

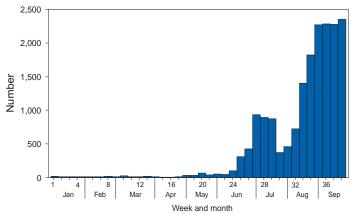
Weekly

November 14, 2003 / Vol. 52 / No. 45

Cholera Epidemic After Increased Civil Conflict — Monrovia, Liberia, June–September 2003

Since 1989, civil war in Liberia has resulted in the displacement of hundreds of thousands of persons. In June 2003, as rebel forces approached the capital city of Monrovia (2003 estimated population: one million), an estimated 300,000 internally displaced persons (IDPs) settled in private homes with family members, public buildings, and other sites. Because of fighting during June–July, the normal collection of health data by the Liberian Ministry of Health (MoH) was interrupted. In June, cases of cholera were confirmed by international nongovernment organizations. To estimate the magnitude of the outbreak, in August, the World Health Organization (WHO) conducted a retrospective review of data collected by health organizations during June-August 2003 but not reported to MoH. Additional data were collected from an emergency surveillance system that began operation on August 25. This report summarizes the results of that analysis, which indicated that as of September 22, a cholera epidemic was ongoing in Monrovia. During the week ending October 20, a total of 1,252 cases of suspected cholera were reported (WHO, MoH, unpublished data, 2003). As of November 12, the epidemic was contining. The epidemic began in June (Figure) and was associated temporally with increased fighting and the movement of IDPs. Because cholera transmission was probably attributable to an acute shortage of clean water, poor sanitation, and crowded living conditions, international and Liberian organizations attempted to supply IDP settlements with sufficient potable water and began chlorinating wells. To stop cholera transmission and avoid additional illness and death, further preventive measures are needed.

Although the majority of health-care facilities in Monrovia were closed during June–July, by mid-August, local and international organizations and MoH were operating five inpatient hospitals, four cholera-treatment centers, seven oral FIGURE. Number of cholera cases reported, by week and month — Monrovia, Liberia, January–September 2003



rehydration clinics, and at least 30 general outpatient clinics. Before August 25, each organization classified cases of diarrheal disease differently, making it difficult to apply a standard surveillance definition. Cases most closely approximating the standard WHO-recommended case definition for use in cholera outbreaks (i.e., acute watery diarrhea in a person aged

INSIDE

- 1096 Tobacco Use Among Middle and High School Students — United States, 2002
- 1198 History of Foot Ulcer Among Persons with Diabetes United States, 2000–2002
- 1102 First Human Death Associated with Raccoon Rabies Virginia, 2003
- 1103 Outbreak of Severe Rotavirus Gastroenteritis Among Children — Jamaica, 2003
- 1105 West Nile Virus Activity United States, November 6–12, 2003
- 1106 Notices to Readers

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION 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 2003;52:[inclusive page numbers].

Centers for Disease Control and Prevention

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

Dixie E. Snider, M.D., M.P.H. (Acting) Deputy Director for Public Health Science

> Susan Y. Chu, Ph.D., M.S.P.H. (Acting) 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

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

Jeffrey D. Sokolow, M.A. (Acting) Lead Technical Writer/Editor

> Jude C. Rutledge Teresa F. Rutledge Douglas W. Weatherwax *Writers/Editors*

Lynda G. Cupell Malbea A. LaPete Visual Information Specialists

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

Division of Public Health Surveillance and Informatics

Notifiable Disease Morbidity and 122 Cities Mortality Data Robert F. Fagan Deborah A. Adams Felicia J. Connor Lateka Dammond Donna Edwards Patsy A. Hall Pearl C. Sharp >5 years) were included in retrospective case counts. After August 25, the majority of facilities that reported data to the emergency surveillance system used a case definition that included acute watery diarrhea in children aged 2–4 years.

During June, the number of persons treated for cholera increased from 49 to 426 per week. During June 2–September 22, of an estimated one million permanent residents and 172,000 IDPs in Monrovia (*I*), 16,969 (1.4%) persons sought medical care for an illness consistent with the surveillance case definition for cholera. The number of persons treated for cholera increased sharply in early June, and stool cultures confirmed the presence of *Vibrio cholerae* O1; the case-fatality ratio in cholera-treatment centers was <1%. The number of persons treated per week peaked in mid-July at 935, declined to 387 in the last week in July, and increased again to 2,352 during September 16–22, the last week for which data are available.

V. cholerae O1 was isolated in the laboratory of St. Joseph Catholic Hospital in Monrovia from stool specimens obtained from six patients during June 9–13; no additional serotyping or antimicrobial susceptibility data were available. *V. cholerae* was isolated again at the same laboratory later in the outbreak from stool specimens obtained on August 26 from five of six adults with suspected cholera who were admitted to cholera-treatment centers at Samuel K. Doe Stadium and John F. Kennedy (JFK) Hospital, the main referral hospital in Monrovia.

Community-based mortality data were unavailable. However, three cholera-treatment centers operated by Médecins sans Frontières (MSF) reported that during June 2– September 15, of 4,746 hospitalized patients with illnesses consistent with a diagnosis of cholera, 37 (0.8%) patients died. During this period, 3,073 (64.8%) hospitalized patients had severe dehydration. Data from the cholera-treatment center operated at JFK Hospital by MSF Belgium were used to compare the outbreak in 2003 with the number of reported cholera cases in previous years. This center, unlike other health facilities that provided services in Monrovia during the 2003 outbreak, has treated cholera patients for the previous 4 years. During June–August, a total of 2,648 cholera patients were treated in this facility, compared with 450–655 patients during comparable periods in the previous 4 years.

Reported by: S Briand, MD, World Health Organization, Geneva, Switzerland. H Khalifa, MD, Médecins sans Frontières; CL Peter, MD, Medical Emergency Relief International (Merlin); OJ Khatib, MD, FK Bolay, MD, World Health Organization, Monrovia, Liberia. BA Woodruff, MD, MA Anderson, MD, Div of Emergency and Environmental Health Svcs, National Center for Environmental Health; ED Mintz, MD, Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC. Editorial Note: Although the precise number of cholera cases and cholera deaths is unknown, available data indicate that a large cholera epidemic is occurring in Monrovia. Cholera is endemic in Liberia during the rainy season (March-November), but the number of persons treated during June-August 2003 was substantially higher than the number treated during comparable periods in recent years. Cholera transmission is facilitated by crowded conditions, poor sanitation, and lack of clean water, all of which were exacerbated in Monrovia during June-July by increased fighting and population movement. The supply of clean water in Monrovia is limited, and for the previous 10 years, the piped water distribution system has not functioned in the majority of Monrovia neighborhoods. Availability of water from other sources (e.g., vendors or wells) was disrupted by the fighting, and frequent heavy rains washed contamination into shallow, unprotected wells from which a substantial number of persons obtain water. In addition, the trucking system that provides IDP sites with chlorinated water from deep borehole wells has not supplied sufficient quantities. An assessment on August 22 indicated that in 14 selected IDP sites, the water supply averaged 1.8 liters of clean water per person per day (2), compared with the recommended minimum in emergencies of 15 liters per person per day (3).

The case-fatality ratio in cholera-treatment centers operated by MSF was substantially lower than that observed in other large cholera outbreaks (4). Treatment in these centers, which specialize in the rehydration of cholera patients, probably was adequate. In addition, because cholera is endemic in Monrovia, the population might have had some immunity, leading to less severe or shorter duration of illness.

The surveillance data described in this report likely underestimate the total number of cholera cases and deaths in Monrovia. Reporting of illnesses from health facilities was incomplete, the cholera case definition varied initially by facility, and mortality reporting was lacking. In addition, not all ill patients might have sought treatment. In other major cholera outbreaks in similar emergencies, a substantial proportion of persons ill with cholera did not report to healthcare facilities and thus never were recorded by health-care facility–based surveillance (4). The majority of health-care facilities in Monrovia stopped functioning or were inaccessible during the worst periods of fighting, which probably reduced the number of cholera patients seeking treatment. The number of deaths that occurred at health-care facilities not operated by MSF is unknown.

Public health authorities use morbidity and mortality surveillance data to evaluate the effectiveness of curative and

preventive interventions in emergency situations. If collection of such data ceases in an emergency, public health surveillance should be reestablished as soon as possible. All public health organizations should agree on which agency is responsible for coordinating surveillance data collection, analysis, and distribution. In addition, health-care facilities should use standard case definitions and report data with the same periodicity.

Although cholera in Monrovia is most likely waterborne, which water sources are primarily responsible for cholera transmission is unknown. Other routes of transmission, including transmission by contaminated food, also might exist. Investigations are needed to identify the specific routes of cholera transmission so that targeted and effective preventive interventions can be implemented. Until such investigations are completed, past experience and empirical data should guide prevention efforts. Chlorination of wells is expensive and has not been proven effective during a cholera epidemic (5). Cholera transmission is more effectively prevented by provision of increased amounts of clean water (6), health education (7), and chlorination of water in protected household containers (8). In previous years, the seasonal increase in the number of cholera cases persisted through December. Until effective control measures are taken, the current epidemic will result in additional cases of illness and death.

References

- 1. United Nations Office for the Coordination of Humanitarian Affairs. Liberia humanitarian briefing issue 1. Monrovia, Liberia: United Nations Office for the Coordination of Humanitarian Affairs, August 26, 2003.
- United Nations Children's Fund (UNICEF). Preliminary report on a rapid assessment of the water and sanitation situation in greater Monrovia. Monrovia, Liberia: United Nations Children's Fund, August 12–22, 2003.
- 3. The Sphere Project. The Sphere Project: Humanitarian Charter and Minimum Standards in Disaster Response. Geneva, Switzerland: Oxfam Publishing, 2000.
- Goma Epidemiology Group. Public health impact of Rwandan refugee crisis: what happened in Goma, Zaire, in July, 1994? Lancet 1995; 345:339–44.
- Rowe A, Angulo F, Roberts L, Tauxe R. Chlorinating well water with liquid bleach was not an effective water disinfection strategy in Guinea-Bissau. Int J Environ Health Res 1998;8:339–40.
- 6. World Health Organization. Guidelines for Cholera Control. Geneva, Switzerland: World Health Organization, 1993.
- Quick RE, Thompson BL, Zuniga A, et al. Epidemic cholera in rural El Salvador: risk factors in a region covered by a cholera prevention campaign. Epidemiol Infect 1995;114:249–55.
- Reller ME, Mong YJ, Hoekstra RM, Quick RE. Cholera prevention with traditional and novel water treatment methods: an outbreak investigation in Fort-Dauphin, Madagascar. Am J Public Health 2001; 91:1608–10.

Tobacco Use Among Middle and High School Students — United States, 2002

Each day in the United States, approximately 4,400 youths aged 12-17 years try their first cigarette (1). An estimated one third of these young smokers are expected to die from a smoking-related disease (2). The National Youth Tobacco Survey (NYTS), conducted by the American Legacy Foundation, provides estimates of usage among U.S. middle and high school students for various tobacco products (i.e., cigarettes, cigars, smokeless tobacco, pipes, bidis [leaf-wrapped, flavored cigarettes from India], and kreteks [clove cigarettes]). This report summarizes tobacco use prevalence estimates from the 2002 NYTS and describes changes in prevalence since 2000. Both tobacco use and cigarette smoking among students in high school (i.e., grades 9-12) decreased by approximately 18% during 2000–2002; however, a decrease among students in middle school (i.e., grades 6-8) was not statistically significant. The lack of progress among middle school students suggests that health officials should improve implementation of proven antismoking strategies and develop new strategies to promote continued declines in youth smoking.

Sampling frames for the 2002 NYTS were stratified by U.S. Census Bureau region; black, Hispanic, and Asian students were oversampled. A partial panel design was used (i.e., comprising a newly drawn sample and a sampling of schools that participated in the 2000 NYTS). The sampling frame for the drawn sample consisted of all public and private schools in the United States. A total of 94 primary sampling units (PSUs) (i.e., large counties or groups of counties) were selected in the first stage of the sampling, and 215 schools were selected from these PSUs in the second stage of the sampling; 83 additional schools were selected randomly for the panel sample. Of these 298 eligible schools, 246 (83%) participated in the 2002 NYTS. Approximately 125 students were then drawn from each school by selecting classes randomly, depending on the average class size of each school, from a required subject area (e.g., English or social studies). Participation was voluntary and anonymous, and school parental permission procedures were followed; students recorded their responses on a computer-scannable sheet.

Among youths attending the 246 participating schools, 26,119 (90%) (i.e., 12,581 middle school students and 13,538 high school students) completed the survey, resulting in an overall response of 75%. Data were weighted to be nationally representative. STATA 7 was used to compute 95% confidence intervals for prevalence estimates, which were used to identify differences among populations. Current use of a specific tobacco product was defined as having used that product

on at least one occasion during the 30 days preceding the survey. Current use of any tobacco product was defined as having used any of the listed products on at least one occasion during the 30 days preceding the survey.

In 2002, a total of 13.3% of middle school students reported current use of any tobacco product (Table 1). Cigarettes (10.1%) were the most commonly used product, with no statistically significant differences in usage by sex. Cigars (6.0%) were the second most commonly used tobacco product, followed by smokeless tobacco (3.7%), pipes (3.5%), bidis (2.4%), and kreteks (2.0%). Males were more likely than females to use all tobacco products except for cigarettes. No significant differences were found for any type of tobacco use by race/ethnicity.

Among high school students, 28.4% reported current use of any tobacco product (Table 2). Cigarettes (22.9%) were the most commonly used product, with no difference by sex; however, white students were more likely to use cigarettes than black, Hispanic, or Asian students. Cigars (11.6%) were the second most common tobacco product, followed by smokeless tobacco (6.1%), pipes (3.2%), kreteks (2.7%), and bidis (2.6%). Males were more likely than females to use all tobacco products except for cigarettes. Asian students were less likely to use cigars, and white students were more likely to use smokeless tobacco than students in other racial/ethnic groups.

During 2000–2002, current use of any tobacco product among high school students decreased from 34.5% to 28.4%; cigarette use decreased from 28.0% to 22.9%, cigar use from 14.8% to 11.6%, bidi use from 4.1% to 2.6%, and kretek use from 4.2% to 2.7% (Table 2). However, no significant change was found among middle school students in the prevalence of tobacco use (Table 1).

Reported by: JA Allen, MA, D Vallone, PhD, ML Haviland, DrPH, C Healton, DrPH, American Legacy Foundation, District of Columbia. KC Davis, MS, MC Farrelly, PhD, Research Triangle Institute, Research Triangle Park, North Carolina. CG Husten, MD, T Pechacek, PhD, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The declines in cigarette smoking and overall tobacco use among high school students reflect downward national trends since 1997 (3, 4). The declining use of cigars, bidis, and kreteks and the unchanged use of smokeless tobacco and pipes among high school students suggests that students are not substituting other tobacco products for cigarettes and that efforts to reduce cigarette smoking might be reducing use of all tobacco products. However, the lack of any statistically significant decline in tobacco usage among middle school students is cause for concern.

	Any	/ tobacco†	Cig	arettes	(Cigars	-	okeless bacco	F	Pipes		Bidis	к	reteks
Characteristic	%	(95% Cl§)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Middle school, 2002														
Sex														
Male	14.8	(±1.6)	10.2	(±1.3)	7.9	(±1.1)	5.6	(±1.3)	5.1	(±0.8)	3.1	(±0.6)	2.7	(±0.6)
Female	11.8	(±1.4)	10.0	(±1.4)	4.1	(±0.7)	1.8	(±0.4)	1.9	(±0.4)	1.7	(±0.4)	1.1	(±0.3)
Race/Ethnicity														
White	13.3	(±1.9)	10.4	(±1.6)	5.5	(±1.0)	4.0	(±1.1)	2.8	(±0.6)	1.8	(±0.4)	1.5	(±0.4)
Black	13.6	(±2.4)	9.4	(±2.4)	7.3	(±1.7)	2.9	(±1.1)	3.9	(±1.4)	3.1	(±1.0)	2.3	(±0.9)
Hispanic	12.5	(±1.9)	9.1	(±1.6)	6.3	(±1.1)	2.9	(±0.7)	4.4	(±0.9)	2.9	(±0.7)	2.6	(±0.7)
Asian	8.6	(±3.2)	7.4	(±3.2)	4.8	(±2.8)	3.6	(±2.7)	4.4	(±2.7)	2.9	(±2.1)	3.6	(±2.8)
Total	13.3	(±1.4)	10.1	(±1.2)	6.0	(±0.7)	3.7	(±0.8)	3.5	(±0.5)	2.4	(±0.3)	2.0	(±0.3)
Middle school, 2000														
Sex														
Male	17.6	(±2.2)	11.7	(±1.7)	9.7	(±1.5)	5.7	(±1.8)	4.3	(±0.7)	3.4	(±0.6)	2.7	(±0.5)
Female	12.7	(±1.5)	10.2	(±1.3)	4.6	(±0.8)	1.5	(±0.3)	1.8	(±0.4)	1.4	(±0.3)	1.5	(±0.3)
Race/Ethnicity														
White	14.3	(±1.9)	10.8	(±1.6)	6.1	(±1.1)	3.9	(±1.3)	2.7	(±0.5)	1.9	(±0.4)	1.9	(±0.4)
Black	17.5	(±3.0)	11.2	(±2.0)	9.8	(±2.5)	2.4	(±0.7)	2.2	(±0.7)	2.9	(±0.8)	1.7	(±0.5)
Hispanic	16.0	(±2.0)	11.4	(±1.7)	8.8	(±1.4)	2.9	(±0.7)	5.3	(±1.1)	3.6	(±0.9)	2.6	(±0.8)
Asian	7.5	(±2.6)	5.3	(±2.3)	4.1	(±1.9)	1.7	(±1.2)	2.8	(±1.5)	2.9	(±1.7)	2.3	(±1.4)
Total	15.1	(±1.5)	11.0	(±1.2)	7.1	(±1.0)	3.6	(±0.9)	3.0	(±0.4)	2.4	(±0.4)	2.1	(±0.4)

TABLE 1. Percentage of students in middle school (i.e., grades 6–8) who were current users* of any tobacco product, by product type, sex, and race/ethnicity-National Youth Tobacco Survey, United States, 2002 and 2000

* Used tobacco on at least one occasion during the 30 days preceding the survey. [†] Cigarettes, cigars, smokeless tobacco, pipes, bidis (leaf-wrapped, flavored cigarettes from India), or kreteks (clove cigarettes). [§] Confidence interval.

								okeless						
	Any	/ tobacco [†]	_ Ciga	arettes		Cigars	to	bacco	F	Pipes		Bidis	K	reteks
Characteristic	%	(95% Cl§)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
High school, 2002														
Sex														
Male	32.9	(±2.3)	24.6	(±2.1)	16.9	(±1.4)	10.8	(±2.0)	5.0	(±0.9)	3.7	(±0.8)	3.5	(±0.7)
Female	23.9	(±1.8)	21.2	(±1.8)	6.2	(±0.9)	1.4	(±0.4)	1.4	(±0.4)	1.5	(±0.4)	1.8	(±0.5)
Race/Ethnicity														
White	31.1	(±2.1)	25.5	(±1.8)	11.8	(±1.0)	7.4	(±1.4)	2.8	(±0.6)	2.2	(±0.5)	2.7	(±0.6)
Black	21.8	(±2.9)	14.3	(±2.8)	12.0	(±1.9)	2.3	(±0.8)	3.8	(±1.2)	3.4	(±1.1)	1.9	(±0.8)
Hispanic	24.5	(±2.7)	20.5	(±2.5)	10.8	(±1.5)	3.8	(±1.3)	4.6	(±1.1)	3.5	(±0.9)	3.0	(±0.8)
Asian	15.0	(±3.9)	12.8	(±3.5)	5.4	(±2.3)	2.3	(±1.5)	2.7	(±1.5)	2.9	(±1.7)	2.1	(±1.7)
Total	28.4	(±1.7)	22.9	(±1.6)	11.6	(±0.9)	6.1	(±1.1)	3.2	(±0.6)	2.6	(±0.5)	2.7	(±0.5)
High school, 2000														
Sex														
Male	39.1	(±2.2)	28.8	(±1.9)	22.0	(±1.5)	11.8	(±1.7)	5.2	(±0.7)	5.4	(±0.6)	5.3	(±0.7)
Female	29.8	(±1.9)	27.3	(±2.0)	7.3	(±0.9)	1.4	(±0.4)	1.4	(±0.3)	2.8	(±0.4)	3.0	(±0.5)
Race/Ethnicity														
White	38.0	(±2.3)	31.8	(±2.1)	15.1	(±1.2)	8.2	(±1.2)	3.3	(±0.5)	3.6	(±0.5)	4.5	(±0.6)
Black	26.5	(±3.6)	16.8	(±3.0)	15.3	(±2.9)	2.6	(±0.9)	2.2	(±0.8)	4.9	(±1.0)	2.2	(±0.7)
Hispanic	28.4	(±2.5)	22.6	(±2.4)	13.6	(±1.6)	4.0	(±1.2)	4.2	(±0.9)	5.7	(±1.1)	4.0	(±0.8)
Asian	22.9	(±3.7)	20.6	(±3.5)	7.4	(±2.1)	1.9	(±0.9)	2.5	(±1.1)	3.0	(±1.3)	3.2	(±1.4)
Total	34.5	(±1.9)	28.0	(±1.7)	14.8	(±1.1)	6.6	(±0.9)	3.3	(±0.4)	4.1	(±0.4)	4.2	(±0.5)

TABLE 2. Percentage of students in high school (i.e., grades 9–12) who were current users* of any tobacco product, by product type, sex, and race/ethnicity — National Youth Tobacco Survey, United States, 2002 and 2000

* Used tobacco on at least one occasion during the 30 days preceding the survey. [†]Cigarettes, cigars, smokeless tobacco, pipes, bidis (leaf-wrapped, flavored cigarettes from India), or kreteks (clove cigarettes). [§]Confidence interval.

The findings in this report are subject to at least two limitations. First, these data apply only to youth who attended middle school or high school and are not representative of all youths in these age groups. Nationally, approximately 5% of youths aged 16–17 years were no longer in school (4). Second, the data were from self-reports of survey participants. Although underreporting of tobacco use by youths has been minimal in previous surveys (5), recent declines in the acceptability of smoking might have led to increased underreporting.

Why middle school and high school students appear to be responding differently to the current antismoking environment is not clear. Factors expected to discourage youth from smoking include increases in cigarette prices (i.e., approximately 88% from December 1997 to December 2002) (6); implementation of smoke-free laws and policies; restrictions on tobacco advertising; and local, state, and national antitobacco campaigns (e.g., the truth[®] campaign) (7). However, spending on tobacco industry marketing doubled during 1997–2001 (8), and tobacco industry-sponsored media campaigns have been determined to reduce the impact of public health campaigns (7).

The data in this report suggest that further refinements in evidence-based strategies will be needed to decrease tobacco use among middle school students. Efforts might focus on 1) devising more targeted and effective media campaigns, 2) reducing depictions of tobacco use in entertainment media (9), 3) instituting campaigns to discourage family and friends from providing cigarettes to youths, 4) promoting smoke-free homes, 5) instituting comprehensive school-based programs and policies in conjunction with supportive community activities, and 6) decreasing the number of adult smokers (e.g., parents) to present more nonsmoking role models.

Because tobacco use is the leading cause of preventable death in the United States, efforts to reduce tobacco use must remain a public health priority. Preventing tobacco use among youth is essential to reduce future smoking-related illness and associated costs. However, in 2003, states cut spending for tobacco use prevention and control programs by \$86.2 million (11.2%) (10). For the decline in tobacco use among youth in the United States to continue, such funding must be restored and perhaps expanded.

References

- Substance Abuse and Mental Health Services Administration. Summary
 of findings from the 2001 National Household Survey on Drug Abuse:
 Volume II. Technical appendices and selected data tables. Rockville,
 Maryland: U.S. Department of Health and Human Services, 2002;
 NHSDA Series H-18; DHHS publication no. (SMA)02-3759.
- 2. CDC. Projected smoking-related deaths among youth. MMWR 1996;45:971-4.

- Johnston LD, O'Malley PM, Bachman JG. Monitoring the future: national survey results on drug use, 1975–2002. Volume 1: secondary school students. Bethesda, Maryland: National Institutes of Health, National Institute on Drug Abuse, 2003; DHHS publication no. (NIH) 03-5375.
- Grunbaum JA, Kann L, Kinchen S, et al. Youth risk behavior surveillance—United States, 2001. In: Surveillance Summaries (June 28). MMWR 2002;51(No. SS-4).
- 5. Office on Smoking and Health. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, 1994.
- U.S. Department of Labor, Bureau of Labor Statistics. Consumer price index—all urban consumers (current series). Washington, DC: U.S. Department of Labor, 2003. Available at http://data.bls.gov/labjava/ outside.jsp?survey=cu.
- Farrelly MC, Healton CG, Davis KC, Messeri P, Hersey JC, Haviland ML. Getting to the truth: evaluating national tobacco countermarketing campaigns. Am J Public Health 2002;92:901–7.
- 8. Federal Trade Commission. Cigarette report for 2001. Federal Trade Commission, 2003. Available at http://www.ftc.gov/opa/2003/06/2001 cigrpt.htm.
- Sargent JD, Dalton MA, Beach ML, et al. Viewing tobacco use in movies: does it shape attitudes that mediate adolescent smoking? Am J Prev Med 2002;22:137–45.
- 10. Campaign for Tobacco-Free Kids, American Lung Association, American Cancer Society, American Heart Association, SmokeLess States National Tobacco Policy Initiative. Show us the money: a report on the states' allocation of the tobacco settlement dollars. Washington, DC: National Center for Tobacco-Free Kids, 2003. Available at http:// www.tobaccofreekids.org/reports/settlements/2003/fullreport.pdf.

History of Foot Ulcer Among Persons with Diabetes — United States, 2000–2002

Foot ulcers and lower extremity amputations (LEAs) are disabling complications of diabetes and lower extremity disease (1,2). In the United States, approximately 60% of all LEAs occur among persons with diabetes (3); of these LEAs, approximately 85% are preceded by a foot ulcer (4). To estimate the percentage of U.S. adults with diabetes who had a history of a foot ulcer, CDC analyzed data from the 2000– 2002 Behavioral Risk Factor Surveillance System (BRFSS). This report summarizes the findings of that analysis, which indicate that persons with longer duration of diabetes who used insulin and who smoked were most likely to have a history of foot ulcer. Persons with diabetes can benefit from interventions that prevent or delay foot ulcer and LEAs.

BRFSS is a state-based, random-digit–dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥18 years. BRFSS is conducted in the 50 states, the District of Columbia (DC), Puerto Rico, Guam, and the U.S. Virgin Islands. The median response rate was 48.9% (range: 28.8%–71.8%) in 2000, 51.1% (range: 33.3%–81.5%) in 2001, and

58.6% (range: 42.2%-82.6%) in 2002. Persons with diabetes were defined as respondents who answered "yes" to the question, "Have you ever been told by a doctor that you have diabetes?" Women who were told they had diabetes only during pregnancy were excluded. Persons who reported they had diabetes were asked questions regarding foot ulcer from the diabetes module. Persons with a history of foot ulcer were defined as those who responded "yes" to the question, "Have you ever had any sores or irritations on your feet that took >4 weeks to heal?" Other questions from the diabetes module included the following: "How old were you when you were told you had diabetes?"; "Are you now taking insulin?"; "About how often do you check your blood for glucose or sugar?"; and "Have you ever taken a course or class in how to manage your diabetes?" A total of 44 states and DC reported information from the diabetes module for at least 2 years during 2000-2002. Data were weighted to reflect the age, sex, and racial/ethnic distribution in each area. The percentage of persons with diabetes who had a history of foot ulcer was analyzed by using the selected questions from the diabetes module, selected sociodemographic characteristics, obesity (body mass index \geq 30), smoking status, and area of residence. Logistic regression analysis was used to determine the independent associations of various risk factors among persons with a history of foot ulcer. All analyses were conducted by using SAS v8 software with SUDAAN to estimate standard errors and confidence intervals, and t-tests were used to test for significant differences between groups. Prevalence was age-adjusted according to the 2000 U.S. standard population.

During 2000–2002, an estimated 11.8% of U.S. adults with diabetes had a history of foot ulcer (Table 1). The percentage decreased with increasing

TABLE 1. Crude prevalence of a history of foot ulcer among adults aged ≥18 years with diagnosed diabetes, by selected characteristics — Behavioral Risk Factor Surveillance System, United States*, 2000–2002

Characteristic	%	(95% Cl†)	p value§	OR [¶]	(95% CI)
Age group (yrs)					
18–44**	13.7	(11.8–15.5)			
45–64	13.4	(12.2–14.5)	0.600	1.1	(0.9–1.3)
65–74	9.6	(8.4–10.9)	0.004	0.7	(0.5–0.9)
≥75	9.0	(7.2–10.7)	<0.001	0.6	(0.4–0.7)
Diabetes duration (yrs)					
<6**	8.8	(7.6–10.1)			
6–10	10.4	(9.1–11.7)	0.062	1.2	(1.0–1.5)
11–20	14.0	(12.3–15.6)	<0.001	1.6	(1.3–2.0)
≥21	18.6	(16.6–20.6)	<0.001	2.3	(1.9–2.9)
Sex					
Women**	11.8	(10.8–12.7)			
Men	11.9	(10.9–13.0)	0.242	—	—
Race/Ethnicity					
White, non-Hispanic**	11.6	(10.9–12.3)			
Black, non-Hispanic	9.5	(8.1–11.0)	<0.001	0.6	(0.5–0.7)
Hispanic	15.4	(11.8–19.0)	0.239	1.2	(0.9–1.7)
Married or cohabitating					
No	13.8	(12.6–15.0)	<0.001	1.4	(1.2–1.7)
Yes**	10.6	(9.7–11.5)			
Obesity ^{††}					
No**	10.4	(9.6-11.3)			
Yes	13.3	(12.2–14.5)	<0.001	1.4	(1.2–1.6)
Insulin use					
No**	9.7	(8.9-10.4)			
Yes	17.7	(16.0–19.4)	<0.001	1.6	(1.4–1.9)
Smoking status					
Nonsmoker**	10.3	(9.3–11.3)			
Former smoker	11.9	(10.7–13.1)	0.001	1.3	(1.1–1.6)
Current smoker	15.8	(13.7–17.8)	<0.001	1.6	(1.3–2.0)
Education level					
<high school<="" td=""><td>12.2</td><td>(11.2–13.3)</td><td>0.371</td><td>_</td><td>_</td></high>	12.2	(11.2–13.3)	0.371	_	_
≥Some college**	11.3	(10.4–12.3)			
Health insurance coverage					
No**	13.5	(11.2–15.8)			
Yes	11.6	(10.9–12.4)	0.496	_	_
Blood sugar monitoring		. ,			
No**	10.3	(9.2–11.3)			
Yes	13.2	(12.2–14.2)	0.426	_	_
Diabetes management education	n	. ,			
No**	10.9	(9.9–11.9)			
Yes	12.7	(11.7–13.7)	0.499	_	_
Total	11.8	(11.1–12.6)			

* Excludes territories and states with only 1 year of data; missing values also are excluded from the _ analysis.

^T Confidence interval.

[§] Full model, including all variables.

[¶]Odds ratio; final model, including significant variables only.

** Reference level for characteristic.

⁺⁺ Body mass index ≥30.

age and increased with longer duration of disease (p<0.001, t-test for trend). The percentage was lower among non-Hispanic blacks than among non-Hispanic whites or Hispanics (p<0.01) and lower among married or cohabitating persons than among persons who were not (p<0.001). Foot ulcers were significantly more prevalent among persons who were obese than among those who were not (p<0.001) and among insulin users than among persons who did not use insulin (p<0.001). The prevalence of foot ulcer increased with smoking, from 10.3% among nonsmokers to 11.9% among former smokers to 15.8% among current smokers (p<0.001, t-test for trend). The percentage did not differ significantly by sex, education level, health insurance coverage, blood sugar monitoring, and diabetes management education. In multivariate analyses, younger age, longer duration of disease, white race, Hispanic ethnicity, not being married or cohabitating, obesity, insulin use, and smoking all were associated independently with a history of foot ulcer. The strongest associations were duration of disease of ≥ 21 years (odds ratio [OR] = 2.3), insulin use (OR = 1.6), and current smoking (OR = 1.6).

Overall, the age-adjusted prevalence of a history of foot ulcer among persons with diabetes was 12.7% (Table 2). Of the 45 areas (44 states and DC) that reported information from the BRFSS diabetes module, Indiana (16.3%), California (16.2%), and Nevada (16.2%) had the highest ageadjusted prevalence of a history of foot ulcer among persons with diabetes, and Colorado (7.4%), Wisconsin (8.8%), and Hawaii (8.9%) had the lowest (Table 2).

Reported by: ME Aguiar, MSPH, NR Burrows, MPH, J Wang, MPH, JP Boyle, PhD, LS Geiss, MA, MM Engelgau, MD, Div of Diabetes Translation, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report indicate that approximately 12% of U.S. adults with diabetes had a history of foot ulcer, a risk factor for further ulceration or LEA. This analysis identifies risk factors for foot ulcer and underscores the need to improve foot-related preventive care practices among persons with diabetes, particularly those with longer duration of disease who use insulin and who smoke.

Among persons with diabetes, foot ulcers and LEAs can be reduced by 44%-85% (5). These persons should receive annual foot examinations to identify high-risk foot conditions (e.g., peripheral neuropathy, peripheral arterial disease, foot deformities, and history of ulcer or LEAs), and persons with one or more high-risk foot conditions should receive more frequent evaluations (6). Preventive strategies should focus on 1) glycemic control to reduce neuropathy, 2) smoking cessation or prevention, 3) early detection and appropriate management of persons with high-risk foot conditions, 4) provider education, 5) patient education on daily foot care, 6) use of

TABLE 2. Age-adjusted prevalence* of a history of foot ulcer
among adults aged \geq 18 years with diagnosed diabetes, by
state/area — Behavioral Risk Factor Surveillance System,
United States [†] , 2000–2002

State/Area	%	(95% Cl [§])
Alabama	13.3	(10.4–16.2)
Alaska	12.8	(7.7–18.0)
Arizona	12.8	(6.2–19.5)
Arkansas	13.4	(10.3–16.6)
California	16.2	(12.3–20.2)
Colorado	7.4	(4.1–10.7)
Connecticut	10.5	(8.0–13.0)
District of Columbia	9.7	(4.9–14.6)
Florida	10.6	(8.3–12.9)
Georgia	13.0	(10.2–15.9)
Hawaii	8.9	(6.1–11.8)
Idaho	12.4	(9.5–15.3)
Indiana	16.3	(12.4–20.1)
Iowa	10.5	(7.2–13.8)
Kansas	11.4	(8.8-14.0)
Kentucky	13.5	(11.1–15.9)
Louisiana	12.8	(8.9–16.8)
Maine	14.7	(8.8–20.6)
Massachusetts	13.5	(10.9–16.0)
Michigan	14.5	(10.8–18.2)
Minnesota	13.0	(9.2–16.8)
Mississippi	10.6	(7.5–13.7)
Montana	10.3	(6.8–13.9)
Nebraska	12.7	(9.2–16.2)
Nevada	16.2	(9.6-22.8)
New Hampshire	10.1	(7.2–13.1)
New Jersey	11.1	(8.3–14.0)
New Mexico	12.7	(9.7–15.6)
North Carolina	9.8	(6.6–13.0)
North Dakota	9.7	(6.4–13.1)
Ohio	9.9	(7.1–12.6)
Oklahoma	13.2	(10.5–15.9)
Pennsylvania	11.4	(7.9–15.0)
Rhode Island	10.9	(7.7–14.1)
South Carolina	13.4	(10.4–16.3)
South Dakota	12.8	(9.3–16.4)
Tennessee	14.5	(10.3–18.7)
Texas	12.2	(9.9–14.5)
Utah	11.4	(7.8–15.0)
Vermont	10.4	(7.4–13.5)
Virginia	11.7	(8.2–15.2)
Washington	13.3	(9.7-16.9)
West Virginia	9.9	(7.4–12.4)
Wisconsin	8.8	(5.9–11.7)
Wyoming	10.9	(7.2–14.5)
Total	12.7	(11.9–13.6)

* Age-adjusted with persons aged <65 years and aged >65 years according to the 2000 U.S. standard population.

⁺Excludes territories and states with only 1 year of data; missing values [§]Confidence interval.

proper footwear, and 7) health-care interventions to improve care (e.g., chart reminders and patient tracking) (6-8).

The findings in this report are subject to at least five limitations. First, BRFSS does not include institutionalized persons (e.g., nursing home residents) or persons without telephones. Second, BRFSS data are self-reported and subject to recall bias. These two limitations might explain in part why younger age was associated with a higher prevalence of a history of foot ulcer. Third, factors that were not significant in the analysis (e.g., blood glucose monitoring and diabetes management education) might be confounded with longer duration and severity of disease (e.g., insulin use), and health insurance coverage might not include appropriate foot care. Fourth, the median BRFSS response rate was only 58.6% in 2002; however, BRFSS data have minimal bias compared with census data (http://www.cdc.gov/brfss). Finally, the analysis included data from 44 states and DC and therefore might not be representative of the entire country.

CDC conducts surveillance on foot-related preventive care practices and LEAs (http://www.cdc.gov/diabetes/statistics/ index.htm) in the United States. To estimate the extent of lower extremity disease and its risk factors, in 1999, CDC and the National Institutes of Health (NIH) included assessments of peripheral vascular disease, peripheral neuropathy, foot deformities, ulcers, and LEAs in the National Health and Nutrition Examination Survey. This information can assist clinicians and public health providers in developing preventive care and community-based interventions.

Increasing the proportion of persons with diabetes who receive preventive foot care and reducing LEAs are high public health priorities in the United States and, as such, were included in the national health objectives for 2010. The prevalence of annual foot examinations among persons with diabetes increased during 1995-2001, from 56.0% to 62.3% (9), which is still below the national target of 75% (objective no. 5-14) (10). To improve diabetes-related preventive practices, CDC provides technical assistance to state diabetes prevention and control programs. CDC also collaborates with the Health Resources and Services Administration in the Health Disparities Collaboratives, participates with 13 other agencies in the National Diabetes Quality Improvement Alliance, and cosponsors the National Diabetes Education Program (NDEP) with NIH. NDEP patient education materials on making foot care an essential part of diabetes care are available at http://www.ndep.nih.gov/diabetes/pubs/ feet_kit_eng.pdf.

References

- Reiber GE, Boyko EJ, Smith DG. Lower extremity foot ulcers and amputations in diabetes. In: Harris MI, Cowie CC, Stern MP, Boydo EJ, Reiber GE, Bennett PH, eds. Diabetes in America, 2nd ed. Washington, DC: U.S. Government Printing Office, 1995; DHHS publication no. (NIH)95-1468.
- Ramsey SD, Newton K, Blough D, et al. Incidence, outcomes, and cost of foot ulcers in patients with diabetes. Diabetes Care 1999; 22:382–7.
- 3. CDC. Hospital discharge rates for nontraumatic lower extremity amputation by diabetes status—United States, 1997. MMWR 2001; 50:954–8.

"The wisest mind has something yet to learn."

George Santayana

MMWR Continuing Education makes it possible for you to stay current on relevant public health and clinical topics-online and at no charge.

Review course descriptions, take exams, track your results, and receive course certificates– all from your own computer, when and where your schedule allows.

MMWR CE A wise choice.

cdc.gov/mmwr



- 4. Pecoraro RE, Reiber GE, Burgess EM. Pathways to diabetic limb amputation: basis for prevention. Diabetes Care 1990;13:513–21.
- Bild DE, Selby JV, Pomeroy S, Browner WS, Braveman P, Showstack JA. Lower-extremity amputation in people with diabetes: epidemiology and prevention. Diabetes Care 1989;12:24–31.
- 6. American Diabetes Association. Preventive foot care in people with diabetes. Diabetes Care 2003;26(suppl 1):S78–S79.
- Mayfield JA, Reiber GE, Sanders LJ, Janisse D, Pogach LM. Preventive foot care in people with diabetes. Diabetes Care 1998;21:2161–77.
- Rith-Najarian SJ, Reiber GE. Prevention of foot problems in persons with diabetes. J Fam Practice 2000;49:S30–S39.
- CDC. Preventive-care practices among persons with diabetes—United States, 1995 and 2001. MMWR 2002;51:965–9.
- U.S. Department of Health and Human Services. Healthy people 2010, 2nd ed. With understanding and improving health and objectives for improving health (2 vols.). Washington, DC: U.S. Department of Health and Human Services, 2000.

First Human Death Associated with Raccoon Rabies — Virginia, 2003

Rabies is an acute, progressive, incurable viral encephalitis, caused by the bite of an infected animal. In March 2003, a previously healthy man aged 25 years from northern Virginia died from a diagnosed illness of meningoencephalitis of unknown etiology after a 3-week illness. Histopathologic review of central nervous system tissues at CDC revealed viral inclusions suggestive of Negri bodies, and subsequent tests confirmed a diagnosis of rabies. Genetic sequencing identified a rabies virus variant associated with raccoons, but how the patient became infected remains unknown. This report summarizes the investigation of the first documented case of human rabies associated with a raccoon rabies virus variant in the United States and highlights the importance of continued education in the prevention and diagnosis of rabies.

In February 2003, the patient visited his physician with head and body aches, nausea, abdominal pain, chills, fever of 99°–100° F (37.2° C–37.7° C), dry cough, and listlessness. Upon retrospective questioning, his wife reported that he had showed mild personality changes during the previous days. Six days later, the patient awoke disoriented with unsteady gait and slurred speech. He was evaluated in a local emergency department and admitted to the hospital. Physical examination revealed mild ataxia and confusion. Laboratory values were substantial for decreased sodium. A lumbar puncture revealed a white blood cell count of $24/\mu$ L (normal: 0–5 cells/ μ L), a red blood cell count of $10/\mu$ L (normal: 0–5 cells/ μ L), a glucose concentration of 58 mg/dL (normal: 40–70 mg/dL), and a protein concentration of 81 mg/dL (normal: 15–45 mg/dL). An electroencephalogram demonstrated generalized slowing. Magnetic resonance imaging of the brain was interpreted with a high T2 signal in the hypothalamus and bilateral mesial temporal lobes.

The patient remained febrile and hyponatremic (range: 119– 125 mmol/L) with declining mental status. On the fifth day of hospitalization, the patient was intubated, and twitching on his right side was noted. On day six, he was unresponsive and had near-constant myoclonic activity. On the 11th day, a computerized tomography scan of the head showed sulcal effacement and diffuse cerebral edema. The patient remained comatose and intermittently febrile. Despite aggressive critical care management, the patient died on the 14th hospital day.

At autopsy, histopathologic evaluation showed severe meningoencephalitis involving the cortex and white matter of the cerebral hemispheres, deep gray nuclei, cerebellum, and spinal cord. Brain tissue submitted to a research laboratory was positive by polymerase chain reaction (PCR) for *Naegleria*.

The possibility of rabies was discussed briefly during hospitalization but was discarded from further consideration on the basis of a review of the history and clinical signs and symptoms. A brain biopsy was planned but was canceled because of hemodynamic instability. Initial microscopic examination of brain tissue did not detect any inclusions suggestive of viral infection.

Tissues were forwarded to CDC for pathologic evaluation for *Naegleria*. Immunohistochemical (IHC) assays for various amoebae, including *Naegleria fowleri*, were negative. However, abundant intracytoplasmic inclusions of neurons in several areas of the brain suggested a diagnosis of rabies. The diagnosis was confirmed by IHC stains for rabies virus. Further testing, including both indirect and direct fluorescent antibody tests and reverse transcriptase-PCR of fixed brain tissue, supported the diagnosis of rabies. Nucleotide sequence analysis and antigenic typing with monoclonal antibodies on frozen brain tissue indicated that the specific etiologic agent was a southeastern raccoon rabies virus variant. Genetic sequence analysis indicated 100% homology with a raccoon rabies virus variant from Virginia.

Approximately 125 family members and friends and 173 health-care workers were questioned retrospectively about direct unprotected exposures to the patient's secretions and tissues. After detailed investigation, five family members and three hospital employees received postexposure prophylaxis for potential exposure to patient secretions.

The patient was an office worker who for the previous 6 years had lived, worked, and recreated in areas in which raccoon rabies was endemic. However, extensive interviews with family, friends, and co-workers revealed that he had no specific exposure to terrestrial animals likely to be infected with the raccoon rabies virus variant. The patient did not spend much time outdoors, but the potential existed for encountering a rabid mammal while camping or in a trash can, wood pile, or other outdoor environment.

Reported by: MA Silverstein, MD, Herndon Family Medicine, Herndon; CD Salgado, MD, S Bassin, MD, TP Bleck, MD, MB Lopes, MD, BM Farr, MD, Univ of Virginia Health System, Charlottesville; SR Jenkins, VMD, DC Sockwell, MSPH, JS Marr, MD, GB Miller, MD, Office of Epidemiology, Virginia Dept of Health. Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: Approximately 7,000-9,000 cases of animal rabies are diagnosed annually in the United States (1). This report describes the first documented case of human rabies associated with a raccoon rabies virus variant. Of the 37 human rabies cases reported in the United States since 1990, no history of suspicious animal bite exposure was documented for 28 of the 30 cases presumed to be acquired in the United States. With the isolation of raccoon rabies virus from this patient, human cases have been associated with all of the major reservoirs and vectors of the disease in the United States, including dogs, cats, bats, foxes, skunks, coyotes, and bobcats. Human rabies cases without a definitive history of animal exposure are associated commonly with bat rabies viruses (2). Challenges to implicating an animal source readily can include failure to seek medical care for perceived minor lesions, nonrecognition of the actual exposure event, communication (i.e., language) barriers, and recall bias from memory loss or impaired speech in encephalitic patients. Incubation periods range typically from 1 to 3 months after exposure but in rare cases can exceed 1 year in duration, further complicating collection of an adequate history.

During the late 1970s, rabid raccoons were identified in Virginia and West Virginia after probable translocation of infected animals from the southeastern United States. Raccoon rabies spread throughout the region, with approximately 50,000 rabid raccoons diagnosed to date. During 2003, Tennessee became the twentieth affected state, and the enzootic area now stretches from eastern Canada to Florida (*3*).

Rabies should be considered in the differential diagnosis of any acute, rapidly progressive encephalitis, regardless of documented history of animal bite. Prompt ante- or postmortem diagnosis is necessary for accurate reporting of human rabies to public health officials and implementation of appropriate infection-control measures, including prompt administration of prophylaxis to exposed persons.

The Advisory Committee on Immunization Practices publishes guidelines for human rabies prevention (4), and recommendations have been published for the management of suspected cases (5). Human rabies postexposure prophylaxis is effective when administered promptly and properly. Human-to-human transmission is a concern, but no cases among health-care workers exposed to a rabies patient have been reported (6,7). In the case described in this report, careful risk assessment based on identifiable contact with the patient's secretions limited the number of persons receiving prophylaxis. Emergency medicine physicians, infectiousdisease consultants, and state and national public health officials can provide advice on rabies prophylaxis for complicated or unusual exposure scenarios to prevent this fatal disease and aid in its diagnosis.

Acknowledgments

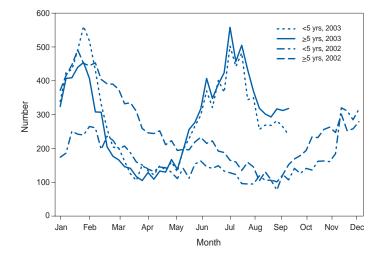
This report is based, in part, on contributions by M Prosniak, PhD, B Dietzschold, DVM, Thomas Jefferson Univ, Philadelphia, Pennsylvania.

References

- 1. Krebs JW, Noll HR, Rupprecht CE, Childs JE. Rabies surveillance in the United States during 2001. J Am Vet Med Assoc 2002;221:1690–701.
- Messenger SL, Smith JS, Rupprecht CE. Emerging epidemiology of batassociated cryptic cases of rabies in the United States. Clin Infect Dis 2002;35:738–47.
- 3. Guerra MA, Curns AT, Rupprecht CE, Hanlon CA, Krebs JW, Childs JE. Skunk and raccoon rabies in the eastern United States: temporal and spatial analysis. Emerg Infect Dis 2003;9:1143–50.
- CDC. Human rabies prevention—United States, 1999. Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-1).
- 5. Jackson AC, Warrell MJ, Rupprecht CE, et al. Management of rabies in humans. Clin Infect Dis 2003;36:60–3.
- 6. Helmick CG, Tauxe RV, Vernon AA. Is there a risk to contacts of patients with rabies? Rev Infect Dis 1987;9:511–8.
- 7. Noah DL, Drenzek CL, Smith JS, et al. Epidemiology of human rabies in the United States, 1980 to 1996. Ann Intern Med 1998;128:922–30.

Outbreak of Severe Rotavirus Gastroenteritis Among Children — Jamaica, 2003

In late May 2003, the Jamaican Ministry of Health (MoH) identified a sharp increase in the number of acute gastroenteritis (AGE) cases reported throughout the country (Figure), accompanied by increases in AGE-associated hospital admissions and deaths among children. The greatest increase in AGE cases was observed among children aged <5 years in the southeastern parish of Kingston and St. Andrew. During June–July, 12 AGE-associated deaths were reported among children aged <8 years. MoH began an investigation to determine the etiology of the outbreak, ascertain risk factors for illness and death, and identify appropriate control measures. This report presents the preliminary results of that investigation, which determined that the AGE cases were associated with rotavirus FIGURE. Number of acute gastroenteritis cases in persons aged <5 years and \geq 5 years, by month — National Sentinel Surveillance System, Jamaica, January 2002–October 2003



and deaths might have been reduced by appropriate AGE case management, indicating a need for additional education of caregivers regarding AGE treatment.

The increase in AGE cases was detected by Jamaica's National Sentinel Surveillance System (NSSS), which receives weekly reports that include the number of patient visits for AGE among children at 55 sentinel sites. In addition, review of admissions at two Kingston and St. Andrew hospitals identified an increase in the number of children hospitalized for AGE. Mandatory investigation and reporting to MoH found a concurrent increase in the number of diarrheal deaths among children.

Interviews with primary caregivers suggested that eight of the 12 deaths were attributable to diarrhea. These eight deaths occurred among children aged 4 months–3 years (mean: 17 months). All eight children had watery diarrhea and vomiting that began 1–5 days before death. All had visited a public or private health-care provider at least once for treatment. Five children had received oral rehydration therapy (ORT) for their diarrheal illness; three received no ORT during their clinic visits. Three children were treated with antibiotics, two with antidiarrheals, and three with antiemetic injections.

Testing for *Salmonella*, *Shigella*, *Vibrio cholerae*, and *Escherichia coli* O157:H7 on 43 stool specimens collected during June–July as part of NSSS surveillance identified four *Shigella* spp. and nine *Salmonella* spp. isolates. This was an expected finding for that time of the year. However, rotavirus was identified by latex agglutination in 21 (49%) of the initial 43 stool specimens and by enzyme-linked immunosorbent assay in 33 (50%) of an additional 66 stool specimens collected from children aged <5 years as part of the MoH investigation. Fur-

ther testing at CDC identified rotavirus in five of seven stool specimens from persons aged >5 years. Testing of 32 stool specimens was negative for norovirus, sapovirus, and astrovirus; however, adenovirus was identified in three specimens, all of which also had evidence of rotavirus. Initial characterization of 23 rotavirus samples obtained as part of the MoH investigation indicated the presence of three common serotypes; no vaccine strain was identified.

An epidemiologic investigation of this rotavirus-associated outbreak continues to identify risk factors for severe illness and death. As of November 12, no food or water source had been identified. Preventive efforts have focused on advising parents and physicians of the benefits of ORT for children with AGE.

Reported by: D Ashley, MD, E Hedmann, MD, K Lewis-Bell, MD, E Ward, MD, Jamaican Ministry of Health; J Bryce, MD, National Public Health Laboratory, Kingston, Jamaica. RM Turcios, MD, D Tuller, MA Widdowson, VetMB, JS Bresee, MD, S Adams, S Monroe, PhD, JR Gentsch, PhD, RI Glass, MD, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; TK Fischer, MD, EIS Officer, CDC.

Editorial Note: In Jamaica, rotavirus is usually confined to winter months (*1*), occurs among children aged <3 years, and is no longer associated with substantial mortality. Identification of rotavirus as the etiologic agent of this large outbreak of severe AGE seemed improbable because the outbreak occurred during the summer, included children aged >3 years, and resulted in multiple deaths. However, laboratory tests confirmed rotavirus as the etiologic agent, and identified multiple common rotavirus strains. Environmental exposures are being considered as explanations for this unusual outbreak. Ongoing studies are examining heavy rainfalls that occurred in late May and might have flooded latrines in crowded urban areas, causing fecal contamination of water sources. Communitywide outbreaks of rotavirus attributed to fecally contaminated water have been reported but are uncommon (*2*).

This outbreak underscores the importance of surveillance for rotavirus disease. Rotavirus remains a major cause of diarrheal deaths worldwide (3), many of which might be prevented by aggressive use of ORT (4) and vaccines (5). The investigation of the outbreak in Jamaica suggested that AGEassociated deaths might be attributable to inappropriate case management. Certain children did not receive adequate ORT treatment, nor was home use of ORT emphasized. Certain children received antiemetic and antidiarrheal injections, which are not part of standard diarrhea management. Additional education of physicians, parents, and other caregivers regarding ORT can reduce the severity and mortality from diarrhea during AGE outbreaks (6). References

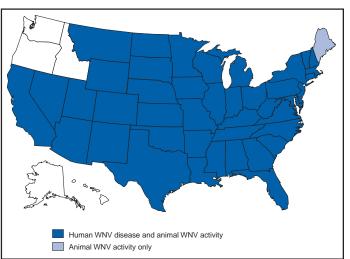
- 1. Dowe G, King SD, Maitland PB, Swaby-Ellis DE. Laboratory investigations on rotavirus in infantile gastroenteritis in Jamaica. Trans R Soc Trop Med Hyg 1988;82:155–9.
- Hopkins RS, Gaspard GB, Williams FP Jr, Karlin RJ, Cukor G, Blacklow NR. A community waterborne gastroenteritis outbreak: evidence for rotavirus as the agent. Am J Public Health 1984;74:263–5.
- Miller MA, McCann L. Policy analysis of the use of hepatitis B, *Haemophilus influenzae* type b-, *Streptococcus pneumoniae*-conjugate and rotavirus vaccines in national immunization schedules. Health Econ 2000;9:19–35.
- Santosham M. Oral rehydration therapy: reverse transfer of technology. Arch Pediatr Adolesc Med 2002;156:1177–9.
- Bresee JS, Glass RI, Ivanoff B, Gentsch JR. Current status and future priorities for rotavirus vaccine development, evaluation and implementation in developing countries. Vaccine 1999;17:2207–22.
- Walker GJ, Ashley DE, Hayes RJ. The quality of care is related to death rates: hospital inpatient management of infants with acute gastroenteritis in Jamaica. Am J Public Health 1988;78:149–52.

West Nile Virus Activity — United States, November 6–12, 2003

This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET as of 3 a.m., Mountain Standard Time, November 12, 2003.

During the reporting week of November 6–12, a total of 176 human cases of WNV infection were reported from 12 states (Arizona, Georgia, Kansas, Louisiana, Maryland, Nebraska, New Jersey, New Mexico, Pennsylvania, South Dakota, Tennessee, and Virginia), including two fatal cases from Louisiana. During the same period, WNV infections were reported in 39 dead birds, 12 mosquito pools, 93 horses, one cat, and five dogs.

During 2003, a total of 8,393 human cases of WNV infection have been reported from Colorado (n = 2,477), Nebraska (n = 1,698), South Dakota (n = 989), Texas (n = 513), North Dakota (n = 422), Wyoming (n = 339), Pennsylvania (n = 225), Montana (n = 220), New Mexico (n = 201), Minnesota (n = 144), Iowa (n = 143), Ohio (n = 104), Louisiana (n = 103), Kansas (n = 88), Oklahoma (n = 75), New York (n = 67), Mississippi (n = 62), Missouri (n = 59), Maryland (n = 56), Illinois (n = 50), Georgia (n = 41), Alabama (n = 33), Florida (n = 32), Indiana (n = 30), New Jersey (n = 29), North Carolina (n = 24), Tennessee (n = 23), Virginia (n = 23), Arkansas (n = 21), Massachusetts (n = 16), Kentucky (n = 14), Delaware (n = 13), Wisconsin (n = 13), Connecticut (n = 12), Michigan (n = eight), Rhode Island (n = six), Arizona (n = four), District of Columbia (n = three), New Hampshire (n = three), Vermont (n = three), California (n = two), Nevada (n = two), South Carolina (n = one), Utah (n = one), and West Virginia (n = one) (Figure). Of 8,256 (98%) cases for which FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2003^*



* As of 3 a.m., Mountain Standard Time, November 12, 2003.

demographic data were available, 4,251 (53%) occurred among males; the median age was 47 years (range: 1 month–99 years), and the dates of illness onset ranged from March 28 to October 28. Of the 8,256 cases, 184 fatal cases were reported from Colorado (n = 45), Texas (n = 26), Nebraska (n = 21), South Dakota (n = 13), New York (n = eight), Wyoming (n = eight), Pennsylvania (n = seven), Maryland (n = five), Missouri (n = five), Georgia (n = four), Iowa (n = four), Kansas (n = four), Minnesota (n = four), New Mexico (n = four), North Dakota (n = four), Alabama (n = three), Louisiana (n = three), Ohio (n = three), Indiana (n = two), Montana (n = two), New Jersey (n = two), Delaware (n = one), Illinois (n = one), Kentucky (n = one), Michigan (n = one), Mississippi (n = one), Tennessee (n = one), and Virginia (n = one). A total of 718 presumptive West Nile viremic blood donors have been reported to ArboNET, including 625 (87%) from the following nine western and midwestern states: Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. Of the 587 donors for whom data were reported completely, six (1%) subsequently had neuroinvasive disease (median age: 45 years; range: 28-76 years), and 90 (15%) had West Nile fever.

In addition, 11,115 dead birds with WNV infection have been reported from 42 states, the District of Columbia, and New York City. WNV infections also have been reported from 41 states in horses (n = 4,084), dogs (n = 26), squirrels (n = 17), cats (n = one), and unidentified animal species (n = 31). During 2003, WNV seroconversions have been reported in 1,377 sentinel chicken flocks from 15 states. Of the 61 seropositive sentinel horses reported, Illinois reported 43, West Virginia reported eight, Minnesota reported seven, and South Dakota reported three. In addition, seropositivity was reported from one other unidentified animal species. A total of 7,602 WNV-positive mosquito pools have been reported from 38 states, the District of Columbia, and New York City.

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

Notice to Readers

SMART BRFSS Provides Data Comparisons by Metropolitan and Micropolitan Statistical Area (MMSA)

Growth in sample sizes now enables CDC to offer data comparisons at the metropolitan level in the Behavioral Risk Factor Surveillance System (BRFSS). BRFSS prevalence estimates can be generated for the U.S. Census Bureau's metropolitan and micropolitan areas (MMSAs) and metropolitan divisions. MMSA data comparing 30 health risk factors will be offered to the public next week via Selected Metropolitan/Micropolitan Area Risk Trends (SMART) BRFSS, a searchable Internet site.

For approximately 20 years, BRFSS has tracked health-risk behaviors, preventive health practices, and health-care access among different U.S. populations, identifying those at greatest risk for morbidity and mortality. However, while BRFSS has routinely provided data comparisons by sex, race/ethnicity, and age group, comparisons by geographic area have been limited to states and territories.

SMART BRFSS, with standardized methodology and timely (i.e., approximately 3 months) delivery of results, can be a vital tool for local public health officials, filling a critical need for local surveillance data to support implementation and evaluation of targeted programs and better planning of prevention efforts. In one SMART BRFSS comparison of data from 98 MMSAs, the unadjusted prevalence of self-rated fair or poor health ranged widely, from 6.7% in Bethesda-Frederick-Gaithersburg, Maryland, to 26.2% in Huntington-Ashland, West Virginia-Kentucky-Ohio (median: 13.7%). The SMART BRFSS Internet site will be available at http:// www.cdc.gov/brfss.

Notice to Readers

Great American Smokeout — November 20, 2003

In 2001, an estimated 22.8% of U.S. adults (1) and in 2002 an estimated 22.9% of U.S. high school students (2) were current cigarette smokers. An estimated 70% of smokers want to quit (3). To help smokers quit, each year the American Cancer Society (ACS) sponsors the Great American Smokeout on the third Thursday in November. Since 1977, ACS has encouraged smokers to quit for 24 hours in the hope they might quit for good. Last year, 19% of smokers participated in the Great American Smokeout, and of those smokers, 6% had not resumed 1–5 days later. Additional information about the Great American Smokeout is available from ACS, telephone 1-800-227-2345.

The likelihood of quitting smoking permanently is increased when effective therapies are used (4). Telephone quitlines exist in only 34 states (5), leaving an estimated 14 million U.S. smokers without access to state-based services in their home states. The American Legacy Foundation is working with CDC to provide quitline funding for up to five additional states.

References

- 1. CDC. Cigarette smoking among adults—United States, 2001. MMWR 2003;52:953–6.
- CDC. Tobacco use among middle and high school students—United States, 2002. MMWR 2003;52:1096–98.
- CDC. Cigarette smoking among adults—United States, 2000. MMWR 2002;51:642–5.
- Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence: clinical practice guideline. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, 2000; DHHS publication no. (AHRQ)00-0032.
- 5. Tobacco Control Research Branch. Talk to an expert: find help in your state. Bethesda, Maryland: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 2003. Available at http://smokefree.gov/usmap.html.

CASES CURRENT DISEASE DECREASE INCREASE 4 WEEKS 554 Hepatitis A, Acute Hepatitis B, Acute 480 68 Hepatitis C, Acute 107 Legionellosis 1 Measles, Total 52 Meningococcal Infections 10 Mumps 448 Pertussis 0 Rubella 0.125 0.25 0.5 2 0.03125 0.0625 1 4 Ratio (Log Scale)[†] Beyond Historical Limits

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals November 8, 2003, with historical data

* No rubella cases were reported for the current 4-week period yielding a ratio for week 45 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.

		Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax		-	2	Hansen disease (leprosy)†	49	75
Botulism:		-	-	Hantavirus pulmonary syndrome [†]	15	17
	foodborne	11	25	Hemolytic uremic syndrome, postdiarrheal [†]	134	180
	infant	54	57	HIV infection, pediatric ^{†§}	187	135
	other (wound & unspecified)	24	17	Measles, total	43¶	32**
Brucellosis [†]		72	102	Mumps	167	235
Chancroid		42	61	Plague	1	1
Cholera		1	2	Poliomyelitis, paralytic	-	-
Cyclosporiasi	is [†]	59	154	Psittacosis [†]	14	14
Diphtheria		1	1	Q fever [†]	64	49
Ehrlichiosis:		-	-	Rabies, human	3	3
	human granulocytic (HGE) [†]	298	275	Rubella	7	16
	human monocytic (HME)†	170	180	Rubella, congenital	-	1
	other and unspecified	35	20	Streptococcal toxic-shock syndrome [†]	132	98
Encephalitis/I	Meningitis:	-	-	Tetanus	13	20
	California serogroup viral [†]	74	139	Toxic-shock syndrome	109	92
	eastern equine [†]	8	5	Trichinosis	3	13
	Powassan [†]	-	1	Tularemia [†]	72	69
	St. Louis [†]	28	20	Yellow fever	-	-
	western equine [†]	2	-			

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending November 8, 2003 (45th Week)*

-: No reported cases.

Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date). t

Not notifiable in all states.

[§] Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update October 26, 2003.

Of 43 cases reported, 32 were indigenous, and 11 were imported from another country.

** Of 32 cases reported, 18 were indigenous, and 14 were imported from another country.

(45th Week)*									Encephalit	is/Meningitis
	All Cum.	DS Cum.	Chla Cum.	mydia [†] Cum.	Coccidio Cum.	domycosis Cum.	Cryptosp Cum.	oridiosis Cum.	We Cum.	st Nile Cum.
Reporting area	2003§	2002	2003	2002	2003	2002	2003	2002	2003	2002
UNITED STATES	38,482	35,422	707,403	718,878	3,325	3,719	2,809	2,658	1,607	2,487
NEW ENGLAND Maine	1,277 49	1,370 28	23,358 1,600	24,009 1,489	N	N	149 18	176 10	-	27
N.H. Vt.	34 15	30 12	1,037 905	1,362 815	-	-	11 29	29 31	-	-
Mass.	518	693	9,894	9,523	-	-	61	71	-	18
R.I. Conn.	90 571	86 521	2,534 7,388	2,384 8,436	N	N	15 15	19 16	-	- 9
MID. ATLANTIC	9,040	8,273	95,305	80,941	-	-	331 114	356	154	124
Upstate N.Y. N.Y. City	853 4,989	659 4,949	17,197 28,932	14,604 26,372	N -	N -	75	116 129	4	38 28
N.J. Pa.	1,356 1,842	1,214 1,451	11,103 38,073	12,243 27,722	N	N	7 135	15 96	16 134	23 35
E.N. CENTRAL	3,556	3,864	120,490	132,027	7	21	831	901	102	1,407
Ohio Ind.	718 482	726 463	28,177 14,262	33,109 15,006	N	N	135 80	116 52	97	267 18
III. Mich.	1,609 581	1,866 645	36,709 27,671	41,928 27,218	-7	2 19	68 122	115 122	1 4	554 518
Wis.	166	164	13,671	14,766	-	-	426	496	-	50
W.N. CENTRAL Minn.	685 144	610 131	40,851 8,489	40,759 9,002	1 N	1 N	522 140	374 181	329 49	176 17
Iowa Mo.	72 319	71 278	3,344 15,536	4,972 13,908	N	N	114 40	42 35	75 29	103
N. Dak. S. Dak.	2 10	2 10	1,027 2,298	1,042 1,875	N	N	13 37	24 28	5 40	- 14
Nebr. ¹	52 86	58 60	4,234	4,077	1	1	18	48	45 86	32
Kans. S. ATLANTIC	10,692	10,296	5,923 135,891	5,883 136,190	N 5	N 4	160 345	16 287	157	10 63
Del. Md.	195 1,285	165 1,510	2,613 14,055	2,309 14,279	N 5	N 4	4 21	3 19	12 35	21
D.C.	859	616	2,719	2,901	-	-	16	4	-	-
Va. W. Va.	819 79	712 76	15,016 2,254	15,698 2,156	N	N	41 4	21 2	17 1	2
N.C. S.C. [¶]	1,006 719	835 747	22,771 13,885	21,423 12,638	N	N	44 8	32 6	- 1	- 1
Ga. Fla.	1,667 4,063	1,431 4,204	27,378 35,200	28,235 36,551	N	- N	115 92	110 90	44 47	21 18
E.S. CENTRAL	1,704	1,675	44,846	45,666	N	N	109	113	41	272
Ky. Tenn.	175 738	277 691	7,066 17,535	7,681 13,938	N N	N N	22 36	8 53	11 15	41 8
Ala. Miss.	390 401	342 365	10,599 9,646	13,965 10,082	N	N	41 10	45 7	15	33 190
W.S. CENTRAL	4,110	3,635	85,774	94,087	4	11	77	60	509	416
Ark. La.	165 522	206 879	6,764 14,764	6,442 16,691	N	N	16 2	8 9	19 43	11 203
Okla. Tex.	176 3,247	166 2,384	9,670 54,576	9,707 61,247	N 4	N 11	13 46	16 27	25 422	202
MOUNTAIN	1,342	1,170	38,046	44,601	2,017	2,312	122	143	311	202
Mont. Idaho	13 21	10 26	1,625 2,167	1,926 2,160	N N	N N	18 26	5 28	216	1
Wyo.	7	8	835	801	1	-	5	9	88	-
Colo. N. Mex.	328 103	255 78	9,360 5,933	12,303 6,591	N 6	N 7	32 9	51 18	3	-
Ariz. Utah	584 60	486 57	10,791 2,905	12,995 2,652	1,964 15	2,254 11	6 19	15 13	1 1	-
Nev.	226	250	4,430	5,173	31	40	7	4	2	-
PACIFIC Wash.	6,076 422	4,529 412	122,842 14,337	120,598 12,799	1,290 N	1,369 N	323 43	248 28	4	-
Oreg. Calif.	229 5,321	288 3,710	6,340 95,908	5,896 94,812	- 1,290	1,369	36 243	37 180	4	-
Alaska Hawaii	15 89	28 91	3,121 3,136	3,191 3,900	-	-	1	1	-	-
Guam	6	2	-	578	-	-	-	-	-	-
P.R. V.I.	944 31	1,042 63	1,693 208	2,169 125	N	N	N	N	-	-
Amer. Samoa C.N.M.I.	U 2	UU	U	U	U	U U	U	U U	U	U U
0.11.111.	۷	0	-	0	-	0	-	0	-	0

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 8, 2003, and November 9, 2002 (45th Week)*

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands. * Incidence data for reporting years 2002 and 2003 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 October 26, 2003. § Contains data reported through National Electronic Disease Surveillance System (NEDSS).

MMWR

(45th Week)*					,		5	-,,-		-,
		Escher	<i>ichia coli</i> , Ente	rohemorrhagio	(EHEC)					
			-	in positive,	Shiga toxi	•				
	Cum.	7:H7 Cum.	Serogrou Cum.	p non-O157 Cum.	not sero	grouped Cum.	Gia Cum.	rdiasis Cum.	Gor Cum.	orrhea Cum.
Reporting area	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
UNITED STATES	2,271	3,334	227	172	121	44	15,615	17,967	270,174	305,205
NEW ENGLAND	145	248	49	46	15	5	1,174	1,587	6,171	6,750
Maine N.H.	10 12	35 32	1 2	8	1	-	163 22	183 40	162 76	118 110
Vt.	15	12	-	1	-	1	109	124	71	81
Mass. R.I.	61 1	114 11	7	19 1	14	4	565 95	859 138	2,639 824	2,861 788
Conn.	46	44	39	17	-	-	220	243	2,399	2,792
MID. ATLANTIC Upstate N.Y.	216 87	375 153	16 10	1	35 18	7	3,067 909	3,674 1,075	36,431 6,744	36,909 7,485
N.Y. City	5	16	-	-	-	-	987	1,280	11,438	11,048
N.J. Pa.	20 104	58 148	1 5	- 1	- 17	1 6	314 857	424 895	6,292 11,957	6,734 11,642
E.N. CENTRAL	514	784	23	30	20	4	2,585	3,153	54,350	64,436
Ohio Ind.	125 79	140 72	17	10 1	19	3	796	818	15,553 5,689	18,955 6,489
III.	103	173	-	6	-	-	660	893	16,539	21,090
Mich. Wis.	83 124	130 269	- 6	3 10	- 1	1	643 486	824 618	12,078 4,491	12,480 5,422
W.N. CENTRAL	408	473	45	30	20	4	1,769	1,823	14,449	15,666
Minn. Iowa	129 96	150 113	19	25	1	-	695 243	691 282	2,402 775	2,713 1,166
Mo.	82	68	13	-	1	-	433	438	7,418	7,782
N. Dak. S. Dak.	13 27	16 39	4 4	- 2	8	-	33 71	30 68	56 200	64 230
Nebr.	33	58	4	3	-	-	107	150	1,414	1,324
Kans. S. ATLANTIC	28 134	29 310	1 61	30	10 9	4 1	187 2,428	164 2,577	2,184 67,549	2,387 77,382
Del.	9	8	N	N	N	Ň	40	50	1,001	1,376
Md. D.C.	10 1	26	-	-	-	-	101 44	105 43	6,721 2,163	7,944 2,305
Va.	35	60	9	9	-	-	315	270	6,923	8,830
W.Va. N.C.	5 4	9 102	- 26	-	-	1 -	37 N	50 N	757 13,126	840 13,823
S.C. Ga.	2 27	5 41	- 3	- 7	-	-	126 818	118 819	7,551 13,732	8,038 15,539
Fla.	41	59	23	14	9	-	947	1,122	15,575	18,687
E.S. CENTRAL	74	103	2	-	7	10	306	339	22,159	26,425
Ky. Tenn.	24 31	30 44	2	-	7	10	N 156	N 165	3,143 7,344	3,287 8,201
Ala. Miss.	13 6	18 11	-	-	-	-	150	174	6,715 4,957	8,985 5,952
W.S. CENTRAL	79	103	5	1	10	8	255	218	35,575	42,201
Ark.	10	11	-	-	-	-	131	147	3,453	4,085
La. Okla.	3 25	4 21	-	-	-	-	9 114	6 63	8,976 4,003	10,284 4,151
Tex.	41	67	5	1	10	8	1	2	19,143	23,681
MOUNTAIN Mont.	296 16	323 28	23	27	5	5	1,392 95	1,459 78	8,313 91	9,786 95
Idaho	76	41	15	16	-	-	179	115	66	80
Wyo. Colo.	3 69	14 96	1 3	2 6	- 5	- 5	20 390	29 488	39 2,278	55 3,033
N. Mex. Ariz.	10 31	11 33	3 N	3 N	N	N	43 224	131 187	958 2,976	1,312 3,233
Utah	69	72	-	-	-	-	326	292	306	274
Nev.	22	28	1	-	-	-	115	139	1,599	1,704
PACIFIC Wash.	405 102	615 134	3 1	7	-	-	2,639 301	3,137 376	25,177 2,385	25,650 2,508
Oreg.	92	201	2	7	-	-	347	388	850	754
Calif. Alaska	199 4	238 7	-	-	-	-	1,845 74	2,193 101	20,749 448	21,227 534
Hawaii	8	35	-	-	-	-	72	79	745	627
Guam P.R.	N _	N 1	-	-	- 36	-	- 127	7 79	- 178	41 310
V.I.	-	-	-	-	-	-	-	-	55	31
Amer. Samoa C.N.M.I.	U -	U U	U -	U U	U -	U U	U -	U U	U -	U U

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 8, 2003, and November 9, 2002 (45th Week)*

(45th Week)*		Haemophilus influenzae, invasive†											
	All a	iges		<u>naomopinao</u>	Age <5					atitis te), by type			
	All ser	otypes	Serot	ype b	Non-ser	otype b	Unknown	serotype		A			
Poporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002			
Reporting area UNITED STATES	1,443	1,410	19	2002	79	109	163	131	5,763	7,848			
NEW ENGLAND	106	91	1	-	6	8	5	2	289	270			
Maine	4	1	-	-	-	-	1	-	14	8			
N.H. Vt.	11 8	8 7	1	-	-	-	-	-	11 6	11 1			
Mass.	47	42	-	-	6	4	3	2	176	130			
R.I. Conn.	6 30	10 23	-	-	-	- 4	1	-	14 68	30 90			
MID. ATLANTIC	323	268	-	2	1	14	45	21	1,161	1,009			
Upstate N.Y.	119	102	-	2	1	4	13	7	126	162			
N.Y. City N.J.	53 55	62 52	-	-	-	-	10 7	9 5	382 137	406 168			
Pa.	96	52	-	-	-	10	15	-	516	273			
E.N. CENTRAL	205	279	4	3	8	11	31	41	570	957			
Ohio Ind.	63 42	70 37	- 1	- 1	- 4	1 7	11	8	105 61	269 43			
III.	62	111	-	-	-	-	15	20	176	248			
Mich. Wis.	21 17	14 47	3	2	4	3	1 4	- 13	186 42	210 187			
W.N. CENTRAL	110	62	2	1	7	2	15	6	159	267			
Minn.	44	42	2	1	7	2	2	4	37	38			
lowa Mo.	40	1 11	-	-	-	-	- 12	- 2	25 58	61 78			
N. Dak.	3	4	-	-	-	-	-	-	1	1			
S. Dak. Nebr.	1 3	1	-	-	-	-	-	-	- 11	3 17			
Kans.	19	3	-	-	-	-	1	-	27	69			
S. ATLANTIC	340	315	3	5	14	15	20	23	1,552	2,147			
Del. Md.	- 80	- 79	- 1	- 2	- 6	- 3	- 1	- 1	7 152	15 277			
D.C.	-	-	-	-	-	-	-	-	38	72			
Va. W.Va.	49 14	29 17	-	-	-	- 1	6	4 1	93 14	127 17			
N.C.	36	30	-	-	3	3	2	-	98	195			
S.C. Ga.	4 57	12 69	-	-	-	-	1 5	2 10	35 733	56 428			
Fla.	100	79	2	3	5	8	5	5	382	960			
E.S. CENTRAL	70	61	1	1	1	5	10	11	203	248			
Ky. Tenn.	5 43	5 31	-		1	1 1	- 6	1 7	29 144	41 111			
Ala.	20	16	1	1	-	3	3	1	15	35			
Miss.	2	9	-	-	-	-	1	2	15	61			
W.S. CENTRAL Ark.	62 7	53 1	1	2	8 1	10	5	2	345 19	950 66			
La.	12	7	-	-	-	-	5	2	51	81			
Okla.	41 2	43 2	- 1	- 2	7	10	-	-	17 258	46 757			
Tex. MOUNTAIN	141		1	2		-	-	-		488			
Mont.	-	150	-	-	19	26	21	14	406 8	400			
Idaho Wyo.	4 1	2 2	-	-	-	-	1	1	- 1	26 3			
Colo.	35	31	-	-	-	-	- 7	3	66	71			
N. Mex.	14	25	-	-	4	6	1	1	19	27			
Ariz. Utah	64 13	62 16	4	2 1	6 5	14 4	8 4	6	226 41	252 48			
Nev.	10	12	-	1	4	2	-	3	45	48			
PACIFIC	86	131	3	8	15	18	11	11	1,078	1,512			
Wash. Oreg.	11 39	3 50	-	2	7	1 -	3 3	- 3	57 52	142 56			
Calif.	20	42	3	6	8	17	4	4	950	1,280			
Alaska Hawaii	- 16	1 35	-	-	-	-	- 1	1 3	8 11	10 24			
Guam	-	-	-	-	-	-	-	-	-	1			
P.R.	-	1	-	-	-	-	-	-	50	207			
V.I. Amer. Samoa	- U	U	- U	Ū	- U	U	- U	Ū	Ū	- U			
C.N.M.I. N: Not notifiable.	U: Unavailable.	Ū	orted cases.	Ū	-	Ŭ	-	Ū	-	Ŭ			

 TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 8, 2003, and November 9, 2002

 (45th Week)*

N: Not notifiable. U: Unavailable. -: No reported cases. * Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date). † Non-serotype b: nontypeable and type other than b; Unknown serotype: type unknown or not reported. Previously, cases reported without type information were counted as non-serotype b.

(45th Week)*	н	epatitis (vira	l, acute), by ty	ре						
	L	B		;		nellosis	Liste			disease
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	5,417	6,319	1,648	1,597	1,737	1,079	540	565	15,659	19,637
NEW ENGLAND Maine N.H.	225 1 11	257 9 20	6 - -	19 - -	85 2 6	100 2 5	41 7 3	59 5 4	3,020 191 95	6,371 102 235
Vt. Mass. R.I.	3 175 13	6 134 24	6	13 6	5 35 14	35 42 2	1 13	3 33 1	41 961 529	33 1,761 314
Conn.	22	24 64	U	U	23	14	17	13	1,203	3,926
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	781 113 262 165 241	1,349 104 667 287 291	139 37 - 102	97 41 5 51	502 138 45 62 257	311 89 60 31 131	105 31 15 15 44	170 52 36 33 49	10,224 4,094 5 1,786 4,339	10,126 4,452 57 2,225 3,392
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	362 125 33 1 172 31	594 83 42 138 288 43	145 10 8 16 111	100 2 - 21 73 4	344 203 24 3 98 16	253 103 18 23 74 35	63 22 7 7 19 8	75 21 10 18 18 8	763 76 20 33 8 626	1,218 65 20 47 26 1,060
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak.	280 31 11 195 2 2	194 27 18 99 4 2	219 8 1 209	621 2 1 605 - 1	57 3 9 28 1 2	55 11 11 16 - 4	19 10 - 5 -	16 1 2 9 1 1	362 254 45 51 -	335 240 41 39 1 2
Nebr. Kans.	22 17	23 21	1 -	12	4 10	13	4	1 1	2 9	6 6
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	1,792 5 118 10 159 27 148 145 623 557	1,510 13 115 21 175 18 207 110 394 457	142 18 7 3 11 24 4 75	185 9 - 15 3 25 4 63 66	466 25 116 17 88 16 36 7 29 132	186 7 43 6 24 - 11 8 18 69	114 N 24 - 8 6 16 4 29 27	73 N 17 - 6 8 12 23	1,018 168 571 9 81 22 95 8 15 49	1,256 174 689 22 144 17 122 20 2 66
E.S. CENTRAL Ky. Tenn. Ala. Miss.	372 61 172 54 85	345 50 121 92 82	79 14 22 7 36	122 4 26 10 82	85 37 32 13 3	40 18 14 8	27 6 7 12 2	19 3 11 4 1	57 14 15 5 23	67 21 24 11 11
W.S. CENTRAL Ark. La. Okla. Tex.	337 59 100 41 137	827 104 119 62 542	766 3 97 2 664	301 10 92 5 194	58 2 1 7 48	31 - 4 3 24	41 1 2 3 35	33 4 9 20	87 - 6 - 81	134 3 5 126
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	522 16 29 72 31 245 56 73	531 9 6 17 68 144 190 43 54	47 2 15 7 23	49 1 5 6 2 4 4 26	59 4 3 12 2 10 20 6	44 3 1 2 8 2 9 13 6	29 2 10 2 9 - 4	27 2 6 3 12 3 1	17 3 2 4 1 3 3 3	16 4 1 1 3 5 1
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	746 61 94 563 9 19	712 61 114 521 8 8	105 15 11 76 1 2	103 23 11 68 - 1	81 10 N 71	59 5 N 53 - 1	101 5 4 87 - 5	93 8 9 68 - 8	111 3 15 90 3 N	114 10 12 89 3 N
Guam P.R. V.I.	78	1 165 -	-	-	-	-	-	2	N	Ň
V.I. Amer. Samoa C.N.M.I.	- U -	U U	U	U U	U	U U	U	U U	U	U U

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 8, 2003, and November 9, 2002 (45th Week)*

(45th Week)*	-						-	· ·		
	Mal	aria		ococcal ease	Pert	ussis	Rabies	s, animal		lountain d fever
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	998	1,247	1,376	1,543	6,375	7,191	5,022	6,865	780	954
NEW ENGLAND	39	69	65	83	828	702	506	824	-	6
Maine N.H.	3 4	5 7	6 3	4 11	12 60	17 18	61 13	53 44	-	-
Vt.	2	4	3	4	60	134	30	86	-	-
Mass. R.I.	10 2	30 5	41 2	45 5	662 17	493 13	189 55	268 69	-	3 3
Conn.	18	18	10	14	17	27	158	304	-	-
MID. ATLANTIC Upstate N.Y.	241 51	344 43	161 43	186 43	764 452	438 293	845 376	1,159 629	34 2	53
N.Y. City	116	217	29	34	-	20	6	16	12	10
N.J. Pa.	37 37	39 45	22 67	27 82	65 247	- 125	62 401	167 347	10 10	16 27
E.N. CENTRAL	79	152	190	233	548	843	152	160	16	31
Ohio Ind.	19 2	21 13	52 40	72 29	237 61	378 120	51 27	38 31	10 1	12 4
III.	25	60	41	50	-	154	23	31	-	12
Mich. Wis.	23 10	45 13	39 18	38 44	100 150	50 141	44 7	46 14	5	3
W.N. CENTRAL	44	57	136	131	378	662	514	439	64	103
Minn. Iowa	21 5	17 4	26 24	32 22	141 109	341 111	36 97	37 72	1 2	- 3
Mo. N. Dak.	5 1	15 1	65 1	44	74 6	133	51 51	49 47	50	95
S. Dak.	3	2	1	2	3	5 6	67	85	5	1
Nebr. Kans.	- 9	5 13	8 11	23 8	7 38	8 58	58 154	- 149	3 3	4
S. ATLANTIC	279	294	236	253	587	382	2,282	2,372	474	450
Del. Md.	3 67	5 100	8 24	7 8	8 73	3 59	57 255	24 359	1 101	1 39
D.C.	13	20	-	-	3	2	-	-	1	2
Va. W.Va.	35 4	30 3	24 5	38 4	90 18	132 31	464 79	526 161	29 5	36 2
N.C. S.C.	21 3	21 7	32 21	30 28	118 144	40 41	700 211	636 133	234 33	270 68
Ga.	55	47	29	28	32	26	346	370	60	19
Fla.	78	61	93	110	101	48	170	163	10	13
E.S. CENTRAL Ky.	18 7	19 7	75 17	87 14	125 43	232 90	168 37	205 25	97 2	123 5
Tenn. Ala.	5 3	3 4	24 15	36 20	60 16	101 32	99 31	108 68	58 12	77 14
Miss.	3	5	19	17	6	9	1	4	25	27
W.S. CENTRAL Ark.	80 4	71 3	157 13	189 23	536 37	1,496 486	202 25	1,130 94	83 31	171 97
La.	4	4	32	39	6	7	-	-	-	-
Okla. Tex.	4 68	8 56	14 98	19 108	14 479	35 968	177	106 930	42 10	61 13
MOUNTAIN	43	43	68	80	825	941	161	297	10	14
Mont. Idaho	- 1	2	5 7	2 4	5 71	5 65	20 15	18 37	1 2	1
Wyo.	1	-	2	-	123	11	6	18	2	5
Colo. N. Mex.	21 3	23 3	22 7	23 4	290 61	369 180	38 5	59 10	2	2 1
Ariz. Utah	12 4	7 5	15 2	23 4	126 116	170 94	60 14	131 13	1 2	-
Nev.	1	3	8	20	33	47	3	11	-	5
PACIFIC	175 24	198 22	288	301	1,784 627	1,495	192	279	2	3
Wash. Oreg.	10	9	28 53	58 43	407	395 168	6	14	-	2
Calif. Alaska	133 1	158 2	194 3	188 4	735 5	900 4	179 7	239 26	2	1
Hawaii	7	7	10	8	10	28	-	-	-	-
Guam P.R.	- 1	- 1	- 5	1 7	- 1	2 3	- 67	- 79	N	N
V.I. Amer. Samoa	- U	- U	- U	- U	- U	Ū	- U	- U	- U	- U
C.N.M.I.	-	Ŭ	-	Ŭ	-	Ŭ	-	Ŭ	-	Ŭ

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 8, 2003, and November 9, 2002 (45th Week)*

MMWR

<u> </u>					_		· · · ·	ptococcus pne	<i>umoniae</i> , inv	asive
	Salmo	onellosis	Shige	ellosis	Streptococo invasive,		Drug res all a		Age <	5 years
Reporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	35,765	38,059	19,170	18,188	4,621	4,019	1,794	2,109	379	304
NEW ENGLAND	1,835	1,998	281	302	347	290	40	99	8	3
Maine N.H.	115 100	132 125	6 5	8 11	26 21	20 35	-	-	N	N
Vt. Mass.	64 1,082	70 1,124	7 187	1 188	19 165	9 97	6 N	5 N	4 N	2 N
R.I. Conn.	118 356	149 398	15 61	16 78	14 102	15 114	10 24	12 82	4 U	1 U
MID. ATLANTIC	4,011	5,119	1,974	1,566	817	634	24 110	98	85	70
Upstate N.Y.	1,008	1,342	445	261	329	250	61	79	67	57 U
N.Y. City N.J.	1,143 483	1,247 952	340 240	434 564	113 134	141 139	U N	U N	U N	N
Pa.	1,377	1,578	949	307	241	104	49	19	18	13
E.N. CENTRAL Ohio	4,680 1,226	4,974 1,219	1,491 270	1,910 555	941 269	858 183	376 245	198 55	154 86	122 17
Ind. III.	518 1,470	501 1,644	146 748	101 921	97 182	46 247	131	141 2	44	55
Mich.	694	793	220	163	324	271	N	N	N	Ν
Wis.	772	817	107	170	69	111	N	N	24 52	50
W.N. CENTRAL Minn.	2,268 500	2,314 496	726 96	945 196	299 147	219 108	141	417 292	43	53 49
Iowa Mo.	353 887	449 744	75 339	115 166	N 66	N 42	N 11	N 5	N 2	N 1
N. Dak.	37	40	4	18	14	-	3	1	2 7	3
S. Dak. Nebr.	104 131	108 157	16 101	151 214	21 24	13 22	1 -	1 25	N	N
Kans.	256	320	95	85	27	34	126	93	Ν	N
S. ATLANTIC Del.	9,531 86	9,823 86	6,422 154	5,989 269	803 6	655 2	926 1	963 3	18 N	30 N
Md. D.C.	774 42	829 74	539 67	1,012 58	241 13	105 8	- 2	-	- 7	21 3
Va.	958	1,074	397	866	93	69	N	N	N	N
W.Va. N.C.	116 1,193	128 1,334	883	9 396	31 93	19 112	64 N	39 N	11 U	6 U
S.C. Ga.	664 1,890	720 1,754	428 1,501	106 1,465	36 107	35 120	126 216	169 241	N N	N N
Fla.	3,808	3,824	2,453	1,808	183	185	517	511	N	N
E.S. CENTRAL	2,374 349	2,909 333	799 118	1,279 157	180 40	106 19	124 16	119 17	N	- N
Ky. Tenn.	668	729	296	105	140	87	108	102	N	N
Ala. Miss.	461 896	767 1,080	227 158	695 322	-	-	-	-	N	N
W.S. CENTRAL	4,633	4,224	4,215	2,786	320	263	53	168	57	22
Ark. La.	727 420	974 728	93 226	178 431	5 1	7 1	8 45	6 162	- 8	-7
Okla.	423	451	736	519	78	41	N	N	31	3
Tex. MOUNTAIN	3,063 1,936	2,071 1,968	3,160 1,040	1,658 810	236 383	214 488	N 21	N 47	18 5	12 4
Mont.	96	80	2	3	2	-	-	-	-	-
Idaho Wyo.	160 73	131 92	28 7	13 8	18 2	9 7	N 4	N 13	N -	N
Colo. N. Mex.	429 227	536 274	265 207	183 192	119 95	108 96	- 17	- 33	-	-
Ariz.	592	499	428	336	136	238	-	-	N	N
Utah Nev.	203 156	163 193	45 58	28 47	9 2	30	-	- 1	5	4
PACIFIC	4,497	4,730	2,222	2,601	531	506	3	-	-	-
Wash. Oreg.	478 369	465 311	137 203	145 94	53 N	56 N	- N	- N	N N	N N
Calif.	3,394 62	3,641	1,833 9	2,291 5	372	366	N	N	N	N
Alaska Hawaii	194	74 239	9 40	5 66	106	84	3	-	(N -	-
Guam	-	38	-	32	- N I	- N I	-	4 N	- N	- NI
P.R. V.I.	318	486	8	30	N	N	N -	N	N -	N -
Amer. Samoa C.N.M.I.	U	U U	U	U U	U	U U	U	U U	U	U U

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 8, 2003, and November 9, 2002

(45th Week)*		Syp	hilis						Varicella	
	Primary &	secondary	Congenital		Tuberculosis		Typhoid fever		(Chickenpox)	
Poporting area	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	
Reporting area UNITED STATES	5,806	5,845	313	370	9,488	10,999	271	285	10,946	
NEW ENGLAND	174	126	1	1	281	361	23	13	1,575	
Maine	7	2	1	-	5	20	-	-	768	
N.H. Vt.	14 1	6 1	-	-	7 7	13 4	2	-	- 651	
Mass.	118	84	-	1	186	188	12	7	151	
R.I. Conn.	16 18	6 27	-	-	28 48	46 90	2 7	- 6	5	
MID. ATLANTIC	734	642	55	57	1,841	1,904	47	72	33	
Upstate N.Y.	37	29	9	4	242	267	10	8	N	
N.Y. City N.J.	418 142	377 142	31 15	23 29	984 359	914 438	17 14	39 17	-	
Pa.	137	94	-	1	256	285	6	8	33	
E.N. CENTRAL	749	1,067	64	57	950	1,120	17	31	4,776	
Ohio Ind.	181 44	141 53	3 10	3 3	171 112	197 107	2 4	6 2	1,020	
III.	288	417	19	34	444	525	1	15	-	
Mich. Wis.	225 11	432 24	32	17	171 52	232 59	10	4 4	3,042 714	
W.N. CENTRAL	124	112	4	2	407	453	4	9	49	
Minn.	36	54	-	1	163	202	-	3	N	
lowa Mo.	7 46	2 31	- 4	- 1	25 99	24 115	2 1	- 2	N	
N. Dak.	2	-	-	-	-	4	-	-	49	
S. Dak. Nebr.	2 8	- 6	-	-	16 18	11 23	- 1	- 4	-	
Kans.	23	19	-	-	86	23 74	-	-	-	
S. ATLANTIC	1,562	1,487	57	82	1,930	2,272	45	40	1,887	
Del. Md.	6 252	10 176	- 10	- 15	23 207	14 253	- 8	- 7	28	
D.C.	49	51	-	1	- 207	- 203	- -	-	27	
Va.	69	62	1	1	222	233	12	7	473	
W.Va. N.C.	2 138	2 255	16	18	19 281	28 305	- 9	2	1,132 N	
S.C.	87	118	4	11	147	145		- 5	227	
Ga. Fla.	400 559	322 491	6 20	13 23	315 716	457 837	7 9	5 19	N	
E.S. CENTRAL	273	422	10	26	566	653	5	4	1	
Ky. Tann	31	83	1	3	104	113	1	4	N	
Tenn. Ala.	119 104	153 143	3 4	8 9	181 197	252 179	2 2	-	N -	
Miss.	19	43	2	6	84	109	-	-	1	
W.S. CENTRAL	817	736	56	80	1,234	1,616	34	28	2,095	
Ark. La.	49 144	30 133	-	11	78	110	-	-	- 11	
Okla.	57	59	1	2	124	144	1	2	N	
Tex.	567	514	55	67	1,032	1,362	33	26	2,084	
MOUNTAIN Mont.	259	280	22	16	329 5	359 6	5	9	530 N	
Idaho	11	7	-	-	8	13	-	-	N	
Wyo. Colo.	- 24	- 58	3	- 2	4 62	3 82	- 3	- 4	43	
N. Mex.	52	32	1	-	6	32	-	1	3	
Ariz. Utah	158 4	165 6	18	14	189 33	183 26	2	- 2	4 480	
Nev.	10	12	-	-	22	14	-	2	-	
PACIFIC	1,114	973	44	49	1,950	2,261	91	79	-	
Wash. Oreg.	69 40	53 20	-	1	212 88	211 100	3 5	4 2	-	
Calif.	1,003	892	44	47	1,544	1,781	82	68	-	
Alaska Hawaii	- 2	- 8	-	- 1	47 59	43 126	- 1	- 5	-	
Guam	-	6	-	-	-	61	-	-	-	
P.R.	174	247	1	21	86	90	-	-	392	
V.I. Amer. Samoa	1 U	1 U	- U	- U	- U	- U	- U	- U	- U	
C.N.M.I.	-	Ŭ	-	Ŭ	-	Ŭ	-	Ŭ	-	

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 8, 2003, and November 9, 2002 (45th Week)*

TABLE III. Deaths in 122 U.S. cities,* week ending November 8, 2003 (45th Week)

	IN 122 U.S. Cities,* week ending November 8, All causes, by age (years)						,	All causes, by age (years)							
Reporting Area	All Ages	<u>></u> 65	45-64	25-44	1-24	<1	P&I [†] Total	Reporting Area	All Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	P&I [†] Total
NEW ENGLAND	450	311	. 89	39	5	6	43	S. ATLANTIC	1,181	768	257	. 87	40	29	62
Boston, Mass.	132	82	30	16	3	1	12	Atlanta, Ga.	130	71	30	21	7	1	4
Bridgeport, Conn.	28	19	7	2	-	-	2	Baltimore, Md.	175	98	50	18	5	4	14
Cambridge, Mass.	13	9	4	-	-	-	-	Charlotte, N.C.	106	60	31	6	3	6	7
Fall River, Mass. Hartford, Conn.	19 42	12 28	4 7	2 6	1 1	-	1 5	Jacksonville, Fla. Miami, Fla.	135 95	93 69	24 14	8 4	7 5	3 3	6 4
Lowell, Mass.	21	13	8	-		-	3	Norfolk, Va.	51	38	6	2	2	3	4
Lynn, Mass.	11	8	3	-	-	-	-	Richmond, Va.	68	46	17	3	-	2	4
New Bedford, Mass.	29	21	4	1	-	3	3	Savannah, Ga.	51	40	8	1	1	1	4
New Haven, Conn.	U	U	U	U	U	U	U	St. Petersburg, Fla.	58	41	12	4	-	1	2
Providence, R.I.	32	27	2	2	-	1	5	Tampa, Fla.	190	136	38	5	6	5	12
Somerville, Mass.	1	1	-	-	-	-	-	Washington, D.C.	100	62	22	12	4	-	-
Springfield, Mass.	48	35	6	6	-	1	3	Wilmington, Del.	22	14	5	3	-	-	1
Waterbury, Conn. Worcester, Mass.	32 42	26 30	5 9	1 3	-	-	1 8	E.S. CENTRAL	810	549	175	60	14	12	50
								Birmingham, Ala.	172	120	35	15	2	-	15
MID. ATLANTIC	1,899	1,381	346	119	31	22	91	Chattanooga, Tenn.	67	49	10	7	1	-	5
Albany, N.Y.	35	24	5	5	1	-	-	Knoxville, Tenn.	87	63	13	7	2	2	-
Allentown, Pa. Buffalo, N.Y.	21 99	17 71	3 15	1 7	- 2	- 4	1 6	Lexington, Ky. Memphis, Tenn.	74 139	52 100	17 27	3 9	1 1	1 2	10 9
Camden, N.J.	39 16	8	5	3	-	4	2	Mobile, Ala.	61	39	15	2	2	3	9 1
Elizabeth, N.J.	18	12	3	2	1	-	-	Montgomery, Ala.	58	39	10	6	3	-	3
Erie, Pa.	45	37	7	-	1	-	-	Nashville, Tenn.	152	87	48	11	2	4	7
Jersey City, N.J.	30	24	4	1	1	-	-	W.S. CENTRAL	935	622	201	63	29	20	85
New York City, N.Y.	800	578	154	50	9	9	27	Austin, Tex.	935 78	49	18	5	29	20	5
Newark, N.J.	50	25	15	8	1	1	3	Baton Rouge, La.	, U	43 U	U	Ŭ	Ú	Ū	Ŭ
Paterson, N.J.	22	15	6	1	-	-	4	Corpus Christi, Tex.	65	45	13	6	1	-	4
Philadelphia, Pa.	379 37	272 27	71 6	24 4	7	5	19 2	Dallas, Tex.	185	110	44	16	7	8	15
Pittsburgh, Pa.§ Reading, Pa.	30	26	3	4	-	-	2 1	El Paso, Tex.	81	51	19	9	2	-	6
Rochester, N.Y.	147	112	22	8	5		15	Ft. Worth, Tex.	113	77	23	6	3	4	3
Schenectady, N.Y.	26	18	7	-	-	1	-	Houston, Tex.	U	U	U	U	U	U	U
Scranton, Pa.	24	21	3	-	-	-	2	Little Rock, Ark. New Orleans, La.	78 40	60 24	14 10	3	1 6	-	10
Syracuse, N.Y.	49	36	9	-	2	2	4	San Antonio, Tex.	157	106	30	13	4	4	8
Trenton, N.J.	27	19	5	3	-	-	2	Shreveport, La.	42	29	12	1	-	-	2
Utica, N.Y. Yonkers, N.Y.	16 28	15 24	- 3	1	- 1	-	- 3	Tulsa, Okla.	96	71	18	4	3	-	32
				-				MOUNTAIN	858	595	157	63	22	20	51
E.N. CENTRAL	1,322 56	917 42	268 9	87 3	26 2	24	74 4	Albuquerque, N.M.	102	71	21	8	-	2	5
Akron, Ohio Canton, Ohio	33	25	5	3	-		4	Boise, Idaho	41	30	9	2	-	-	4
Chicago, III.	U	Ŭ	Ŭ	Ŭ	U	U	Ŭ	Colo. Springs, Colo.	70	53	9	4	4	-	2
Cincinnati, Ohio	78	54	17	6	-	1	5	Denver, Colo.	104	68	13	13	5	5	4
Cleveland, Ohio	119	78	29	7	3	2	6	Las Vegas, Nev. Ogden, Utah	235 37	166 29	46 6	14 1	3 1	5	14 5
Columbus, Ohio	179	113	42	9	6	9	9	Phoenix, Ariz.	U 37	29 U	U	Ŭ	Ů	U	U
Dayton, Ohio	133	97	23	10	2	1	9	Pueblo, Colo.	33	21	9	3	-	-	2
Detroit, Mich.	U	U	U	U	U	U	U	Salt Lake City, Utah	105	65	17	10	7	6	8
Evansville, Ind. Fort Wayne, Ind.	29 52	21 35	7 12	1 4	-	- 1	- 4	Tucson, Ariz.	131	92	27	8	2	2	7
Gary, Ind.	28	16	8	3	1	-	-	PACIFIC	1,279	913	247	60	33	26	90
Grand Rapids, Mich.		40	9	4	1	2	5	Berkeley, Calif.	1,210	13	2	-	-	-	3
Indianapolis, Ind.	158	106	35	9	4	4	8	Fresno, Calif.	69	41	15	12	1	-	4
Lansing, Mich.	45	37	6	2	-	-	5	Glendale, Calif.	14	12	2	-	-	-	2
Milwaukee, Wis.	103	68	22	9	1	3	7	Honolulu, Hawaii	64	53	5	3	2	1	6
Peoria, III.	U	U	U	U	U	U	U	Long Beach, Calif.	75	48	21	2	2	2	7
Rockford, III.	35	25	7	2	1	-	1	Los Angeles, Calif.	274	206	49	11	3	5	18
South Bend, Ind. Toledo, Ohio	48 100	39 69	6 18	3 9	3	- 1	3 3	Pasadena, Calif. Portland, Oreg.	23 131	17 97	4 24	1 3	5	1 2	1 6
Youngstown, Ohio	70	52	13	3	2	-	1	Sacramento, Calif.	U	U	24 U	U	U	Ű	U
0								San Diego, Calif.	172	120	32	11	7	2	13
W.N. CENTRAL	545	367	119	30	18	11	27	San Francisco, Calif.	Ű	U	Ŭ	U	Ů	Ū	U
Des Moines, Iowa Duluth, Minn.	77 32	57 26	15 6	2	2	1	4 3	San Jose, Calif.	170	125	30	7	4	4	16
Kansas City, Kans.	32	26 18	9	2	2	2	3	Santa Cruz, Calif.	U	U	U	U	U	U	U
Kansas City, Mo.	73	43	20	5	4	1	1	Seattle, Wash.	125	74	33	5	6	7	7
Lincoln, Nebr.	43	29	7	6	1	-	1	Spokane, Wash.	51	39	9	1	1	1	3
Minneapolis, Minn.	73	42	20	5	3	3	6	Tacoma, Wash.	96	68	21	4	2	1	4
Omaha, Nebr.	71	53	12	2	2	2	6	TOTAL	9,279¶	6,423	1,859	608	218	170	573
St. Louis, Mo.	U	U	U	U	U	U	U								
St. Paul, Minn.	50	38	8	2	2	-	-								
Wichita, Kans.	93	61	22	6	2	2	3	l							

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

¹ Total includes unknown ages.

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

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop 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.

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

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

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

☆U.S. Government Printing Office: 2004-633-140/69157 Region IV ISSN: 0149-2195