section of the laboratory; no cases were reported among workers in hematology, chemistry, or pathology.

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Editorial Note: Although the risk for disease remains low (2), laboratory-acquired meningococcal disease represents an occupational hazard to microbiologists. The findings in this report were self-reported and required respondents to have access to electronic media. However, the identification of 14 previously unreported cases and the additional two cases reported to CDC in 2001 suggest that either cases of laboratory-acquired meningococcal disease are underreported or the incidence of laboratory-acquired meningococcal disease has increased. The case-fatality rate of 50% in this report is substantially higher than that observed among community-acquired cases; this might reflect underreporting of mild cases or might be a result of the highly virulent strains and high concentration of organisms encountered in the laboratory setting.

Each year in the United States, approximately 3,000 isolates of invasive *N. meningitidis* are cultured (*3*); on the basis of standard practices used for isolation and identification of *N. meningitidis*, each of the clinical samples and isolates is handled by an average of three microbiologists during the course of a laboratory investigation, resulting in an estimated 9,000 microbiologists exposed per year. During 1996–2000 in the United States, six cases of probable laboratory-acquired meningococcal disease were detected, for an attack rate of 13 per 100,000 population (95% confidence interval [CI]= 5–29) at risk per year, compared with approximately 0.2 per 100,000 population among adults aged 30–59 in the United States (CDC, unpublished data, 2001), the age group of most laboratory scientists. If the three cases from 2000 are excluded from this estimate, the attack rate is seven (95% CI=1–19).

*N. meningitidis* is classified as a biosafety level 2 organism (4). Guidelines recommend the use of a biosafety cabinet for mechanical manipulations of samples that have a substantial risk for droplet formation or aerosolization such as centrifuging, grinding, and blending procedures (4,5). Less is known about the risk

associated with routine isolate manipulation. The exclusive occurrence of probable laboratoryacquired cases in microbiologists suggests that exposure to isolates of *N. meningitidis*, and not patient samples, increases the risk for infection. Nearly all the microbiologists in this report were manipulating isolates and performing subplating with an inoculation loop on an open laboratory bench. A recent study indicated that manipulating suspensions of *N. meningitidis* outside a biosafety cabinet is associated with a high risk for contracting disease (*3*). Isolates obtained from a respiratory source are in general less pathogenic and represent a lower risk for microbiologists. Although the exact mechanism of transmission in the laboratory setting is unclear, use of a biosafety cabinet during manipulation of sterile site isolates of *N. meningitidis* would ensure protection. Alternative methods of protection (e.g., splash guards and masks) from droplets and aerosols require additional assessment. If a biosafety cabinet or other means of protection is unavailable, manipulation of these isolates should be minimized, and workers should consider sending specimens to laboratories possessing this equipment. Education of microbiologists and strict adherence to these safety precautions when manipulating meningococcal isolates should further minimize the risk for infection. To address these safety issues, the governing bodies of organizations responsible for setting policy for laboratory safety will be reassessing current guidelines about the handling of *N. meningitidis*.

Although primary prevention should focus on laboratory safety, laboratory workers also should make informed decisions about vaccination. The quadrivalent meningococcal polysaccharide vaccine, which includes serogroups A, C, Y, and W-135, will decrease but not eliminate the risk for infection (6). Research and industrial laboratory scientists who are exposed routinely to *N. meningitidis* in solutions that might be aerosolized also should consider vaccination (6–8). In addition, vaccination might be used as an adjunctive measure by microbiologists in clinical laboratories.

Laboratory scientists with percutaneous exposure to an invasive *N. meningitidis* isolate from a sterile site should receive treatment with penicillin; those with known mucosal exposure should receive antimicrobial chemoprophylaxis (6) (Table 1). Microbiologists who manipulate invasive *N. meningitidis* isolates in a manner that could induce aerosolization or droplet formation (including plating,

 TABLE 1. Schedule for administering chemoprophylaxis against

 meningococcal disease

Drug	Age group	Dosage	Duration and route of administration*
Rifampin <sup>†</sup>	<1 month	5 mg/kg every 12 hours	2 days
	≥1 month	10 mg/kg every 12 hours	2 days
	Adults	600 mg every 12 hours	2 days
Ciprofloxacin§	Adults	500 mg	Single dose
Ceftriaxone	<15 years	125 mg	Single intramuscular dose
Ceftriaxone	Adults	250 mg	Single intramuscular dose

Oral administration unless otherwise indicated.

<sup>†</sup>Not recommended for pregnant women because the drug is teratogenic in laboratory animals. Because the reliability of oral contraceptives may be affected by rifampin therapy, consideration should be given to using alternative contraceptive measures while rifampin is being administered.

<sup>§</sup> Not generally recommended for persons aged <18 years or for pregnant and lactating women because the drug causes cartilage damage in immature laboratory animals. However, ciprofloxacin can be used for chemoprophylaxis of children when no acceptable alternative therapy is available.</p>

subculturing, and serogrouping) on an open bench top and in the absence of effective protection from droplets or aerosols also should consider antimicrobial chemoprophylaxis.

CDC has instituted prospective surveillance for laboratoryacquired meningococcal disease. Hospitals, laboratories, and public health departments that are aware of suspected cases should report these cases through their state public health department to CDC, telephone 404-639-3158.

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## Populations Receiving Optimally Fluoridated Public Drinking Water — United States, 2000

Dental caries (i.e., tooth decay) is a transmissible, multifactor disease that affects 50% of children aged 5–9 years, 67% of adolescents aged 12–17 years (*I*), and 94% of adults aged  $\geq$ 18 years (*2*) in the United States. During the second half of the 20th century (*3*), a major decline in the prevalence and severity of dental caries resulted from the identification of fluoride as an effective method of preventing caries. Fluoridation of the public water supply is the most equitable, costeffective, and cost-saving method of delivering fluoride to the community (*4*, *5*). In the United States during 2000, approximately 162 million persons (65.8% of the population served by public water systems) received optimally fluoridated water compared with 144 million (62.1%) in 1992 (*6*). This report presents state-specific data on the status of water fluoridation in the United States and describes a new surveillance system designed to routinely produce state and national data to monitor fluoridation in the public water supply. The results of this report indicate slow progress toward increasing access to optimally fluoridated water for persons using public water systems. Data from the new surveillance system can heighten public awareness of this effective caries prevention measure and can be used to identify areas where additional health promotion efforts are needed.

The 2000 and 2010 national health goals include objectives (13.9 and 21.9, respectively) (7,8) to increase the 1989 and 1992 national baseline fluoridation levels (61% and 62%, respectively) (6,9) to 75% of the U.S. population served by community water systems that receive water with optimal levels of fluoride (0.7–1.2 ppm depending on the average maximum daily air temperature of the area). The U.S. Environmental Protection Agency (EPA) does not regulate the addition of fluoride to water, and EPA's Safe Drinking Water Information System (SDWIS) actively tracks fluoride concentrations only in water systems with naturally occurring fluoride levels above the established regulatory limits ( $\geq$ 2.0 ppm).

During 1998–2000, CDC developed the Water Fluoridation Reporting System (WFRS), a surveillance database that included CDC's 1992 water fluoridation census (6) and EPA's SDWIS. To ensure that initial data were accurate and complete, in 2000, CDC sent state-specific reports generated from WFRS to the oral health contact at each state health agency for review; updated information was returned, and nonrespondents were contacted through telephone calls and electronic messages. In July 2001, each state received its preliminary public water system data and was asked to submit corrections. Alabama, California, Kansas, Louisiana, Montana, Rhode Island, Texas, and Wyoming had not updated their data by September 1, 2001; therefore, existing WFRS data were used in this report.

Fluoridation percentages were determined by dividing the number of persons using public water systems with fluoride levels considered optimal (naturally occurring and adjusted) for the state by the total population of the state served by public water systems. When the population served by public water systems exceeded the 2000 population census for that state, the state census was used as the population using the public water supplies. This might occur as a result of the methods used by water systems to estimate the population served. These states were Alabama, Hawaii, Louisiana, Massachusetts, Missouri, Utah, and Wyoming.

In the United States during 2000, approximately 162 million persons (65.8% of the population served by public water systems) received optimally fluoridated water compared with 144 million (62.1%) in 1992 (6); state-specific percentages (Table 1) ranged from 2% (Utah) to 100% (District of Columbia) (median: 76.7%). In 27 states during 1992–2000, the proportion increased (range: 0.8%-63.8% [Georgia and Nevada, respectively]; median: 4.9%), and in 23 states, the proportion decreased (range: from -0.1% to -6.0% [Iowa and Alaska, respectively]; median: 2.9%); the District of Columbia remained 100% fluoridated. Delaware, Maine, Missouri, Nebraska, and Virginia reached 75% in 2000 and Oklahoma reached 74.6%. The national objective has been met by 26 states, and the small increase from 1992 to 2000 of 3.7 percentage points has left a gap of 9.2 percentage points from the overall target.

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**Editorial Note:** WFRS data indicate that during the 1990s, the estimated proportion of the U.S. population using public water supplies that maintained optimally fluoridated water increased from 62.1% to 65.8%. This modest progress occurred as the result of substantial increases in coverage in a few states and, in some instances, because several large metropolitan areas commenced fluoridation (e.g., Clark County [Las Vegas], Nevada; Los Angeles and Sacramento, California; and Manchester, New Hampshire).

The findings in this report are subject to at least three limitations. First, nonresponses might have affected the accuracy of some states' final water fluoridation percentages by not accounting for changes in status. Second, use of the 2000 U.S. census data as the denominator for calculating water fluoridation percentages in seven states might have resulted in the percentages being underestimated because, in most states, the number of persons using public water systems was probably less than the 2000 U.S. census population. Finally, three states (Kentucky, Rhode Island, and South Dakota) reported their 1992 fluoridation rates as 100%; in these states, the apparent decrease from 1992 to 2000 in the percentage of persons using public water supplies receiving optimally fluoridated water represents an error correction in reporting methods rather than a true decrease.

WFRS will become an increasingly valuable tool for monitoring state and annually updating national water fluoridation data as more users register and routinely participate in entering data and receiving reports. WFRS updates and reports will assist states in monitoring the extent and consistency of water fluoridation. During 2002, CDC will provide online information on water fluoridation for states that update their data electronically.

Although the new WFRS online site might facilitate public knowledge about optimally fluoridated water, efforts to convince jurisdictions to provide such water must address 1) the perception by some scientists, policymakers, and members of the public that dental caries is no longer a public health problem or that fluoridation is no longer necessary or effective; 2) the often complex political process involved in adopting water fluoridation; and 3) unsubstantiated claims by opponents of water fluoridation about its alleged adverse health effects (*10*). To reach the goal of 75% of the public water drinking population supplied with optimally fluoridated water, policymakers and public health officials at the federal, state, and local levels will need to devise new promotion and funding approaches to gain support for this prevention measure.

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	2000	2000	2000	1992	Change in
State	fluoridated population	total PWS population	percentage fluoridated	percentage fluoridated ( <i>9</i> )	percentage 1992–2000
Alabama*	3,967,059	4,447,100	89.2%	82.6%	6.6
Alaska	270,099	489,371	55.2%	61.2%	-6.0
Arizona	2,700,354	4,869,065	55.5%	49.9%	5.6
Arkansast	1,455,767	2,431,477	59.9%	58.7%	1.2
California	9,551,961	33,238,057	28.7%	15.7%	13.0
Colorado <sup>†</sup>	2,852,386	3,708,061	76.9%	81.7%	-4.8
Connecticut	2,398,227	2,701,178	88.8%	85.9%	2.9
Delaware	505,747	624,923	80.9%	67.4%	13.5
District of Columbia	595,000	595,000	100.0%	100.0%	0.0
Florida	9,407,494	15,033,574	62.6%	58.3%	4.3
Georgia	6,161,139	6,634,635	92.9%	92.1%	0.8
Hawaii*			92.9%	13.0%	-4.0
daho	109,147 383,720	1,211,537 845,780	45.4%	48.3%	-4.0 -2.9
llinois	10,453,837	11,192,286	45.4% 93.4%	40.3 <i>%</i> 95.2%	-2.9 -1.8
Indiana	4,232,907	4,441,502	95.3%	98.6%	-3.3 -0.1
lowa	2,181,649	2,390,661	91.3%	91.4%	-0.1 4.1
Kansas	1,513,306	2,421,274	62.5%	58.4%	
Kentucky	3,235,053	3,367,812	96.1%	100.0%	-3.9
_ouisiana*	2,375,702	4,468,976	53.2%	55.7%	-2.5
Vaine	466,208	618,033	75.4%	55.8%	19.6
Maryland <sup>†</sup>	4,124,953	4,547,908	90.7%	85.8%	4.9
Massachusetts <sup>†*</sup>	3,546,099	6,349,097	55.8%	57.0%	-1.2
Vichigan	6,568,151	7,242,531	90.7%	88.5%	2.2
Vinnesota	3,714,465	3,780,942	98.2%	93.4%	4.8
Mississippi	1,227,268	2,665,075	46.0%	48.4%	-2.4
Missouri*	4,502,722	5,595,211	80.5%	71.4%	9.1
Montana	143,092	645,452	22.2%	25.9%	-3.7
Nebraska <sup>†</sup>	966,262	1,243,713	77.7%	62.1%	15.6
Nevada <sup>†</sup>	1,078,479	1,637,105	65.9%	2.1%	63.8
New Hampshire	347,007	807,438	43.0%	24.0%	19.0
New Jersey	1,120,410	7,208,514	15.5%	16.2%	-0.7
New Mexico	1,187,404	1,548,084	76.7%	66.2%	10.5
New York <sup>†</sup>	12,000,000	17,690,198	67.8%	69.7%	-1.9
North Carolina	4,862,220	5,837,936	83.3%	78.5%	4.8
North Dakota	531,738	557,595	95.4%	96.4%	-1.0
Ohio	8,355,002	9,535,188	87.6%	87.9%	-0.3
Oklahoma <sup>†</sup>	2,164,330	2,900,000	74.6%	58.0%	16.6
Oregon <sup>†</sup>	612,485	2,700,000	22.7%	24.8%	-2.1
Pennsylvania	5,825,328	10,750,095	54.2%	50.9%	3.3
Rhode Island	842,797	989,786	85.1%	100.0%	-14.9
South Carolina	3,086,974	3,383,434	91.2%	90.0%	1.2
South Dakota <sup>†</sup>	553,503	626,221	88.4%	100.0%	-11.6
Tennessee	4,749,493	5,025,998	94.5%	92.0%	2.5
Texas	11,868,046	18,072,680	65.7%	64.0%	1.7
Jtah <sup>†*</sup>	43,816	2,233,169	2.0%	3.1%	-1.1
Vermont	240,579	443,901	54.2%	57.4%	-3.2
Virginia	5,677,551	6,085,436	93.3%	72.1%	21.2
Washington <sup>†</sup>	2,844,893	4,925,540	57.8%	53.2%	4.6
West Virginia†	1,207,000	1,387,000	87.0%	82.1%	4.9
Wisconsin	3,108,738	3,481,285	89.3%	93.0%	-3.7
Wyoming*	149,774	493,782	30.3%	35.7%	-5.4
Total	162,067,341	246,120,616	65.8%	62.1%	3.7

TABLE 1. Number of persons and percentage of the population receiving optimally fluoridated water through public water systems (PWS), by state — United States, 1992 and 2000

\* Reported PWS population exceeded total state population; PWS population was set to the 2000 U.S. census of state populations. <sup>†</sup> Complete data were not available from Water Fluoridation Reporting System; additional information was obtained from states.

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# Socioeconomic Status of Women with Diabetes — United States, 2000

Persons whose socioeconomic status is low have poorer health than other persons (1,2) and are less likely to have adequate access to care or to receive high-quality clinical and prevention care services (3). In the United States, diabetes is a potentially debilitating disease that is increasing in prevalence (4); however, little is known about the socioeconomic status of persons with diabetes (5-7). Women account for approximately 52% of all persons aged  $\geq$ 20 years with diabetes (4). To assess the socioeconomic status of women with diabetes, CDC analyzed data from the Behavioral Risk Factor Surveillance System (BRFSS), which indicated that the socioeconomic status of women with diabetes in 2000 was markedly lower than that of women without diabetes. Efforts should be focused to understand the impact of socioeconomic conditions on the health and quality of care of women with diabetes.

BRFSS is a state-based, random-digit-dialed telephone survey of the noninstitutionalized U.S. population aged  $\geq$ 18 years. In 2000, the median state-specific response rate was 48.9% (range: 28.8%–71.8%) (CDC, unpublished data, 2001). Persons with diabetes were identified if they answered "yes" to the question, "Have you ever been told by a doctor that you have diabetes?" Women who answered "no" and those who had been told they had diabetes only during pregnancy were considered not to have diabetes. Data on level of education and annual household income were used to assess socioeconomic status; marital status, size of household, and employment status were used as indicators of living arrangements; and household size was derived by adding the number of adults and number of children aged  $\leq 17$  years. A woman was classified as having low socioeconomic status if she did not complete high school or resided in a household with an annual income of  $\leq 25,000$ .

State-specific data were aggregated and weighted to reflect age, sex, and racial/ethnic distribution, and chi-square tests were used to test all univariate associations. Because many persons aged 18–24 years have not completed their education, socioeconomic status was evaluated only for women aged  $\geq$ 25 years. Multivariate logistic regression analysis was used to examine the relation between having diabetes and not completing high school or living in a low-income household, with control made for age, race/ethnicity, and living arrangements. The models then were used to calculate adjusted percentages using the distributions of female respondents aged  $\geq$ 25 years in the total population. All analyses were conducted using SASv8 software with SUDAAN to estimate standard errors.

Of the 109,680 women who participated in the 2000 BRFSS survey, 6,835 (6.3%) had been told by a doctor that they had diabetes (mean age at diagnosis: 48.8 years). Women with diabetes were more likely than women without diabetes to be aged  $\geq$ 45 years; nonwhite; divorced, separated, or widowed; living alone; retired; or unable to work (Table 1).

Among women aged  $\geq 25$  years, the percentage with diabetes who had not completed high school (27.7%; 95% confidence interval [CI]=25.7%–29.7%) was more than twice that of women without diabetes who had not completed high school (12.2%; 95% CI=11.8%–12.6%) (Table 2). Among women with diabetes, 20.5% (95% CI=18.0%–25.3%) of those aged 25–44 years had not completed high school, compared with 34.3% (95% CI=31.4%–37.2%) of those aged  $\geq 65$  years. Among women without diabetes, 9.8% (95% CI=9.2%–10.3%) of those aged 25–44 years had not completed high school, compared with 20.5% (95% CI=19.5%– 21.5%) of those aged  $\geq 65$  years. After multivariate adjustment, a low level of formal education remained significantly more common among women with diabetes than among those without diabetes. 15.6 (15.3-15.9)

18.6 (18.4 - 18.8)

33.1 (32.6 - 33.6)

57.5 (56.7 - 58.0)

8.2 (7.9 - 8.5)

(13.7 - 14.5)

(16.2 - 17.0)

(3.4 - 3.8)

(32.2 - 33.2)

32.7

14.1

16.6

3.6

		Diabetes*	No diabetes*		
Characteristic	%	(95% Cl <sup>†</sup> )	%	(95% CI)	
Age (yrs)					
18–24	1.4	( 0.9 - 1.9)	12.6	(12.2-13.0)	
25–44	14.7	(13.2 –16.2)	39.6	(39.1 - 40.1)	
45–64	42.1	(40.0 - 44.2)	29.1	(28.6 - 29.6)	
≥65	41.9	(39.8 - 44.0)	18.7	(18.3-19.1)	
Race/Ethnicity					
Non-Hispanic white	64.8	(62.6 -67.0)	73.8	(73.2 - 74.3)	
Non-Hispanic black	17.9	(16.3 –19.5)	9.9	(9.6-10.2)	
Hispanic	13.5	(11.6 –15.4)	12.3	(11.9-12.7)	
Non-Hispanic other	3.9	(2.7 – 5.1)	4.0	(3.7 - 4.3)	
Marital status					
Married/Unwed couple	48.9	(46.7 –51.0)	60.1	(59.6 - 60.6)	
Divorced/Separated	16.6	(15.2 –18.0)	13.4	(13.1 - 13.7)	
Widowed	26.5	(24.6 –28.4)	10.3	(10.0 - 10.6)	
Never married	8.0	(6.8 - 9.2)	16.3	(15.9-16.7)	
Household size					

18 years with and tics — Behavioral ates, 2000

(25.2 - 26.6)

(35.9 - 39.9)

15.7 (14.0 - 17.4)

20.5 (18.3 - 22.7)

31.8 (29.8 - 33.8)

4.4 ( 3.5 - 5.3)

(11.6 - 14.8)

(33.5 - 37.5)

(13.5 - 16.7)

Diabetes = 6,835 persons; no diabetes = 100,927.

25.9

37.9

13.2

35.5

15.1

Unable to work <sup>T</sup> Confidence interval.

**Employment status** Employed

Unemployed

Homemaker

Retired

1

2

3

≥4

Overall, women with diabetes (40.4% [95%CI=38.1%-42.6%]) were approximately twice as likely as women without diabetes (22% [95% CI=21.5%-22.5%]) to have an annual household income <\$25,000. Among women with diabetes, the percentages with incomes <\$25,000 were highest for women aged ≥65 years (47.8% [95% CI=44.4%-51.1%]) and those aged  $\leq 44$  years (41.3% [95% CI=35.4%-47.2%]) and lowest (33% [95% CI=29.5%-36.6%) for women aged 45-64 years (Table 2). In each age group, percentages were lower for women without diabetes (32.9%, 19.7%, and 18.6%, respectively). After multivariate adjustment, the difference between women with and without diabetes remained significant.

Reported by: GLA Beckles, MD, PE Thompson-Reid, MPH, Div of Diabetes Translation, National Center for Chronic Disease and Health Promotion, CDC.

Editorial Note: The findings in this report indicate that the socioeconomic status of women with diabetes is lower than that of women without diabetes and confirm the findings of the 1989 National Health Interview Survey (NHIS) (5). In 2000, at least one in four women with diabetes aged  $\geq$ 25 years had a low level of formal education, and 40% lived in lowincome households. Women with diabetes were more likely to have a low socioeconomic status independent of living arrangements (i.e., marital status, size of household, and employment status). Attaining a higher educational level might influence decision-making, and persons with a higher income might have better access to health care, higher living standards, and other material benefits that have a positive impact on health. Although socioeconomic status might be influenced adversely by factors related to having diabetes (e.g., being unemployed or retiring early), most women with diabetes in this survey were diagnosed long after they had completed their education. BRFSS estimates suggest that the low socioeconomic status of many women with diabetes might compromise their ability to benefit from treatments that might reduce their risks for complications and premature death. Programs designed to meet the needs of women with diabetes should take socioeconomic status into account to assure that women benefit from the interventions. Performance should be carefully evaluated to assess program effectiveness and identify areas for improvement.

The findings in this report are subject to at least three limitations. First, the low median response rate suggests the potential for participation bias. Second, all data were selfreported and might be subject to recall bias. Finally, the level of low socioeconomic status (i.e., household income <\$25,000) among women with diabetes might be underestimated because 21% of women with diabetes declined to

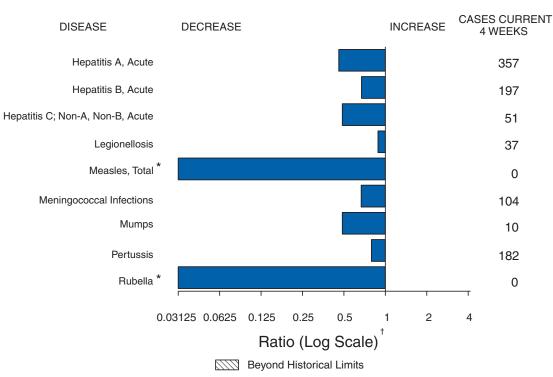
TABLE 2. Percentage of women with low socioeconomic status with and without diabetes, by age group — Behavioral Risk Factor Surveillance System, United States, 2000

		No high sch	ool diplor	na	Annual household income <\$25,000				
	Diabetes		No diabetes		Diabetes		No diabetes		
Age group (yrs)	%	(95% CI*)	%	(95% CI)	%	(95% CI)	%	(95% CI)	
25–44	20.5	(18.0–25.3)	9.8	(9.2–10.3)	41.3	(35.4–47.2)	19.7	(19.1–20.4)	
45–64	23.7	(20.5–26.8)	10.4	(9.7–11.0)	33.0	(29.5–36.6)	18.6	(17.8–19.3)	
≥65	34.3	(31.4–37.2)	20.5	(19.5–21.5)	47.8	(44.4–51.1)	32.9	(31.7–34.0)	
Unadjusted total	27.7	(25.7–29.7)	12.2	(11.8–12.6)	40.4	(38.1–42.6)	22.0	(21.5–22.5)	
Adjusted total <sup>†</sup>	18.0	(16.7–19.4)	13.0	(12.6–13.4)	37.0	(34.7–39.3)	27.0	(26.4–27.5)	

Confidence interval.

Adjusted for age, race/ethnicity, marital status, size of household, and employment status.

# FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending February 16, 2002, with historical data



\* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 7 of zero (0).

<sup>†</sup> 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 16, 2002 (7th 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	9
	infant	5	7	Hantavirus pulmonary syndrome <sup>†</sup>	-	1
	other (wound & unspecified)	1	-	Hemolytic uremic syndrome, postdiarrheal <sup>†</sup>	8	16
Brucellosis <sup>†</sup>		7	5	HIV infection, pediatric <sup>†§</sup>	4	10
Chancroid		3	7	Plague	-	-
Cholera		-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis	S <sup>†</sup>	11	21	Psittacosis <sup>†</sup>	6	1
Diphtheria		-	-	Q fever <sup>†</sup>	3	-
Ehrlichiosis:	human granulocytic (HGE) <sup>†</sup>	5	4	Rabies, human	-	-
	human monocytic (HME) <sup>†</sup>	1	3	Streptococcal toxic-shock syndrome <sup>†</sup>	6	13
	other and unspecified	-	-	Tetanus	-	5
Encephalitis:	California serogroup viral <sup>†</sup>	7	1	Toxic-shock syndrome	13	15
	eastern equine <sup>†</sup>	-	-	Trichinosis	2	5
	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.

<sup>§</sup> 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.

### **MMWR**

(7th Week)*								Escheric	hia coli	
		<b>B</b> 0	0.1				0.15		Shiga Tox	in Positive,
	Cum.	DS Cum.	Chlam Cum.	Cum.	Cum.	ooridiosis Cum.	015 Cum.	Cum.	Cum.	o non-O157 Cum.
Reporting Area	2002§	2001	2002	2001	2002	2001	2002	2001	2002	2001
UNITED STATES	3,550	4,178	71,342	95,443	211	195	132	126	6	4
NEW ENGLAND Maine	119 1	87 3	2,659 174	2,994 162	7	4	6	9	-	-
N.H.	2	5	183	160	2	-	-	1	-	-
Vt. Mass.	2 83	5 50	96 1,170	89 1,147	2	2 1	- 4	- 8	-	-
R.I.	6	9	358	431	3	1	2	-	-	-
Conn.	25	15	678	1,005	-	-	-	-	-	-
MID. ATLANTIC Upstate N.Y.	874	2,021	6,185	8,254 1,079	16	30 4	7 7	13 9	-	-
N.Y. City	52 600	489 1,371	900 3,313	3,441	3 8	18	-	-	-	-
N.J.	163	131	263	993	-	2	-	4	-	-
Pa.	59	30	1,709	2,741	5	6	N	N	-	-
E.N. CENTRAL Ohio	375 106	217 37	10,418 481	18,793 5,356	58 18	73 16	41 11	28 11	-	-
Ind.	53	26	1,667	1,927	8	8	3	4	-	-
III. Miab	175	123	3,253	5,564	3	7	9	7	-	-
Mich. Wis.	31 10	23 8	3,880 1,137	3,592 2,354	14 15	11 31	8 10	1 5	-	-
W.N. CENTRAL	47	46	2,743	5,160	16	5	21	11	3	-
Minn.	9	7	746	1,155	7	-	8	6	3	-
lowa Mo.	15 22	9 6	- 1,030	426 1,840	2 5	2 1	7 3	- 2	-	-
N. Dak.	-	-	37	133	-	-	-	-	-	-
S.Dak.	-	-	286	258	-	-	-	1	-	-
Nebr. Kans.	- 1	15 9	644	488 860	- 2	2	- 3	- 2	-	-
S. ATLANTIC	1,156	709	14,748	18,234	52	30	23	14	1	2
Del.	23	14	181	391	-	-	1	-	-	-
Md. D.C.	143	39	1,905	1,997	1	2	-	-	-	-
Va.	19 113	61 88	379 1,978	401 2,120	1	2 2	- 1	2	-	1
W.Va.	8	4	313	310	2	-	-	-	-	-
N.C. S.C.	64 112	33 50	2,558 1,702	2,080 3,017	7	4	4	6 1	-	-
Ga.	377	104	1,936	4,116	38	9	16	3	1	1
Fla.	297	316	3,796	3,802	5	11	1	2	-	-
E.S. CENTRAL	158	126	6,213	6,509	11	3	1	4	-	-
Ky. Tenn.	16 86	18 58	972 2,093	1,104 2,089	1 1	-	- 1	2	-	-
Ala.	20	25	2,197	1,620	8	2	-	2	-	-
Miss.	36	25	951	1,696	1	1	-	-	-	-
W.S. CENTRAL Ark.	401 14	385 19	12,165 409	14,507 1,271	4 2	4	-	15	-	-
La.	75	117	2,329	2,435	1	1	-	-	-	-
Okla.	7	20	992	1,471	1	1	-	2	-	-
Tex.	305	229	8,435	9,330	-	1	-	13	-	-
MOUNTAIN Mont.	121 3	144 1	4,865 364	4,865 159	10	12	12 1	7	1	1
Idaho	1	-	236	249	2	2	1	2	-	-
Wyo. Colo.	1 21	- 51	99 644	111 1,346	- 4	- 5	- 2	- 2	1	- 1
N. Mex.	6	10	755	798	-	3	2	-	-	-
Ariz.	52	37	1,254	1,437	1	1	1	3	-	-
Utah Nev.	7 30	9 36	880 633	67 698	2 1	1 -	3 2	-	-	-
PACIFIC	299	443	11,346	16,127	37	34	21	25	1	1
Wash.	-	28	1,842	1,871	10	U	4	3	-	-
Oreg. Calif.	76 220	18 396	- 8,680	858 12,527	7 20	3 31	7 10	- 18	1	1
Alaska	-	1	434	313	- 20	-	-	-	-	-
Hawaii	3	-	390	558	-	-	-	4	-	-
Guam	1	1	-	-	-	-	Ν	Ν	-	-
P.R. V.I.	68 33	48 1	-	367 24	-	-	-	-	-	-
	U 33	Ů	U	24 U	Ū	U	-	-	-	-
Amer. Samoa C.N.M.I.	0	Ŭ	20	Ŭ	0	U	U	U U	U	U U

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001 (7th Week)\*

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.

								<i>is influenzae</i> , asive	
	Shiga To	<i>richia coli</i> xin Positive, rogrouped	Giardiasis	Gono	rhea		Ages, rotypes	Age <5 Serot B	уре
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1	1	1,293	33,495	45,972	182	198	-	2001
NEW ENGLAND			141	847	830	7	7		- 1
Maine	-	-	23	13	23	1	-	-	-
N.H.	-	-	9	11	13	1	-	-	-
Vt. Mass.	-	-	16 45	13 450	14 354	- 5	- 7	-	- 1
R.I.	-	-	18	119	109	-	-	-	-
Conn.	-	-	30	241	317	-	-	-	-
MID. ATLANTIC	-	-	240	2,996	4,141	31	33	-	-
Upstate N.Y.	-	-	60	501 1,452	604 1,566	16	7	-	-
N.Y. City N.J.	-	-	99	225	584	10 2	11 12	-	-
Pa.	-	-	81	818	1,387	3	3	-	-
E.N. CENTRAL	1	-	273	5,490	9,728	26	39	-	-
Ohio	1	-	119	340	2,898	21	16	-	-
Ind. III.	-	-	- 31	771 1,906	912 2,937	3	3 13	-	-
Mich.	-		100	2,078	2,124	1	3	-	-
Wis.	-	-	23	395	857	1	4	-	-
W.N. CENTRAL	-	-	127	1,448	2,278	2	3	-	-
Minn.	-	-	37	262	372	-	-	-	-
lowa Mo.	-	-	34 31	- 844	113 1,158	1	- 3	-	-
N. Dak.	-	-	-	- 044	4	-	-	-	-
S. Dak.	-	-	8	38	30	-	-	-	-
Nebr.	-	-	- 17	-	187	-	-	-	-
Kans.	-	-		304	414	-		-	-
S. ATLANTIC Del.	-	-	222 10	9,328 141	11,997 217	55	58	-	1
Md.	-	_	17	1,075	1,156	16	12	-	_
D.C.	-	-	8	335	420	-	-	-	-
Va. W.Va.	-	-	9 2	1,258 127	1,219 59	2	3 2	-	-
N.C.	-	-	-	2,087	1,733	5	6	-	-
S.C.	-	-	1	995	2,714	-	1	-	-
Ga.	-	-	103	1,236	2,283	22	19	-	-
Fla.	-	-	72	2,074	2,196	10	15	-	-
E.S. CENTRAL	-	1	34	3,825 407	4,410 466	3	4	-	-
Ky. Tenn.	-	-	11	1,289	1,494	2	2	-	-
Ala.	-	-	23	1,477	1,359	1	2	-	-
Miss.	-	-	-	652	1,091	-	-	-	-
W.S. CENTRAL	-	-	9	5,726	7,472	9	2	-	-
Ark. La.	-	-	9	253 1,574	874 1,699	-	-	-	-
Okla.	-	-	-	436	731	9	2	-	-
Tex.	-	-	-	3,463	4,168	-	-	-	-
MOUNTAIN	-	-	126 5	1,243	1,296	31	35	-	-
Mont.	-	-		24	6	-	-	-	-
ldaho Wyo.	-	-	3 1	13 8	17 12	-	1	-	-
Colo.	-	-	50	433	474	7	7	-	-
N. Mex.	-	-	8	146	141	7	6	-	-
Ariz. Utah	-	-	12 25	354 67	392 9	13 3	20	-	-
Nev.	-	-	25	198	9 245	1	- 1	-	-
PACIFIC	-	-	121	2,592	3,820	18	17	-	-
Wash.	-	-	22	407	420	-	-	-	-
Oreg.	-	-	76	-	151	13	-	-	-
Calif. Alaska	-	-	- 10	2,038 95	3,119 37	-	12 1	-	-
Hawaii	-	-	13	95 52	93	5	4	-	-
Guam	-	-	-	_	_	-	_	-	-
P.R.	-	-	-	-	128	-	-	-	-
V.I.	-		-		3				
Amer. Samoa C.N.M.I.	U	U U	U	U 1	U U	U	U U	U	U U

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001

N: Not notifiable. U: Unavailable. - : No reported cases. \* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

	На		<i>fluenzae</i> , Invas	ive	Hepatitis (Viral, Acute), By Type					
			<5 Years				*			
	Non-Se Cum.	rotype B Cum.	Unknown S Cum.	erotype Cum.	Cum.	A Cum.	Cum.	B Cum.	C; Non-A, Cum.	Non-B Cum.
Reporting Area	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
UNITED STATES	27	37	-	3	830	1,872	394	737	130	691
NEW ENGLAND	1	3	-	-	48	68	14	18	3	9
Maine	-	-	-	-	1	1	-	1	-	-
N.H. Vt.	-	-	-	-	3	2 1	3 1	1	- 3	2
Mass.	1	3	-	-	23	29	9	4	-	7
R.I. Conn.	-	-	-	-	4 17	2 33	1	- 11	-	-
MID. ATLANTIC	2	4	-	-	66	172	63	185	24	313
Upstate N.Y. N.Y. City	2	2	-	-	14 12	16 59	4 31	6 85	4	6
N.J.	-	-	-	-	1	75	8	71	18	298
Pa.	-	2	-	-	39	22	20	23	2	9
E.N. CENTRAL	4	7	-	-	81	602	57	71	10	46
Ohio Ind.	3 1	2	-	-	29 2	35 5	9 2	15 2	1	1
III.	-	4	-	-	21	483	2	2	1	19
Mich. Wis.	-	- 1	-	-	26 3	68	44	52	8	26
WIS. W.N. CENTRAL	-	I	-	- 1	3 44	11 77	- 17	- 28	- 36	
Minn.	-	-	-	-	44	1	2	28 1	- 30	161
Iowa	-	-	-	-	13	5	5	4	-	-
Mo. N. Dak.	-	-	-	1	8	24	7	17	36	159
S. Dak.	-	-	-	-	2	-	-	1	-	-
Nebr.	-	-	-	-	-	17	-	4	-	1
Kans.	-		-	-	20	30	3	1	-	1
S. ATLANTIC Del.	7	8	-	-	249	192 1	118 1	143 3	10 3	6 1
Md.	-	-	-	-	67	38	14	16	2	1
D.C. Va.	- 1	-	-	-	12	3	2	2 9	-	-
W.Va.	-	-	-	-	3 1	19	13 2	9	-	-
N.C.	-	-	-	-	42	5	34	26	3	1
S.C. Ga.	- 3	- 5	-	-	8 39	9 70	3 21	- 64	1	- 1
Fla.	3	3	-	-	77	47	28	22	1	2
E.S. CENTRAL	1	-	-	1	28	38	11	50	19	10
Ky.	-	-	-	-	8	5	3	8	1	-
Tenn. Ala.	- 1	-	-	- 1	- 5	15 17	- 8	15 14	3 2	7
Miss.	-	-	-	-	15	1	-	13	13	3
W.S. CENTRAL	4	1	-	-	13	338	14	45	-	125
Ark.	-	-	-	-	5	13	12	14	-	1
La. Okla.	4	1	-	-	- 7	14 20	1	19 11	-	52
Tex.	-	-	-	-	1	291	1	1	-	72
MOUNTAIN	6	5	-	1	66	120	29	54	12	8
Mont. Idaho	-	-	-	-	2	2 17	-	2	-	- 1
Wyo.	-	-	-	-	2	1	2	-	4	2
Colo.	1	-	-	-	15	17	11	13	6	1
N. Mex. Ariz.	2 2	2 3	-	-	3 24	3 54	1 7	16 15	-	4
Utah	-	-	-	-	8	7	3	-	-	-
Nev.	1	-	-	-	12	19	5	8	2	-
PACIFIC Wash.	2	9	-	-	235 7	265 5	71 2	143 5	16	13
Oreg.	2	-	-	-	20	1	17	3	6	- 1
Calif.	-	8	-	-	208	248	52	131	10	12
Alaska Hawaii	-	- 1	-	-	-	10 1	-	1 3	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R. V.I.	-	-	-	-	-	1 -	-	6	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	4	U	-	U

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001 (7th Week)\*

N: Not notifiable. U: Unavailable. -: No reported cases. \* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

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	Legion	ellosis	Liste	riosis	Lyme	Disease	Mal	aria	Measles Total		
Demonting Area	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	
Reporting Area	2002 76	<b>2001</b> 98	<b>2002</b> 30	<b>2001</b> 45	2002 361	2001 582	<b>2002</b> 104	2001 153	2002	2001 23 <sup>†</sup>	
NEW ENGLAND	3	2	1	4	16	80	8	15	_	4	
laine	-	-	1	-	-	-	1	-	-	-	
I.H.	1	- 1	-	-	7	2	4	-	-	- 1	
't. Nass.	-	1	-	4	6	29	-	8	-	3	
R.I.	-	-	-	-	3	-	-	-	-	-	
Conn.	2	-	-	-	-	49	3	7	-	-	
ID. ATLANTIC	12 3	20 1	5 3	5 1	264 166	407 111	12 3	36 1	-	-	
Í.Y. City	-	2	1	1	-	4	5	19	-	-	
I.J.	- 9	4	-	2	16	86	2 2	10 6	-	-	
a.		13	1	1	82	206			-	-	
E.N. CENTRAL Dhio	35 25	37 14	5 4	7 1	7 7	23 8	10 7	30 4	-	-	
nd.	1	2	-	-	, -	-	-	6	-	-	
I. 1ich.	- 9	6 9	- 1	1 3	-	2	- 3	9 11	-	-	
Vis.	-	9	-	2	Ū	13	-	-	-	-	
V.N. CENTRAL	1	6	-	1	6	3	6	4	-	-	
/linn.	-	-	-	-	2	3	-	1	-	-	
owa No.	- 1	1 3	-	-	2 2	-	2 2	- 3	-	-	
No. N. Dak.	-	-	-	-	-	-	-	-	-	-	
S. Dak.	-	-	-	-	-	-	-	-	-	-	
lebr. lans.	-	1	-	- 1	-	-	2	-	-	-	
. ATLANTIC	14	9	6	3	52	47	40	30	_	3	
)el.	3	-	-	-	5	4	-	1	-	-	
1d. ).C.	4	5	1	1	37 3	40 1	15 2	12 2	-	3	
′a.	-	2	-	1	-	1	-	8	-	-	
V.Va.	N	N	-	-	-	-	-	-	-	-	
I.C. 5.C.	1	-	2	-	- 1	1	4 2	1	-	-	
ia.	3	1	2	1	-	-	11	4	-	-	
la.	3	1	1	-	6	-	6	2	-	-	
E.S. CENTRAL (y.	-	6 2	2	4 1	-	2 2	2	1	-	-	
enn.	-	-	1	2	-	-	1	1	-	-	
la.	-	2	1	1	-	-	1	-	-	-	
liss.	-	2	-	-	-	-	-	-	-	-	
V.S. CENTRAL ark.	-	2	-	3	1	11	-	2	-	-	
a.	-	1	-	-	-	-	-	1	-	-	
)kla. ex.	-	- 1	-	- 3	- 1	- 11	-	- 1	-	-	
	4	4	3	3	2		3	8			
Iont.	-	-	-	-	-	-	-	o 1	-	-	
daho	-	-	-	-	-	-	-	1	-	1	
Vyo. Colo.	- 1	- 3	- 1	- 1	- 1	-	- 2	- 3	-	-	
I. Mex.	1	-	-	-	1	-	-	-	-	-	
riz. Itah	- 2	1	2	1	-	-	-	1 1	-	-	
ev.	-	-	-	1	-	-	1	1	-	-	
ACIFIC	7	12	8	15	13	9	23	27	-	15	
lash.	-	1	-	-	-	-	-	-	-	11	
Dreg. Calif.	N 7	N 11	1 7	1 14	1 12	1 8	- 20	2 22	-	2 1	
laska	-	-	-	-	-	-	1	1	-	-	
lawaii	-	-	-	-	N	N	2	2	-	1	
luam	-	-	-	-	-	- N	-	-	-	-	
2R. /I.	-	2	-	-	N _	N	-	-	-	-	
mer. Samoa	U	U	U	U	U	U	U	U	U	U	

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001

N: Not notifiable. U: Unavailable. -: No reported cases. \* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date). † Of 23 cases reported, 19 were indigenous and four were imported from another country.

(7th Week)*	Meningo							
	Dise Cum.	ase Cum.	Mun Cum.	nps Cum.	Cum.	Cum.	Rabies, Cum.	Animal Cum.
Reporting Area	2002	2001	2002	2001	2002	2001	2002	2001
UNITED STATES	192	471	18	20	448	637	388	706
NEW ENGLAND Maine	16 2	29	1	-	126 3	105	64 4	59 10
N.H.	1	1	1	-	1	6	1	-
Vt. Mass.	2 8	- 20	-	-	17 105	17 80	17 19	11 16
R.I.	2	-	-	-	-	-	4	8
Conn.	1	8	-	-	-	2	19	14
MID. ATLANTIC Upstate N.Y.	19 4	66 13	3 1	2 1	26 22	27 22	71 54	104 60
N.Y. City	4 1	12 28	-	1	-	4	4	- 16
N.J. Pa.	10	13	2	-	4	- 1	13	28
E.N. CENTRAL	31	49	-	1	65	83	2	6
Ohio Ind.	17 6	13	-	1	43 2	57 1	1 1	- 1
III.	-	11	-	-	10	1	-	-
Mich. Wis.	6 2	17 8	-	-	9 1	10 14	-	2 3
W.N. CENTRAL	8	27	1	1	61	29	21	45
Minn.	-	-	-	-	1	-	3	11
Iowa Mo.	1 4	8 12	-	-	26 22	5 15	4 1	9 2
N. Dak. S. Dak.	- 2	-	-	-	- 2	- 2	-	8 7
Nebr.	-	2 5	-	-	-	-	-	-
Kans.	1		1	1	10	7	13	8
S. ATLANTIC Del.	34 1	72	3	1	41 1	27	165 3	177
Md.	1	12	1	1	10	7	38	36
D.C. Va.	- 2	-7	- 1	-	- 12	-	- 54	- 41
W.Va.	-	-	-	-	- 7	-	10	13
N.C. S.C.	5 2	17 4	- 1	-	10	10 4	54 6	45 7
Ga. Fla.	8 15	14 18	-	-	- 1	6	-	15 20
E.S. CENTRAL	10	28	2		15	16	12	110
Ky.	-	3	-	-	4	3	1	2
Tenn. Ala.	1 8	9 10	- 1	-	9 2	8 2	7 4	106 2
Miss.	1	6	1	-	-	3	-	-
W.S. CENTRAL	11	110	-	-	18	3	16	129
Ark. La.	5 1	6 17	-	-	5	2	-	2
Okla. Tex.	4 1	6 81	-	-	1 12	1	16	10 117
MOUNTAIN	22	22	_	2	76	282	15	33
Mont.	-	-	-	-	2	-	-	4
Idaho Wyo.	-	3	-	- 1	5 1	45	- 1	- 10
Colo.	7	8	-	-	41	92	-	-
N. Mex. Ariz.	- 7	4 3	-	1	12 9	8 133	- 14	- 19
Utah	4	2 2	-	-	5 1	4	-	-
Nev. PACIFIC			-	-				
Wash.	41 7	68 6	8	13	20 4	65 7	22	43
Oreg. Calif.	11 21	1 57	N 8	N 7	11 3	2 49	- 8	- 21
Alaska	1	-	-	-	2	-	14	22
Hawaii	1	4	-	6	-	7	-	-
Guam P.R.	-	-	-	-	-	-	- 11	- 16
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa C.N.M.I.	U	U U	U	U U	U	U U	U	U U

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001 (7th Week)\*

N: Not notifiable. U: Unavailable. - : No reported cases. \* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

(7th Week)*				Rul	bella			
		/lountain d Fever	But	pella	Cong	enital pella	Salmon	ellosis
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	31	9	-	-	-	-	2,554	3,118
NEW ENGLAND	-	-	-	-	-	-	150	162
Maine	-	-	-	-	-	-	28	8
N.H. Vt.	-	-	-	-	-	-	4 6	11 9
Mass.	-	-	-	-	-	-	76	121
R.I. Conn.	-	-	-	-	-	-	5 31	9 4
MID. ATLANTIC	4	-	-	-	-	-		
Upstate N.Y.	- 4	1	-	-	-	-	206 42	535 63
N.Y. City	-	-	-	-	-	-	80	133
N.J. Pa.	- 4	- 1	-	-	-	-	2 82	199 140
E.N. CENTRAL	2	2					399	450
Ohio	2	-	-	-	-	-	108	140
Ind.	-	1	-	-	-	-	33	24
III. Mich.	-	1	-	-	-	-	140 83	139 76
Wis.	-	-	-	-	-	-	35	71
W.N. CENTRAL	-	1	-	-	-	-	187	175
Minn.	-	-	-	-	-	-	43	56
lowa Mo.	-	-	-	-	-	-	36 76	18 47
N. Dak.	-	-	-	-	-	-	-	47
S. Dak.	-	-	-	-	-	-	11	13
Nebr. Kans.	-	-	-	-	-	-	- 21	13 27
S. ATLANTIC	23	4	_	_	_	_	775	681
Del.	-	-	-	-	-	-	6	8
Md.	5	1	-	-	-	-	74	76
D.C. Va.	-	-	-	-	-	-	9 70	13 73
W.Va.	-	-	-	-	-	-	3	1
N.C. S.C.	18	3	-	-	-	-	118 31	134 49
Ga.	-	-	-	-	-	-	294	199
Fla.	-	-	-	-	-	-	170	128
E.S. CENTRAL	2	1	-	-	-	-	160	178
Ky. Topp	- 2	-	-	-	-	-	18 46	31 34
Tenn. Ala.	-	-	-	-	-	-	60	76
Miss.	-	-	-	-	-	-	36	37
W.S. CENTRAL	-	-	-	-	-	-	55	346
Ark.	-	-	-	-	-	-	27	25
La. Okla.	-	-	-	-	-	-	26	59 12
Tex.	-	-	-	-	-	-	2	250
MOUNTAIN	-	-	-	-	-	-	190	162
Mont. Idaho	-	-	-	-	-	-	3 10	7 6
Wyo.	-	-	-	-	-	-	4	8
Colo.	-	-	-	-	-	-	65	45
N. Mex. Ariz.	-	-	-	-	-	-	26 34	26 44
Utah	-	-	-	-	-	-	17	15
Nev.	-	-	-	-	-	-	31	11
PACIFIC	-	-	-	-	-	-	432	429
Wash. Oreg.	-	-	-	-	-	-	12 39	14 5
Calif.	-	-	-	-	-	-	348	360
Alaska Hawaii	-	-	-	-	-	-	9 24	5 45
	-	-	-	-	-	-	24	45
Guam P.R.	-	-	-	-	-	-	- 3	79
V.I.	-	-	-		-	-	-	-
Amer. Samoa C.N.M.I.	U	U U	U	U U	U	U U	U 1	U U
U.N.IVI.I.	-	U	-	0	-	U	I	0

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001 (7th Week)\*\_\_\_\_\_

N: Not notifiable. U: Unavailable. - : No reported cases. \* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

(7th Week)*									
	Shig	ellosis	Streptococc Invasive,	al Disease, Group A		s <i>pneumoniae,</i> ant, Invasive	Streptococcus pneumoniae, Invasive (<5 Years)		
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	
UNITED STATES	1,453	1,659	410	528	213	368	12	12	
NEW ENGLAND	28	19	15	18	1	2	6	-	
Maine N.H.	2 1	-	4 4	5 3	-	-	-	-	
Vt.	-	-	1	3	1	2	6	-	
Mass. R.I.	22	17	6	7	-	-	-	-	
Conn.	3	2	-	-	-	-	-	-	
MID. ATLANTIC	49	224	61	111	10	18	2	8	
Upstate N.Y. N.Y. City	6 27	66 60	26 22	27 45	10	17	2	8	
N.J.	-	59	6	36	-	÷	-	-	
Pa. E.N. CENTRAL	16	39 252	7 76	3	-	1	-	-	
Ohio	202 133	252 60	30	139 35	13	22	2 2	4	
Ind. III.	7 37	32 90	1	- 47	13	22	-	4	
Mich.	20	51	44	50	-	-	-	-	
Wis.	5	19	-	7	-	-	-	-	
W.N. CENTRAL Minn.	150 20	205 97	17	36	22	4	-	-	
Iowa	7	19	-	-	-	-	-	-	
Mo. N. Dak.	17	49 8	10	19 2	1	- 1	-	-	
S. Dak.	91	2	-	2	1	-	-	-	
Nebr. Kans.	- 15	10 20	- 7	2 11	20	1 2	-	-	
S. ATLANTIC	629	200	96	66	134	245	2	-	
Del. Md.	2 52	2 15	- 15	- 8	3	-	-	-	
D.C.	3	8	2	-	2	1	2	-	
Va. W.Va.	154 1	11 1	5	21	- 3	- 6	-	-	
N.C.	37	45	23	13	-	-	-	-	
S.C. Ga.	7 313	12 45	2 37	1 12	21 45	40 90	-	-	
Fla.	60	61	12	11	60	108	-	-	
E.S. CENTRAL	96	112	13	11	23	45	-	-	
Ky. Tenn.	18 9	41 12	1 12	4 7	1 22	5 39	-	-	
Ala.	36	23	-	-	-	1	-	-	
Miss. W.S. CENTRAL	33 45	36 295	- 7	73	2	- 22	-	-	
Ark.	45 16	29	-	-	2	6	-	-	
La. Okla.	- 28	30 1	- 6	- 6	-	16	-	-	
Tex.	1	235	1	67	-	-	-	-	
MOUNTAIN	45	82	61	57	8	10	-	-	
Mont. Idaho	2	- 4	- 1	- 1	-	-	-	-	
Wyo.	-	-	1	-	5	-	-	-	
Colo. N. Mex.	15 3	16 19	41 18	35 15	3	10	-	-	
Ariz. Utah	13 5	36 2	-	5 1	-	-	-	-	
Nev.	7	5	-	-	-	-	-	-	
PACIFIC	209	270	64	17	-	-	-	-	
Wash. Oreg.	2 20	24	16	-	-	-	-	-	
Calif.	179	243	39	10	-	-	-	-	
Alaska Hawaii	1 7	- 3	9	- 7	-	-	-	-	
Guam	-	-	-	-	-	-	-	-	
P.R. V.I.	-	2	-	-	-	-	-	-	
Amer. Samoa	U	U	U	U	-	-	U	U	
C.N.M.I.	-	U	-	U	-	-	-	U	

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001 (7th Week)\*

N: Not notifiable. U: Unavailable. - : No reported cases. \*Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

		Svn	hilis			Typł	noid		
	Primary & S			enital <sup>+</sup>	Tuberc	ulosis	Typhoid Fever		
	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	
Reporting Area	2002	2001	2002	2001	2002	2001	2002	2001	
UNITED STATES	600	630	-	62	511	990	19	30	
NEW ENGLAND Maine	7	2	-	-	17	32	3	4	
N.H.	-	-	-	-	1	1	-	-	
Vt.	-	-	-	-	-	1	-	-	
Mass.	6	-	-	-	5	21	2	4	
R.I. Conn.	- 1	2	-	-	5 6	- 9	- 1	-	
MID. ATLANTIC	51	57		11	114			10	
Upstate N.Y.	4	57	-	6	2	152 20	2	13 3	
N.Y. City	34	34	-	-	77	67	2	1	
N.J.	11	.7	-	5	-	45	-	9	
Pa.	2	15	-	-	35	20	-	-	
E.N. CENTRAL	123	88	-	10	94	101	4	3	
Ohio Ind.	19 7	6 14	-	-	21 12	17 11	2	1	
III.	29	40	-	9	44	57	-	1	
Mich.	65	25	-	1	11	9	1	1	
Wis.	3	3	-	-	6	7	1	-	
W.N. CENTRAL	1	14	-	1	43	24	-	1	
Minn.	-	11	-	-	22	16	-	-	
Iowa Mo.	- 1	- 3	-	-	- 21	- 5	-	- 1	
N. Dak.	-	-	-	-	-	-	-	-	
S. Dak.	-	-	-	-	-	1	-	-	
Nebr.	-	-	-	-	-	2	-	-	
Kans.	-	-	-	1	-	-	-	-	
S. ATLANTIC	144	220	-	16	36	175	5	4	
Del. Md.	1 11	1 37	-	- 1	- 10	- 8	-	2	
D.C.	7	3	-	-	-	16	-	-	
Va.	5	15	-	-	7	21	-	-	
W.Va. N.C.	- 48	- 55	-	- 2	5 10	6 10	-	-	
S.C.	40	34	-	5	2	16	-	-	
Ga.	17	28	-	4	2	37	4	2	
Fla.	38	47	-	4	-	61	1	-	
E.S. CENTRAL	87	74	-	2	33	55	-	-	
Ky.	2	7	-	-	13	7	-	-	
Tenn. Ala.	30 48	37 16	-	1 1	- 16	8 29	-	-	
Miss.	7	14	-	-	4	11	-	-	
W.S. CENTRAL	88	93	-	12	6	189	-	2	
Ark.	-	9	-	2	3	13	-	-	
La.	19	18	-	-	-	-	-	-	
Okla. Tex.	8 61	13 53	-	1 9	3	2 174	-	- 2	
			-				-		
MOUNTAIN Mont.	41	24	-	2	22	37	1	1	
Idaho	1	-	-	-	-	-	-	-	
Wyo.	-	-	-	-	1	-	-	-	
Colo.	-	2	-	-	2	12	1	-	
N. Mex. Ariz.	6 32	2 14	-	2	4 11	3 12	-	-	
Utah	2	4	-	-	2	-	-	-	
Nev.	-	2	-	-	2	10	-	1	
PACIFIC	58	58	-	8	146	225	4	2	
Wash.	6	13	-	-	16	23	-	-	
Oreg. Calif.	- 51	2 41	-	- 8	6 96	10 162	1 3	- 2	
Alaska	-	- 41	-	o -	12	8	-	-	
Hawaii	1	2	-	-	16	22	-	-	
Guam	-	-	-	-	-	-	-	-	
P.R.	-	41	-	1	-	-	-	-	
V.I.	-	-	-	-	-	-	-		
Amer. Samoa C.N.M.I.	U 1	U U	U	U U	U 8	U U	U	U U	

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2002, and February 17, 2001 (7th Week)\*

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 1 All Causes, By Age (Years)			5, 2002 (7th week)		All Causes, By Age (Years)								
Poporting Area	All	≥65	45-64	25-44	1-24	<1	P&l <sup>†</sup> Total	Poporting Area	All	>65	45-64	25-44	1-24	<1	P&l <sup>†</sup> Total
Reporting Area	Ages 369	285	<b>43-04</b> 57	19	6	2	44	Reporting Area S. ATLANTIC	1,394	895	314	115	40	29	104
Boston, Mass.	309 U	205 U	57 U	U	Ŭ	Ű	44 U	Atlanta, Ga.	1,394	103	43	18	40	29 4	7
Bridgeport, Conn.	43	31	7	5	-	-	5	Baltimore, Md.	157	93	43	14	5	2	20
Cambridge, Mass.	24	22	1	1	-	-	6	Charlotte, N.C.	114	78	20	11	1	4	16
Fall River, Mass.	U	U	U	U	U	U	U	Jacksonville, Fla.	132	90	27	8	3	4	11
Hartford, Conn.	36	25	9	-	-	2	2	Miami, Fla.	93	56	16	13	5	3	4
Lowell, Mass.	35	28	4	3	-	-	7	Norfolk, Va.	62	46	15	1	-	-	-
Lynn, Mass.	9	7	1	1	-	-	2	Richmond, Va.	49	25	17	4	1	2	2
New Bedford, Mass. New Haven, Conn.	27 54	26 38	- 11	1 2	3	-	4 4	Savannah, Ga. St. Petersburg, Fla.	51 62	31 48	15 6	3 6	1 2	1	4 8
Providence, R.I.	U 04	- 30 U	Ŭ	Ű	U	U	Ŭ	Tampa, Fla.	202	147	38	8	5	4	26
Somerville, Mass.	5	4	1	-	-	-	1	Washington, D.C.	303	178	74	29	16	5	6
Springfield, Mass.	42	32	5	3	2	-	3	Wilmington, Del.	Ŭ	Ŭ	U	Ū	Ŭ	Ŭ	Ŭ
Waterbury, Conn.	25	20	4	-	1	-	6	E.S. CENTRAL	930	622	198	59	22	27	89
Worcester, Mass.	69	52	14	3	-	-	4	Birmingham, Ala.	221	137	57	12	6	7	21
MID. ATLANTIC	2,321	1,677	435	153	21	34	161	Chattanooga, Tenn.	97	75	15	5	1	1	8
Albany, N.Y.	51	36	10	3	1	1	8	Knoxville, Tenn.	83	56	20	5	1	1	5
Allentown, Pa.	28	27	1	-	-	-	4	Lexington, Ky.	58	40	12	1	2	3	9
Buffalo, N.Y.	98	77	15	4	1	1	6	Memphis, Tenn.	195	128	45	9	6	7	17
Camden, N.J.	29	17	6	4	1	1	2	Mobile, Ala.	68	54	6	7	1	-	7
Elizabeth, N.J.	14	12	2	-	-	-	-	Montgomery, Ala.	42	24	12	5	1	-	6
Erie, Pa.	42	30	7	3	1	1	1	Nashville, Tenn.	166	108	31	15	4	8	16
Jersey City, N.J. New York City, N.Y.	30	18 949	10 252	2 97	- 11	- 21	- 78	W.S. CENTRAL	990	693	207	51	18	21	95
Newark, N.J.	1,330 U	949 U	252 U	97 U	Ŭ	U	/8 U	Austin, Tex.	107	72	21	10	1	3	13
Paterson, N.J.	21	12	6	2	-	1	1	Baton Rouge, La.	47	38	6	1	-	2	3
Philadelphia, Pa.	270	174	66	21	3	5	14	Corpus Christi, Tex.	67	46	17	2	2		11
Pittsburgh, Pa.§	26	19	2	3	1	1	4	Dallas, Tex.	U	U	U	U	U	U	U
Reading, Pa.	29	24	4	1	-	-	5	El Paso, Tex. Ft. Worth, Tex.	60 166	40 114	9 31	4 13	3 3	4 5	5 19
Rochester, N.Y.	140	114	23	3	-	-	16	Houston, Tex.	U	U 114	U	U	U	U	U
Schenectady, N.Y.	29	19	6	2	1	1	4	Little Rock, Ark.	75	53	15	4	-	3	3
Scranton, Pa.	29	23	3	3	-	-	1	New Orleans, La.	Ŭ	Ŭ	U	U	U	Ŭ	Ŭ
Syracuse, N.Y.	101	81	15	5	-	-	12	San Antonio, Tex.	314	218	73	13	7	3	21
Trenton, N.J. Utica, N.Y.	20 34	17 28	2 5	-	- 1	1	2 3	Shreveport, La.	20	15	4	-	1	-	5
Yonkers, N.Y.	U	20 U	Ŭ	U	Ů	U	Ŭ	Tulsa, Okla.	134	97	31	4	1	1	15
		-			-			MOUNTAIN	1,058	750	182	84	20	17	91
E.N. CENTRAL	1,791	1,274	348	95 1	36	38	134	Albuquerque, N.M.	112	72	24	10	4	1	13
Akron, Ohio Canton, Ohio	65 42	53 37	10 3	1	-	1	10 7	Boise, Idaho	62	51	5	4	-	2	5
Chicago, III.	Ű	U	Ŭ	Ů	U	ΰ	Ú	Colo. Springs, Colo.	80	60	11	7	-	2	5
Cincinnati, Ohio	76	49	18	3	3	3	14	Denver, Colo.	U	U	U	U	U	U	U
Cleveland, Ohio	142	90	35	7	6	4	10	Las Vegas, Nev.	248	178	47	16	4	3	16
Columbus, Ohio	227	172	44	6	1	4	10	Ogden, Utah Phoenix, Ariz.	31 201	28 131	1 32	2 25	5	- 4	3 11
Dayton, Ohio	152	111	29	9	1	2	9	Pueblo, Colo.	36	29	5	25	1	-	6
Detroit, Mich.	158	83	48	18	3	6	9	Salt Lake City, Utah	105	70	21	6	5	3	18
Evansville, Ind.	62	57	5	-	-	-	5	Tucson, Ariz.	183	131	36	13	1	2	14
Fort Wayne, Ind. Gary, Ind.	71 18	50 11	13 5	4	3 2	1	4 1	PACIFIC	2,180	1,581	395	119	49	36	182
Grand Rapids, Mich.	45	36	5	- 1	-	1	3	Berkeley, Calif.	2,180	1,581	395	-	49	30	3
Indianapolis, Ind.	214	146	43	11	7	7	19	Fresno, Calif.	187	144	29	9	2	3	15
Lansing, Mich.	39	29	5	4	1	-	2	Glendale, Calif.	32	28	3	1	-	-	1
Milwaukee, Wis.	126	85	24	13	2	2	13	Honolulu, Hawaii	103	80	17	4	-	2	7
Peoria, III.	55	41	7	1	4	2	1	Long Beach, Calif.	77	55	13	3	4	2	14
Rockford, III.	66	43	17	5	-	1	7	Los Angeles, Calif.	737	530	123	56	22	6	45
South Bend, Ind.	49	40	7	1	1	-	1	Pasadena, Calif.	28	18	4	3	2	1	4
Toledo, Ohio	114	87	18	4	2	3	9	Portland, Oreg.	88	58	14	11	3	2	6
Youngstown, Ohio	70	54	10	6	-	-	-	Sacramento, Calif.	162	118	32	6	4	2	16
W.N. CENTRAL	745	523	148	39	16	19	63	San Diego, Calif. San Francisco, Calif.	193 U	132 U	46 U	7 U	5 U	3 U	21 U
Des Moines, Iowa	98	74	16	4	-	4	13	San Jose, Calif.	199	143	42	8	1	5	18
Duluth, Minn.	U	U	U	U	U	U	U	Santa Cruz, Calif.	36	30	5	-	1	-	3
Kansas City, Kans.	14	6	3	2	1	2	1	Seattle, Wash.	143	102	27	7	3	4	9
Kansas City, Mo.	98	65	20	6	4	3	8	Spokane, Wash.	74	55	14	2	1	2	12
Lincoln, Nebr.	54	39	10	2	1	2	2	Tacoma, Wash.	109	79	24	2	1	3	8
Minneapolis, Minn. Omaha, Nebr.	5 126	3 91	2 22	- 9	- 1	- 3	16	TOTAL	11,778 <sup>¶</sup>	8,300	2,284	734	228	223	963
St. Louis, Mo.	86	52	22	9 5	2	2	5		11,110"	0,000	2,204	104	220	220	303
St. Paul, Minn.	111	87	19	2	3	-	10								
Wichita, Kans.	153	106	31	9	4	3	8								
								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.

<sup>5</sup> Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
 <sup>1</sup> Total includes unknown ages.

### (Continued from page 148)

state their income; these nonrespondents were more likely to be elderly, Hispanic, widowed, retired, or not to have completed high school (i.e., to belong to groups that are frequently low income).

CDC has initiated activities that focus on the needs of women with diabetes. CDC's "Diabetes and Women's Health Across the Life Stages: A Public Health Perspective" analyzes the epidemiologic, social, and environmental dimensions of women and diabetes and discusses public health implications (8). CDC, the American Diabetes Association, the American Public Health Association, and the Association of State and Territorial Health Officials are developing a National Public Health Action Plan for Diabetes and Women. CDC is sponsoring Translating Research into Action for Diabetes (TRIAD), a 5-year prospective study of the quality of diabetes care, costs, and outcomes in managed-care settings that will examine the effects of socioeconomic status on health and quality of care. Finally, CDC is encouraging increased focus on women with diabetes through the National Diabetes Education Program, a collaborative effort with the National Institutes of Health to promote early diagnosis and improvement of the treatment and outcomes for persons with diabetes (available at http:// www.cdc.gov/diabetes/projects/ndeps.htm); Racial and Ethnic Approaches to Community Health (REACH) 2010, a program aimed at eliminating disparities in the health status of ethnic minorities (available at http://www.cdc.gov/ reach2010), and state-based diabetes control programs.

The low socioeconomic status of many women with diabetes poses challenges to public health practitioners. As the prevalence of diabetes continues to increase, continued and creative efforts will be needed to gain greater understanding of how socioeconomic status affects the health of women with diabetes.

### Acknowledgement

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