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Outbreak of Leptospirosis Among White-Water Rafters — Costa Rica, 1996

On October 15, 1996, a physician notified the Illinois Department of Public Health about five patients with an unknown febrile illness who had returned from a white-water rafting trip on flooded rivers in Costa Rica during September 27–28, 1996. The five patients had been members of a white-water rafting expedition involving 26 rafters from five states, the District of Columbia, and Costa Rica. This report summarizes the findings of the multistate investigation conducted by the Illinois Department of Public Health and by CDC in collaboration with the Ministry of Health of Costa Rica. The findings implicated leptospirosis as the cause of disease and contaminated river water as the probable source of illness.

A participant list was obtained from the trip organizer. Investigators interviewed all 26 trip participants to assess symptoms and potential environmental and behavioral risk factors, and reviewed medical records of those who sought medical attention. Based on the preliminary review of information available to investigators, the differential diagnoses included dengue fever and leptospirosis. A case of acute illness in a rafter was defined as fever associated with rigors, headache, and myalgia, with onset during September 27–November 1, 1996. Serum specimens were analyzed for evidence of dengue fever by IgM enzyme-linked immunosorbent assay (ELISA), and for leptospirosis by the microscopic agglutination test (MAT) and *Leptospira* IgM ELISA. Laboratory-confirmed leptospirosis was defined as a fourfold rise in MAT titers between acute- and convalescent-phase serum specimens against *Leptospira* serovars. A probable positive result was defined as an agglutination titer of ≥200 to one or more *Leptospira* serovars in at least one serum specimen.

Of the 26 rafters (median age: 34 years), nine (34.6%) had illness that met the case definition. The median incubation period (measured from the first day of rafting) was 12 days. Symptoms were self-limited in three case-patients and six were placed on antimicrobial therapy, of whom two were hospitalized; all recovered. Risk for illness was associated with reporting having ingested river water (nine of 18 versus none of eight; relative risk [RR]=8.7, 95% confidence interval [CI]=1.5–∞) and being submerged under water after falling into the river while rafting (nine of 20 versus none of six; RR=6.0, 95% CI=1.1–∞).

Sixteen persons submitted at least one serum specimen (eight case-patients and eight noncase-patients), and all were negative for anti-dengue IgM. Seven

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case-patients submitted both acute- and convalescent-phase serum specimens; of these, two persons were positive for leptospirosis by MAT and by IgM ELISA on convalescent testing. Leptospirosis was considered probable in three paired serum samples by MAT, all of which were IgM ELISA-positive on convalescent testing; two were negative by MAT and by IgM ELISA testing. One case-patient submitted only an acute-phase serum specimen, which was negative by both MAT and IgM ELISA. Analysis of additional blood specimens obtained from seven case-patients documented slightly elevated liver function tests in all seven patients and thrombocytopenia in three patients.

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Editorial Note: The findings in this investigation indicated that leptospirosis was the cause of the rafters' acute febrile illness; contaminated river water was the most likely source of the organisms based on the known epidemiology of Leptospirosis and the epidemiologic findings. Leptospirosis is a widespread zoonosis that is endemic in the tropics and infects a variety of wild and domestic animals that excrete the organism in their urine. *Leptospira* proliferate in fresh water, damp soil, vegetation, and mud. The occurrence of flooding after heavy rainfall facilitates the spread of the organism because, as water saturates the environment, *Leptospira* present in soil pass directly into surface waters (*1*). Human infection occurs through exposure to water or soil contaminated by infected animal urine and has been associated with canoeing, wading, and swimming in contaminated lakes and rivers (*2,3*). A large epidemic of leptospirosis associated with pulmonary hemorrhage occurred in 1995 in Nicaragua following widespread flooding and affected approximately 2000 persons (*4,5*).

Leptospira may enter the body through cut or abraded skin, mucous membranes, and conjunctivae. The acute generalized illness associated with infection may mimic other tropical diseases (e.g., dengue fever, malaria, and typhus) (*1,6*), and common symptoms include fever, chills, myalgia, nausea, diarrhea, and conjunctivitis. Manifestations of severe disease may include jaundice, renal failure, hemorrhage, and hemodynamic collapse (*7*). The organism may be isolated from samples of blood and cerebrospinal fluid obtained during the first 10 days of illness, and in the urine following the first week of illness. The MAT—the standard for serologic diagnosis of leptospirosis and the most reliable test—is not widely available in the United States (*8*). Testing for leptospirosis using MAT is available at CDC's Division of Bacterial and Mycotic Diseases laboratory, National Center for Infectious Diseases, through referral by state health departments.

Treatment with antimicrobial agents (e.g., penicillin, amoxicillin, or doxycycline) should be initiated early in the course of disease, and intravenous penicillin or

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ampicillin should be used for persons with severe manifestations. Supportive therapy is indicated for treating dehydration, hypotension, hemorrhage, and renal failure (*9*). Oral doxycycline (200 mg weekly) may provide effective chemoprophylaxis for persons with short-term exposure in environments associated with increased risk for infection (*10*). Persons participating in recreational water activities in areas where leptospirosis is endemic may be at increased risk for the disease, particularly during periods of flooding, and should consider preventive measures such as wearing protective clothing and minimizing contact with potentially contaminated water (*1*). Physicians should ask about a travel history and consider leptospirosis in the differential diagnosis for persons with a recent history of travel to areas with endemic disease.

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Progress Toward Global Eradication of Poliomyelitis, 1996

Substantial progress was achieved during 1996 to further implement the World Health Organization (WHO)-recommended strategies for the global eradication of poliomyelitis (*1*). An international coalition of partners supporting the eradication effort in countries with endemic polio includes WHO, Rotary International, CDC, United Nations Children's Fund, and governments of countries with and without endemic polio. This report updates progress toward global polio eradication based on information available at WHO as of April 30, 1997.

Progress in Implementing Strategies

Routine vaccination. Global coverage with three doses of oral poliovirus vaccine (OPV3) among infants aged <1 year in 1996 was 81% (compared with 83% in 1995). OPV3 coverage was >80% in all WHO regions except the African Region (AFR). In AFR, coverage increased from 32% in 1988 to 58% in 1995 and to 60% in 1996.

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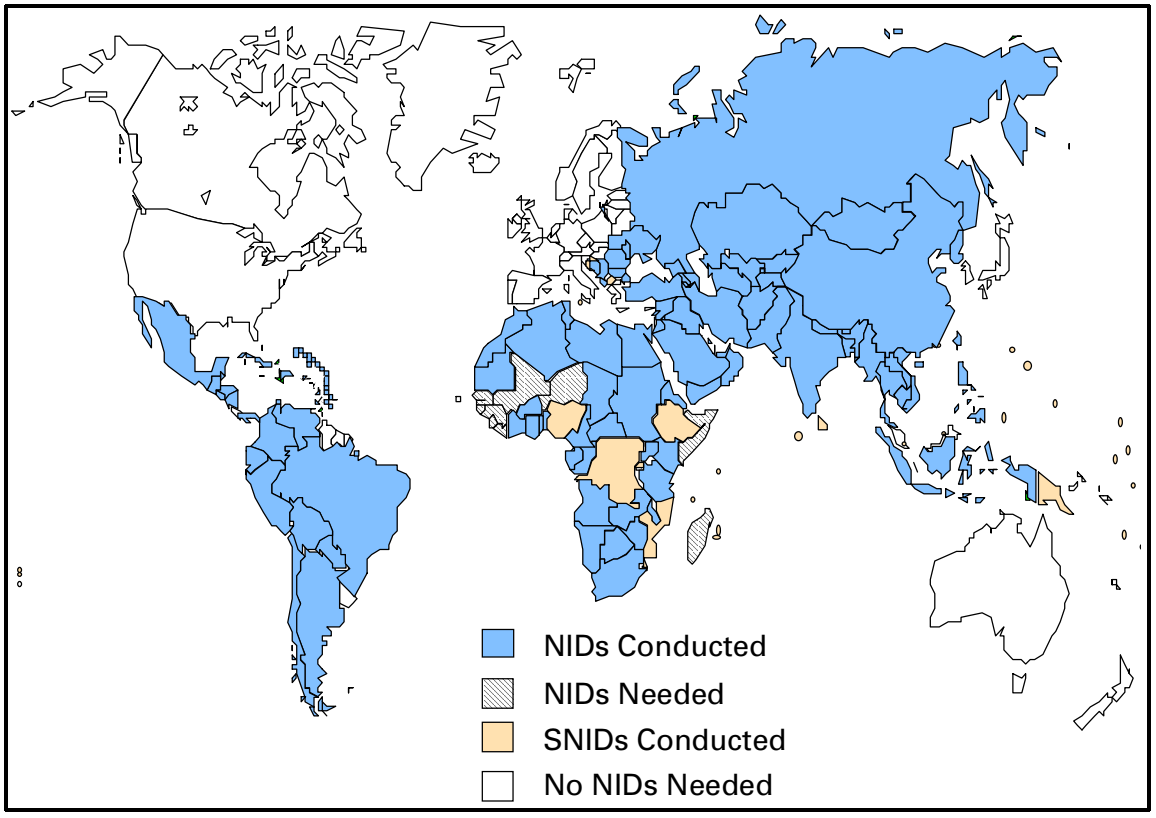
Supplementary vaccination. In 1996, a total of 82 countries conducted National Immunization Days (NIDs)* (compared with 62 countries in 1995); since 1985, a cumulative total of 92 countries have conducted NIDs (Figure 1). Globally, during 1996, approximately 419 million children aged <5 years (approximately two thirds of the world's children aged <5 years) received oral poliovirus vaccine (OPV) during NIDs. By the end of 1996, all countries in Asia and Europe with endemic polio had conducted NIDs; globally, 17 countries with endemic polio had not conducted NIDs (15 of 42 countries in AFR with endemic polio and two of 23 countries with endemic polio in the Eastern Mediterranean Region [EMR]). In addition, four countries in AFR conducted Subnational Immunization Days in 1996 in preparation for NIDs in 1997.

To rapidly interrupt poliovirus transmission and ensure coverage of migrant populations in border areas, NIDs in 1996 were coordinated between countries and among WHO regions. "Operation MECACAR" synchronized NIDs among 18 countries of the European Region (EUR) and EMR and achieved vaccination coverage of 95% (58 million children) (*2*). NIDs conducted during December 1996 and January 1997 provided vaccination with OPV to 257 million children aged <5 years in Bangladesh, Bhutan, India, Myanmar, Nepal, Thailand (in the South East Asia Region [SEAR]), People's Republic of China, Vietnam (in the Western Pacific Region [WPR]), and Pakistan

*Mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children in the target age group, regardless of prior vaccination history, with an interval of 4–6 weeks between doses.

FIGURE 1. Countries that have conducted Subnational Immunization Days (SNIDs) and National Immunization Days (NIDs), 1985–1996



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(in EMR). In India, the first round of NIDs in December 1996 achieved vaccination coverage of 117 million children aged <5 years, and the second round in January 1997 achieved vaccination coverage of 127 million children—this round was the largest vaccination campaign ever conducted. NIDs were conducted in 27 countries in Africa during 1996 as part of the "Kick Polio out of Africa" campaign; this campaign targeted three fourths of children aged <5 years living in sub-Saharan Africa (approximately 74 million children) (*3*). In AFR, all countries with endemic polio except Democratic Republic of Congo (formerly Zaire) plan to conduct NIDs in 1997 (*3*).

Mopping-up vaccination. Targeted supplementary house-to-house vaccination activities ("mopping-up" campaigns) were conducted in high-risk areas (areas identified as potential or known foci of continued poliovirus transmission based on surveillance for acute flaccid paralysis [AFP]). During 1995–1996, mopping-up vaccination in Yunnan Province, China, targeted approximately 3 million children aged <5 years. This campaign focused primarily on counties bordering Myanmar; these counties were targeted because of the identification of four imported cases from Myanmar in persons who were excreting wild poliovirus.

AFP surveillance. AFP surveillance is now conducted in 126 (86%) of 146 countries where polio is or recently was endemic. From 1995 to 1996, the number of countries conducting AFP surveillance increased from 120 to 137 (including 11 countries in which polio is not endemic).

Two important performance indicators for AFP surveillance are 1) the annual rate of nonpolio AFP per 100,000 children aged <15 years (target: >1 case per 100,000 population); and 2) the percentage of AFP cases for which adequate stool specimens have been collected (i.e., two stool specimens collected within 2 weeks of onset of paralysis [target: ≥80%]). From 1995 to 1996, the global rate for nonpolio AFP increased from 0.4 to 0.6, although region-specific rates varied substantially (Table 1). Rates of nonpolio AFP were <0.1 in SEAR and AFR, where AFP surveillance systems are being established.

The proportion of countries that have implemented and achieved high quality AFP surveillance (defined as an AFP rate of ≥1 per 100,000) also varied substantially by region. In the American Region (AMR), WPR, and SEAR, all countries where polio was or recently had been endemic conducted AFP surveillance; in AMR and WPR, 67% and 50%, respectively, of countries reported a rate of nonpolio AFP of ≥1. AFP surveillance had not yet been established in 15 (36%) of the 42 countries in AFR, three (13%) of the 23 in EMR, and two (11%) of the 18 in EUR. In all regions except AMR and WPR, <25% of countries reported nonpolio AFP rates of ≥1.

Laboratory network. In addition to the 16 regional and six specialized reference laboratories, the number of national laboratories participating in the Global Polio Laboratory Network increased from 65 in 1995 to 67 in 1996. In 1996, a process was initiated to formally accredit all national laboratories for participation in the WHO Poliomyelitis Eradication Program. Accreditation will ensure quality and facilitate the use of standardized procedures and reagents.

Impact of Strategies on Polio Incidence

In 1996, a total of 3997 polio cases were reported globally, a decrease of 43% from the 7032 cases reported in 1995. In 1996, a total of 155 countries reported zero cases of polio (compared with 150 countries in 1995), 18 countries reported one to 10 cases

TABLE 1. Confirmed poliomyelitis cases and acute flaccid paralysis (AFP) surveillance performance indicators, by World Health Organization region, 1995 and 1996

Region[†]	Countries where polio is or recently was endemic, 1996		Nonpolio AFP rate*		% AFP cases with two stool specimens in 1996	No. confirmed polio cases		Percentage reduction in confirmed cases from 1995 to 1996
	Total	Implemented AFP surveillance	1995	1996		1995	1996	
AFR	**42**	27	<0.1	<0.1	NA[§]	2192	1898	13%
AMR	**45**[¶]	45	1.2	1.2	76%	0	0	—
EMR	**23**	20	0.5	0.7	65%	789	373	53%
EUR	**18**	16**	0.2	0.7	63%	210	191	9%
SEAR	**8**	8	<0.1	<0.1	39%[††]	3349	1116	67%
WPR	**10**	10	1.2	1.2	80%	492	419	15%
Total	**146**	**137**	**0.4**	**0.6**	**—**	**7032**	**3997**	**43%**

* Number of cases of AFP (not attributed to polio) per 100,000 children aged <15 years.
† The regions are African (AFR), American (AMR), Eastern Mediterranean (EMR), European (EUR), South East Asia (SEAR), and Western Pacific (WPR).
§ Not available.
¶ The last case of polio attributed to wild poliovirus was detected in 1991.
** In addition, 11 countries in which polio is not endemic conducted AFP surveillance in EUR.
†† Percentage excludes India, for which these data are not available.

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(compared with 27 countries in 1995), and 27 countries reported >10 cases (compared with 30 countries in 1995); the 14 countries that made no report primarily included small countries, island nations, and war-affected countries.

In AFR, the number of polio cases reported in 1996 decreased 13% from 1995 (from 2192 to 1898 cases). The impact of NIDs conducted during the 1996 "Kick Polio out of Africa" campaign on disease incidence can be evaluated in 1997. In AMR during 1996, no indigenous wild poliovirus was isolated for the fifth consecutive year, despite continuing high quality AFP surveillance and testing of adequate stool specimens obtained from 1485 (76%) of 1954 patients with AFP.

In EMR, the number of reported polio cases declined 53% from 1995 to 1996 (789 to 373), despite improvements in surveillance for AFP (Table 1). However, wild poliovirus continued to circulate in Pakistan and Egypt. In Egypt, endemic transmission continued with 99 virologically confirmed cases of polio (attributable to serotypes 1 and 3) in 18 (67%) of the 27 governorates; the 99 cases were an increase from the 71 cases reported in 1995. In Pakistan, although the number of polio cases decreased from 460 in 1995 to 223 in 1996, wild poliovirus was isolated from patients in all provinces in 1996.

The number of reported cases in EUR decreased from 1995 (210 cases) to 1996 (191 cases). However, 167 (87%) of the 191 cases in 1996 were associated with a large outbreak resulting from a wild poliovirus importation into Albania (138 cases with 16 deaths), Yugoslavia (Kosovo, 24 cases reported), and Greece (five cases reported). In countries participating in "Operation MECACAR" (*2*), the number of cases continued to decrease from 1995 (53) to 1996 (19).

The number of reported cases in SEAR decreased 67% from 1995 (3349) to 1996 (1116) (*4*), mainly reflecting the impact of NIDs in India conducted in December 1995 and January 1996. The number of cases reported in India decreased 69% from 1995 (3263) to 1996 (1005). High priorities in SEAR include rapid improvement of AFP surveillance to monitor the effect of NIDs and target future supplementary vaccination, and efforts are being initiated to strengthen AFP surveillance in six of eight countries in the region.

In WPR, 419 (8%) of 5288 AFP cases reported in 1996 were confirmed as polio (compared with 492 [9%] of 5650 cases in 1995). Of the 419 cases, 21 (5%) were confirmed based on wild poliovirus isolation, and three of the 21 were imported into southwestern China from Myanmar. No indigenous wild poliovirus was isolated in China during 1996. The other 18 wild-virus–associated polio cases were reported from Cambodia (15), Vietnam (two), and Laos (one). The areas in Cambodia and southern Vietnam in which viruses were found constitute the last known remaining reservoir of wild poliovirus transmission in WPR. During May–June 1997, a cross-border mopping-up operation was conducted in areas of Cambodia, Laos, and Vietnam to interrupt regional transmission.

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Editorial Note: In 1996, progress toward the eradication of polio was aided by expanding the number of countries conducting NIDs, especially in AFR and SEAR; this expansion permitted the provision of supplemental doses of OPV to reach two thirds of

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all children aged <5 years worldwide. In addition, an increasing number of countries participated in multinational, synchronized NIDs to target the remaining foci of transmission of wild poliovirus. As a result of the efforts to expand supplementary vaccination activities, the number of reported polio cases rapidly decreased in many countries. Despite this progress, efforts to develop AFP surveillance—including high-quality laboratory support—have lagged, and the highest priorities now are to improve surveillance and conduct NIDs in the remaining countries with endemic polio. The rapid development of complete and timely AFP surveillance, particularly in the countries with endemic disease in the AFR, EMR, and SEAR, is an urgent priority to achieve the goal of global polio eradication by the year 2000. The global incidence of polio may decline further during 1997 as a result of the planned implementation of NIDs for the first time in all except one of the remaining countries with endemic polio.

War-affected or politically isolated countries (e.g., North Korea, Somalia, southern Sudan, and Democratic Republic of Congo) are reservoirs from which wild virus may continue spreading into bordering or distant polio-free countries, and intensification of the eradication initiative in these countries is critical to the achievement of global eradication. The polio outbreak involving Albania, Yugoslavia, and Greece underscored how countries previously polio-free may remain at risk for poliovirus importation because of suboptimal vaccination coverage or inadequate vaccination of subpopulations.

Although most of the resources to implement polio eradication have been provided by the countries with endemic polio, success of this initiative requires support from other sources, and international and interregional coordination. Projected resource requirements include approximately $175 million in external support to sustain polio eradication activities globally during 1997, and total external support of $1 billion for 1997–2005. External support also must continue for countries and regions where the incidence of polio has reached low levels to ensure interruption of the final chains of poliovirus transmission and to permit the eventual certification of eradication.

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Prevalence of Cardiovascular Disease Risk-Factor Clustering Among Persons Aged ≥45 Years — Louisiana, 1991–1995

Cardiovascular disease (CVD), including coronary heart disease, stroke, and hypertensive disease, is the leading cause of death in Louisiana and in the United States and, in 1994, accounted for 43.7% and 45.2% of all deaths among persons aged ≥45 years in Louisiana and in the United States, respectively. The primary risk factors for CVD are hypertension, high cholesterol, diabetes, overweight, cigarette smoking, and physical inactivity. The first four of these risk factors may cluster in some persons and have been identified as components of a syndrome known as metabolic cardiovascular syndrome (*1*) or the "deadly quartet" (*2*). This syndrome is characterized by a persistent state of insulin resistance and compensatory hyperinsulinemia that may be etiologically related to the four risk factors. Persons with one of the four risk factors are at increased risk for having any of the other three (*3*). To determine the prevalence of risk-factor clustering among older residents of Louisiana, CDC analyzed data from the 1991, 1992, 1993, and 1995 Louisiana Behavioral Risk Factor Surveillance System (BRFSS).* This report summarizes the results of this analysis, which documented a prevalence of clustering of the four risk factors among 1.7% of the respondents aged ≥45 years.

The BRFSS is a population-based, random-digit–dialed telephone survey of the civilian, noninstitutionalized U.S. population aged ≥18 years. Respondents were asked their weight and height and whether they had ever been told by a health-care professional that they had high blood pressure, high cholesterol, or diabetes. Body mass index (BMI), defined as the ratio of weight in kilograms to height in meters squared, was used to determine overweight. Overweight was defined as a BMI of >27.3 for women and >27.8 for men. Presence of any of the other three risk factors was determined by a positive response to the other questions. Data were weighted, and prevalence estimates and standard errors were calculated using SUDAAN.

In Louisiana, complete data were available for 2068 (78%) of the 2646 respondents aged ≥45 years during the 4 years. Data were incomplete for 578 (22%) respondents, including 532 (92%) who reported their cholesterol levels had never been checked.

Persons who reported their cholesterol level had been checked were more likely than those who did not to also report having high blood pressure (40.7% and 26.8%, respectively) and/or diabetes (12.3 % and 7.9%, respectively). Among the total respondent population of 2646 persons, the prevalence of high blood pressure and diabetes was 38.1% and 11.4%, respectively. This analysis is based on data from the 2068 respondents who had complete data and is generalizable to Louisiana residents aged ≥45 years who have ever had their cholesterol level checked.

Overall prevalence estimates of the four risk factors ranged from 12.3% for diabetes to 40.2% for high blood pressure (Table 1). At least one of the four risk factors was reported by 73% of respondents, and 37% had two or more of the risk factors. Clustering of the four risk factors was estimated at 1.7% (Table 2). Although cell sizes were small, prevalence of clustering of the four risk factors ranged from 0.7% for white men to 4.8% for black women.

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*Data were not analyzed for 1994 and 1996 because blood pressure and cholesterol data were not collected.

TABLE 1. Percentage of respondents aged ≥45 years self-reporting four cardiovascular disease risk factors, by sex and race* — Louisiana, Behavioral Risk Factor Surveillance System, 1991–1993 and 1995

	White men (n=636)		Black men (n=122)		White women (n=1026)		Black women (n=284)		Total (n=2068)	
Risk factor	**%**	**(95% CI†)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**
Overweight§	40.2	(34.7%–45.7%)	27.8	(17.4%–38.2%)	31.6	(27.7%–35.5%)	63.1	(55.7%–70.6%)	**38.1**	**(35.2%–41.0%)**
High blood pressure	30.9	(26.2%–35.6%)	49.5	(37.5%–61.1%)	40.6	(36.5%–44.7%)	60.6	(53.2%–68.0%)	**40.2**	**(37.4%–43.0%)**
High cholesterol	33.1	(28.0%–38.2%)	19.1	(10.5%–27.7%)	38.8	(34.6%–43.0%)	36.1	(28.8%–43.4%)	**34.5**	**(31.7%–37.3%)**
Diabetes	10.2	(7.2%–13.3%)	15.7	(6.9%–24.5%)	10.7	(8.1%–13.3%)	21.6	(15.2%–28.0%)	**12.3**	**(10.4%–14.2%)**

*Numbers for races other than black and white were too small for meaningful analysis.
†Confidence interval.
§Body mass index (BMI) >27.8 for men and BMI >27.3 for women.

TABLE 2. Percentage of respondents aged ≥45 years at each level of cardiovascular disease risk factor* clustering, by sex and race† — Louisiana, Behavioral Risk Factor Surveillance System, 1991–1993 and 1995

No.	White men (n=636)		Black men (n=122)		White women (n=1026)		Black women (n=284)		Total (n=2068)	
risk factors	**%**	**(95% CI§)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**
0	28.8	(24.0%–33.6%)	28.3	(17.9%–38.7%)	29.2	(25.5%–32.9%)	10.7	(6.0%–15.4%)	**26.8**	**(24.2%–29.4%)**
1	38.5	(33.2%–43.8%)	43.3	(31.5%–55.1%)	34.4	(30.4%–38.3%)	29.9	(22.8%–37.1%)	**36.2**	**(33.4%–39.0%)**
2	22.7	(18.1%–27.3%)	16.3	(8.3%–24.3%)	24.1	(20.4%–27.8%)	31.4	(24.4%–38.4%)	**23.7**	**(21.1%–26.3%)**
3	9.2	(6.0%–12.4%)	12.0	(4.0%–20.0%)	10.3	(7.8%–12.9%)	23.2	(16.2%–30.2%)	**11.6**	**(9.7%–13.5%)**
4	0.7	(0.2%– 1.2%)	—	—	2.0	(0.8%– 3.2%)	4.8	(1.9%– 7.7%)	**1.7**	**(1.1%– 2.3%)**

*Cardiovascular disease risk factors included are overweight (defined as body mass index [BMI] >27.8 for men and BMI >27.3 for women), high blood pressure, high cholesterol, and diabetes.
†Numbers for races other than black and white were too small for meaningful analysis.
§Confidence interval.

Cardiovascular Disease Risk-Factor Clustering — Continued

Editorial Note: From 1991 through 1994, the average annual age-adjusted CVD death rate among Louisiana women and men aged ≥45 years (593.3 and 987.3 per 100,000 population, respectively) were the second and fourth highest, respectively, of the 50 states and the District of Columbia[†]. The findings in this report indicate that, during 1991–1995, 1.7% of Louisiana residents aged ≥45 years self-reported risk factors compatible with metabolic cardiovascular syndrome and that prevalence of clustering of CVD risk factors varied substantially by sex and race. The race-specific prevalence of clustering of the four risk factors among black women was seven times that of white men and nearly three times that of white women, reflecting, in part, the higher prevalence of overweight among black women.

In this report, high blood pressure was the most prevalent CVD risk factor for both men and women aged ≥45 years. In the United States, less than one fourth of persons with hypertension have their blood pressure under control (*4*). Because control of hypertension does not return CVD risk to that of normotensives, primary prevention of hypertension provides the best opportunity to reduce CVD risk associated with this risk factor. Strategies for the primary prevention of hypertension include attaining and maintaining optimal weight, engaging in moderate physical activity, and limiting intake of salt and alcohol (*5*).

Excessive caloric intake leading to overweight has been postulated as the event leading to the emergence of the other risk factors in metabolic cardiovascular syndrome (*6*). Therefore, reductions in the prevalence of overweight and individual weight loss may have the greatest impact on CVD risk and risk-factor clustering. Even small decreases in weight among persons who are overweight may decrease the prevalence of high blood pressure, elevated cholesterol levels, and diabetes (*3*). Comprehensive public health efforts to reduce the prevalence of overweight should include environmental interventions such as reducing the fat and caloric content of processed foods and changing food preparation methods in institutional settings (e.g., schools, worksites, restaurants, and hospitals). Efforts to improve eating and exercise behaviors should also continue to be encouraged through public health campaigns such as eating at least five servings of fruits and vegetables each day and initiatives to improve physical activity levels (*7*). The Office of Public Health, Louisiana Department of Health and Hospitals, is initiating programs to increase the proportion of residents who meet the Surgeon General's recommendations for moderate physical activity and who eat five servings of fruits and vegetables each day to reduce the burden of overweight, diabetes, and CVD.

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[†]Data obtained from the Compressed Mortality File maintained by CDC.

Cardiovascular Disease Risk-Factor Clustering — Continued

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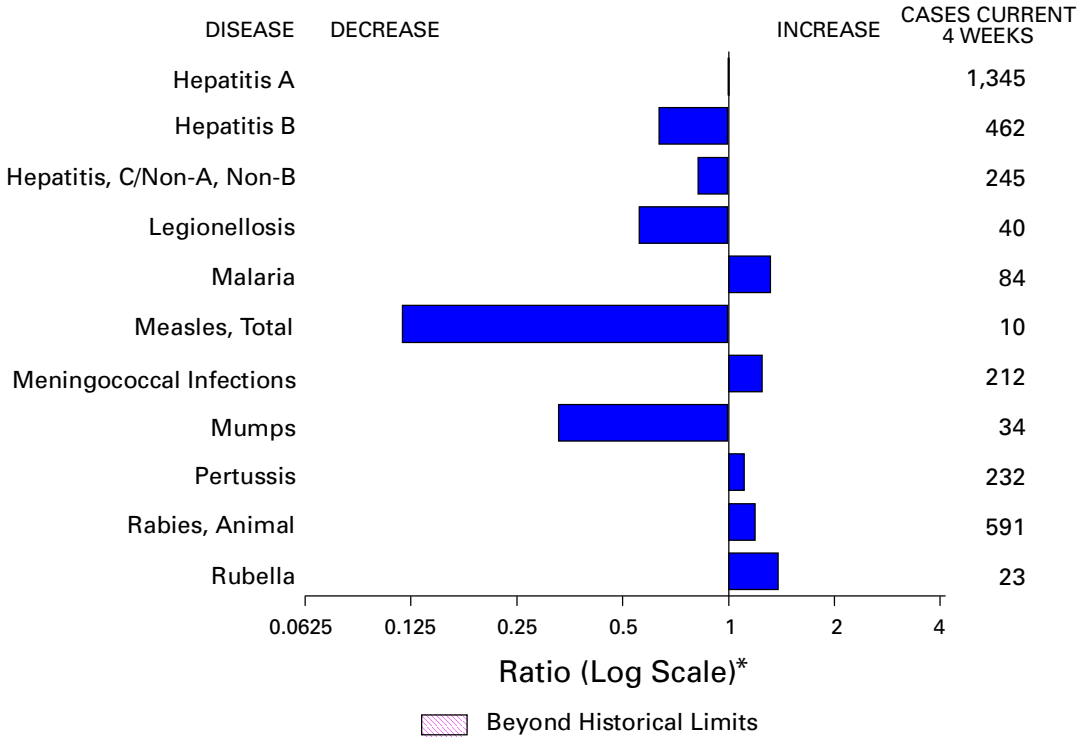
Erratum: Vol. 45, No. RR-15

In the *MMWR Recommendations and Reports*, "Prevention of Hepatitis A Through Active or Passive Immunization—Recommendations of the Advisory Committee on Immunization Practices (ACIP)," the second full paragraph on page 12 (i.e., the last paragraph in the section titled "Immune Globulin") contained errors regarding the recommended delay between administration of immune globulin and measles-mumps-rubella vaccine. The paragraph should read: "IG does not interfere with the immune response to either oral poliovirus vaccine or yellow fever vaccine, or, in general, to inactivated vaccines. However, IG can interfere with the response to other live, attenuated vaccines (e.g., measles-mumps-rubella [MMR] and varicella) when vaccines are administered individually or as combination vaccines. Administration of MMR should be delayed for at least 3 months, and varicella vaccine should be delayed for at least 5 months, after administration of IG for hepatitis A prophylaxis. IG should not be administered within 2 weeks after the administration of MMR or within 3 weeks after administration of varicella vaccine unless the benefits of IG administration exceed the benefits of vaccination (*77*). If IG is administered within 2 weeks after administration of MMR or within 3 weeks after administration of varicella vaccine, the person should be revaccinated, but not sooner than 3 months after the IG administration for MMR or 5 months for varicella vaccine (*77*)."

An additional reference for this information is *CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1996;45(no. RR-11).*

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending June 21, 1997, with historical data — United States



*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending June 21, 1997 (25th Week)

	Cum. 1997		Cum. 1997
Anthrax	-	Plague	1
Brucellosis	23	Poliomyelitis, paralytic	-
Cholera	3	Psittacosis	21
Congenital rubella syndrome	2	Rabies, human	2
Cryptosporidiosis*	562	Rocky Mountain spotted fever (RMSF)	99
Diphtheria	4	Streptococcal disease, invasive Group A	822
Encephalitis: California*	4	Streptococcal toxic-shock syndrome*	20
eastern equine*	-	Syphilis, congenital¶	122
St. Louis*	1	Tetanus	20
western equine*	1	Toxic-shock syndrome	54
Hansen Disease	52	Trichinosis	4
Hantavirus pulmonary syndrome*†	6	Typhoid fever	131
Hemolytic uremic syndrome, post-diarrheal*	21	Yellow fever	-
HIV infection, pediatric*§	112		

-:no reported cases
*Not notifiable in all states.
†Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update May 27, 1997.
¶Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 1997, and June 22,1996 (25th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1997	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996
UNITED STATES	25,284	31,333	190,053	194,966	565	269	119,650	143,001	1,485	1,697
NEW ENGLAND	903	1,247	7,805	7,736	47	23	2,613	2,945	27	45
Maine	25	16	453	U	3	-	28	21	-	-
N.H.	14	42	314	347	2	2	55	68	5	2
Vt.	18	10	188	212	3	1	24	28	-	14
Mass.	419	648	3,390	3,161	31	20	1,062	1,012	19	26
R.I.	71	94	983	973	1	-	223	249	3	3
Conn.	356	437	2,477	3,043	7	-	1,221	1,567	-	-
MID. ATLANTIC	8,301	9,075	26,473	32,981	34	9	15,695	19,909	156	144
Upstate N.Y.	1,358	1,098	N	N	21	4	2,629	3,407	121	113
N.Y. City	4,157	5,292	13,648	17,878	6	-	6,042	7,802	-	3
N.J.	1,773	1,651	4,261	6,537	7	3	2,955	3,999	-	-
Pa.	1,013	1,034	8,564	8,566	N	2	4,069	4,701	35	28
E.N. CENTRAL	1,687	2,423	27,871	41,738	97	28	17,129	26,989	271	253
Ohio	357	550	6,074	9,898	28	11	3,967	6,917	7	7
Ind.	329	344	4,191	4,695	21	5	2,817	3,107	7	7
Ill.	612	990	5,251	11,822	24	-	2,546	7,839	24	50
Mich.	306	400	8,678	10,171	24	4	6,197	6,818	233	189
Wis.	83	139	3,677	5,152	N	8	1,602	2,308	-	-
W.N. CENTRAL	469	791	10,773	14,955	81	47	4,982	6,815	104	47
Minn.	84	157	U	2,293	36	21	U	931	2	-
Iowa	67	53	2,198	1,907	16	8	596	481	27	22
Mo.	195	397	5,360	6,392	10	13	3,450	4,042	54	12
N. Dak.	5	7	387	476	3	2	24	13	2	-
S. Dak.	3	8	578	662	5	-	58	92	-	-
Nebr.	48	49	464	1,025	8	-	124	214	2	5
Kans.	67	120	1,786	2,200	3	3	730	1,042	17	8
S. ATLANTIC	6,203	7,761	40,963	26,384	66	19	39,581	46,761	135	82
Del.	111	165	-	-	2	2	542	691	-	-
Md.	734	853	3,447	2,978	4	1	6,266	5,952	9	1
D.C.	409	456	N	N	-	-	1,319	2,097	-	-
Va.	551	485	5,166	5,330	N	7	3,734	4,515	10	7
W. Va.	38	63	1,478	994	N	-	449	349	9	7
N.C.	361	361	7,963	U	18	9	7,502	9,073	28	22
S.C.	300	414	5,918	U	1	-	5,346	5,371	25	15
Ga.	850	1,203	5,651	5,910	19	-	6,379	10,226	U	-
Fla.	2,849	3,761	11,340	11,172	22	-	8,044	8,487	54	30
E.S. CENTRAL	810	1,076	16,014	14,462	44	7	15,669	15,313	175	321
Ky.	113	153	3,149	3,274	14	-	1,628	1,957	8	18
Tenn.	358	408	6,027	6,231	21	7	5,024	5,307	111	258
Ala.	194	323	3,847	4,079	6	-	5,459	6,353	6	2
Miss.	145	192	2,991	878	3	-	3,558	1,696	50	43
W.S. CENTRAL	2,596	3,277	21,759	10,300	27	5	14,587	9,605	179	146
Ark.	96	144	595	829	3	1	1,227	1,978	-	4
La.	476	758	3,941	3,318	4	3	3,711	3,561	102	86
Okla.	138	139	3,482	3,720	2	1	2,227	2,238	4	1
Tex.	1,886	2,236	13,741	2,433	18	-	7,422	1,828	73	55
MOUNTAIN	730	902	11,851	12,002	68	42	3,512	3,767	197	312
Mont.	18	10	477	588	4	-	20	13	10	10
Idaho	22	23	691	759	11	8	50	51	23	82
Wyo.	13	3	255	325	4	-	25	14	82	91
Colo.	180	245	1,896	942	20	13	915	889	25	28
N. Mex.	65	55	1,709	1,925	5	4	594	428	33	39
Ariz.	188	280	4,645	5,399	N	13	1,395	1,845	18	37
Utah	55	93	815	713	21	-	119	136	3	12
Nev.	189	193	1,363	1,351	3	4	394	391	3	13
PACIFIC	3,585	4,781	26,544	34,408	101	86	5,882	10,897	241	347
Wash.	288	379	4,334	4,794	21	20	922	1,061	14	32
Oreg.	144	234	1,762	2,679	30	39	258	400	4	5
Calif.	3,111	4,068	19,036	25,573	47	24	4,294	8,968	145	208
Alaska	16	11	658	499	3	-	190	220	-	2
Hawaii	26	89	754	863	N	3	218	248	78	100
Guam	2	4	31	206	N	-	3	35	-	5
P.R.	762	1,047	N	N	21	U	317	316	53	86
V.I.	36	14	N	N	N	U	-	-	-	-
Amer. Samoa	-	-	-	-	N	U	-	-	-	-
C.N.M.I.	1	-	N	N	N	U	16	11	2	-

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

*Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update May 27, 1997.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending June 21, 1997, and June 22,1996 (25th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997
UNITED STATES	380	360	1,364	2,328	610	566	3,791	5,548	7,669	8,600	3,482
NEW ENGLAND	26	18	291	384	28	24	76	72	200	190	533
Maine	1	1	3	3	1	3	-	-	11	12	108
N.H.	4	-	7	7	1	1	-	1	6	6	20
Vt.	4	2	3	3	2	2	-	-	3	1	86
Mass.	7	9	46	24	14	7	37	34	113	76	103
R.I.	5	6	43	43	2	3	1	1	16	21	11
Conn.	5	N	189	304	8	8	38	36	51	74	205
MID. ATLANTIC	60	78	777	1,674	158	173	174	248	1,443	1,502	715
Upstate N.Y.	14	20	117	699	28	32	17	35	197	172	524
N.Y. City	1	4	13	92	84	97	36	78	778	773	-
N.J.	7	7	193	330	33	33	65	85	284	329	72
Pa.	38	47	454	553	13	11	56	50	184	228	119
E.N. CENTRAL	131	130	25	21	38	74	324	946	811	915	73
Ohio	71	43	20	10	7	7	106	358	151	140	54
Ind.	23	32	5	8	6	6	80	124	65	90	8
Ill.	-	17	-	3	5	34	26	263	410	498	2
Mich.	31	25	-	-	17	16	59	92	133	141	8
Wis.	6	13	U	U	3	11	53	109	52	46	1
W.N. CENTRAL	35	21	18	55	22	13	60	196	233	228	212
Minn.	1	1	14	3	9	3	U	20	63	55	20
Iowa	10	3	1	8	8	2	3	13	27	31	75
Mo.	8	5	2	24	3	6	38	144	92	86	11
N. Dak.	2	-	-	-	-	-	-	-	5	2	28
S. Dak.	1	2	-	-	-	-	-	-	4	13	32
Nebr.	9	8	1	-	1	-	1	7	8	13	1
Kans.	4	2	-	20	1	2	18	12	34	28	45
S. ATLANTIC	61	44	154	110	142	87	1,597	1,868	1,476	1,570	1,476
Del.	5	2	15	54	2	2	14	18	11	24	31
Md.	15	6	105	20	44	22	441	296	145	130	266
D.C.	3	3	7	1	7	5	41	79	46	70	2
Va.	11	12	3	4	29	15	134	223	140	118	289
W. Va.	N	N	1	4	-	1	1	2	26	27	39
N.C.	6	3	7	20	7	10	344	517	172	216	469
S.C.	2	4	1	2	9	3	206	213	155	176	83
Ga.	-	1	1	-	14	8	265	329	261	326	149
Fla.	19	12	14	5	30	21	151	191	520	483	148
E.S. CENTRAL	15	21	30	32	15	13	890	1,307	545	687	135
Ky.	2	2	3	11	3	3	79	67	115	118	18
Tenn.	7	8	12	9	4	5	374	418	136	231	80
Ala.	2	2	4	1	5	2	233	271	200	222	37
Miss.	4	9	11	11	3	3	204	551	94	116	-
W.S. CENTRAL	6	2	14	18	6	11	496	563	992	966	160
Ark.	-	-	2	9	2	-	59	129	98	91	22
La.	1	-	1	-	4	1	197	274	-	5	1
Okla.	2	2	4	2	-	-	58	86	82	72	60
Tex.	3	-	7	7	-	10	182	74	812	798	77
MOUNTAIN	23	23	5	3	34	29	71	64	251	293	53
Mont.	1	1	-	-	2	3	-	-	7	7	12
Idaho	2	-	-	-	-	-	-	1	5	4	-
Wyo.	1	2	2	3	2	2	-	2	2	3	17
Colo.	5	6	2	-	16	14	2	20	50	43	-
N. Mex.	1	1	-	-	5	1	-	-	16	42	4
Ariz.	7	7	1	-	4	3	59	36	114	106	19
Utah	5	1	-	-	2	4	3	1	11	33	-
Nev.	1	5	-	-	3	2	7	4	46	55	1
PACIFIC	23	23	50	31	167	142	103	284	1,718	2,249	125
Wash.	6	1	1	1	8	7	7	3	94	126	-
Oreg.	-	-	9	9	10	11	4	4	71	86	2
Calif.	16	22	40	20	144	118	90	276	1,426	1,913	105
Alaska	-	-	-	-	3	2	1	-	44	41	18
Hawaii	1	-	-	1	2	4	1	1	83	83	-
Guam	-	1	-	-	-	-	-	3	5	55	-
P.R.	-	-	-	-	3	-	110	123	88	38	28
V.I.	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	5	1	-	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 21, 1997, and June 22,1996 (25th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	1997	Cum. 1997	1997	Cum. 1997	Cum. 1997	Cum. 1996
UNITED STATES	549	586	12,793	13,000	4,042	4,452	-	46	-	20	66	256
NEW ENGLAND	30	14	274	154	72	95	-	8	-	1	9	11
Maine	3	-	41	12	6	2	-	-	-	-	-	-
N.H.	2	9	17	5	5	7	U	-	U	-	-	-
Vt.	2	-	7	3	2	8	-	-	-	-	-	1
Mass.	20	5	121	78	30	27	-	8	-	-	8	9
R.I.	2	-	26	6	8	6	-	-	-	-	-	-
Conn.	1	-	62	50	21	45	-	-	-	1	1	1
MID. ATLANTIC	64	122	939	850	553	723	-	11	-	4	15	21
Upstate N.Y.	7	32	129	186	112	171	-	1	-	3	4	4
N.Y. City	20	30	336	282	187	265	-	4	-	1	5	7
N.J.	27	33	168	189	127	143	-	1	-	-	1	-
Pa.	10	27	306	193	127	144	-	5	-	-	5	10
E.N. CENTRAL	80	99	1,304	1,184	429	533	-	4	-	3	7	16
Ohio	46	51	194	457	41	60	-	-	-	-	-	2
Ind.	8	7	146	159	49	73	-	-	-	-	-	-
Ill.	18	30	268	279	93	154	-	4	-	1	5	3
Mich.	7	6	624	184	232	197	-	-	-	2	2	2
Wis.	1	5	72	105	14	49	-	-	-	-	-	9
W.N. CENTRAL	27	20	972	983	262	229	-	9	-	2	11	16
Minn.	17	10	91	50	23	19	-	-	-	2	2	14
Iowa	3	3	151	203	42	24	-	-	-	-	-	-
Mo.	3	4	521	492	171	148	-	1	-	-	1	1
N. Dak.	-	-	9	27	1	-	U	-	U	-	-	-
S. Dak.	2	1	14	39	-	-	-	8	-	-	8	-
Nebr.	1	1	47	70	8	16	-	-	-	-	-	-
Kans.	1	1	139	102	17	22	U	-	U	-	-	1
S. ATLANTIC	111	104	752	526	591	597	-	1	-	3	4	4
Del.	-	1	12	6	3	4	-	-	-	-	-	1
Md.	44	35	130	97	87	78	-	-	-	1	1	-
D.C.	2	5	14	15	21	15	-	-	-	1	1	-
Va.	7	4	92	77	59	69	-	-	-	-	-	2
W. Va.	3	4	6	11	9	14	-	-	-	-	-	-
N.C.	16	17	103	60	108	177	-	-	-	1	1	-
S.C.	4	3	63	30	59	40	-	-	-	-	-	-
Ga.	20	27	128	41	57	7	-	-	-	-	-	-
Fla.	15	8	204	189	188	193	-	1	-	-	1	1
E.S. CENTRAL	35	18	324	778	346	395	-	-	-	-	-	-
Ky.	5	5	40	16	20	39	-	-	-	-	-	-
Tenn.	22	7	199	546	221	236	-	-	-	-	-	-
Ala.	8	5	50	101	37	27	-	-	-	-	-	-
Miss.	-	1	35	115	68	U	-	-	-	-	-	-
W.S. CENTRAL	30	24	2,696	2,406	513	472	-	3	-	1	4	2
Ark.	1	-	136	242	30	43	-	-	-	-	-	-
La.	6	1	109	67	64	55	-	-	-	-	-	-
Okla.	18	21	830	995	17	23	-	-	-	-	-	-
Tex.	5	2	1,621	1,102	402	351	-	3	-	1	4	2
MOUNTAIN	57	32	1,950	2,106	440	545	-	5	-	-	5	61
Mont.	-	-	51	62	5	6	-	-	-	-	-	-
Idaho	1	1	75	134	16	62	-	-	-	-	-	1
Wyo.	-	-	20	20	20	17	-	-	-	-	-	-
Colo.	7	6	223	188	90	63	-	-	-	-	-	6
N. Mex.	7	8	157	244	153	178	-	-	-	-	-	2
Ariz.	23	12	977	802	89	127	-	5	-	-	5	8
Utah	3	5	342	469	50	58	-	-	-	-	-	40
Nev.	16	-	105	187	17	34	U	-	U	-	-	4
PACIFIC	115	153	3,582	4,013	836	863	-	5	-	6	11	125
Wash.	2	2	261	261	34	50	-	-	-	-	-	37
Oreg.	20	21	187	540	55	58	-	-	-	-	-	6
Calif.	87	124	3,044	3,140	728	745	-	2	-	6	8	17
Alaska	1	4	21	28	13	4	-	-	-	-	-	63
Hawaii	5	2	69	44	6	6	-	3	-	-	3	2
Guam	-	-	-	6	1	-	U	-	U	-	-	-
P.R.	-	1	166	101	619	494	-	-	-	-	-	1
V.I.	-	-	-	23	-	20	U	-	U	-	-	-
Amer. Samoa	-	-	-	-	-	-	U	-	U	-	-	-
C.N.M.I.	5	10	1	1	21	5	U	1	U	-	1	-

N: Not notifiable U: Unavailable -: no reported cases

*Of 120 cases among children aged <5 years, serotype was reported for 63 and of those, 24 were type b.

†For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 21, 1997, and June 22,1996 (25th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996
UNITED STATES	1,920	1,836	12	312	354	46	2,312	1,718	-	47	124
NEW ENGLAND	112	77	-	7	-	3	498	335	-	-	23
Maine	11	9	-	-	-	-	6	9	-	-	-
N.H.	10	3	U	-	-	U	61	19	U	-	-
Vt.	2	3	-	-	-	2	165	10	-	-	2
Mass.	60	28	-	2	-	1	244	294	-	-	19
R.I.	8	7	-	4	-	-	12	-	-	-	-
Conn.	21	27	-	1	-	-	10	3	-	-	2
MID. ATLANTIC	173	204	-	27	52	3	167	113	-	3	7
Upstate N.Y.	42	50	-	5	14	-	52	54	-	1	3
N.Y. City	31	29	-	-	13	-	40	18	-	2	2
N.J.	40	45	-	-	2	-	5	6	-	-	2
Pa.	60	80	-	22	23	3	70	35	-	-	-
E.N. CENTRAL	263	262	1	32	81	10	180	241	-	3	3
Ohio	105	90	1	14	27	4	72	75	-	-	-
Ind.	32	37	-	4	5	2	29	14	-	-	-
Ill.	78	79	-	7	16	4	28	60	-	-	1
Mich.	27	28	-	7	32	-	31	19	-	-	2
Wis.	21	28	-	-	1	-	20	73	-	3	-
W.N. CENTRAL	145	136	3	11	5	1	129	69	-	-	-
Minn.	19	14	1	4	1	1	85	43	-	-	-
Iowa	33	29	2	6	-	-	16	3	-	-	-
Mo.	71	56	-	-	2	-	16	15	-	-	-
N. Dak.	1	2	U	-	2	U	2	-	U	-	-
S. Dak.	4	4	-	-	-	-	2	1	-	-	-
Nebr.	5	12	-	1	-	-	3	2	-	-	-
Kans.	12	19	U	-	-	U	5	5	U	-	-
S. ATLANTIC	346	279	5	46	48	12	212	168	-	21	22
Del.	4	2	-	-	-	-	-	13	-	-	-
Md.	33	32	-	4	16	1	74	56	-	-	-
D.C.	1	4	-	-	-	-	2	-	-	-	1
Va.	33	33	2	6	4	6	25	19	-	1	2
W. Va.	13	12	-	-	-	-	4	2	-	-	-
N.C.	59	48	-	7	10	-	46	34	-	10	8
S.C.	41	37	1	10	5	3	11	6	-	9	1
Ga.	70	77	-	4	2	-	7	7	-	-	-
Fla.	92	34	2	15	11	2	43	31	-	1	10
E.S. CENTRAL	146	135	-	16	15	2	41	148	-	-	2
Ky.	36	19	-	3	-	-	2	128	-	-	-
Tenn.	50	41	-	3	1	2	19	12	-	-	-
Ala.	44	39	-	6	3	-	12	4	-	-	2
Miss.	16	36	-	4	11	-	8	4	-	-	N
W.S. CENTRAL	200	205	1	34	27	1	41	55	-	4	7
Ark.	25	26	-	-	-	-	7	2	-	-	-
La.	38	35	-	11	10	-	11	4	-	-	1
Okla.	23	20	-	-	-	1	6	4	-	-	-
Tex.	114	124	1	23	17	-	17	45	-	4	6
MOUNTAIN	114	115	2	43	14	12	702	174	-	4	6
Mont.	8	5	-	-	-	-	8	6	-	-	-
Idaho	9	16	-	2	-	4	511	60	-	1	2
Wyo.	1	3	-	1	-	-	4	1	-	-	-
Colo.	32	19	-	3	2	8	127	36	-	-	2
N. Mex.	18	20	N	N	N	-	31	30	-	-	-
Ariz.	29	28	2	29	1	-	15	12	-	3	1
Utah	11	11	-	6	2	-	4	5	-	-	-
Nev.	6	13	U	2	9	U	2	24	U	-	1
PACIFIC	421	423	-	96	112	2	342	415	-	12	54
Wash.	51	54	-	12	13	2	179	162	-	-	12
Oreg.	87	74	-	1	-	-	17	33	-	-	1
Calif.	280	289	-	71	82	-	139	208	-	7	38
Alaska	1	4	-	2	2	-	1	1	-	-	-
Hawaii	2	2	-	10	15	-	6	11	-	5	3
Guam	-	1	U	1	4	U	-	-	U	-	-
P.R.	8	7	-	4	1	-	-	2	-	-	-
V.I.	-	-	U	-	1	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	4	-	U	-	-	U	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending June 21, 1997 (25th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	509	370	89	34	12	4	36
Boston, Mass.	165	109	39	8	8	1	17
Bridgeport, Conn.	U	U	U	U	U	U	U
Cambridge, Mass.	19	16	2	1	-	-	1
Fall River, Mass.	22	16	6	-	-	-	-
Hartford, Conn.	50	31	12	5	1	1	1
Lowell, Mass.	18	12	3	3	-	-	3
Lynn, Mass.	11	8	1	2	-	-	1
New Bedford, Mass.	18	15	2	1	-	-	1
New Haven, Conn.	28	22	2	3	-	1	1
Providence, R.I.	54	45	4	4	1	-	2
Somerville, Mass.	5	4	1	-	-	-	-
Springfield, Mass.	43	35	4	3	1	-	5
Waterbury, Conn.	21	15	5	1	-	-	-
Worcester, Mass.	55	42	8	3	1	1	4
MID. ATLANTIC	2,403	1,652	472	197	46	36	119
Albany, N.Y.	41	27	10	2	1	1	5
Allentown, Pa.	16	12	4	-	-	-	1
Buffalo, N.Y.	63	48	10	3	1	1	1
Camden, N.J.	25	10	7	4	3	1	2
Elizabeth, N.J.	15	9	6	-	-	-	1
Erie, Pa.	49	36	10	2	-	1	-
Jersey City, N.J.	48	30	12	4	-	2	3
New York City, N.Y.	1,207	840	222	108	18	19	53
Newark, N.J.	47	22	13	11	1	-	3
Paterson, N.J.	27	14	9	3	1	-	-
Philadelphia, Pa.	500	326	106	45	16	7	22
Pittsburgh, Pa.§	70	52	11	4	2	1	6
Reading, Pa.	12	9	3	-	-	-	1
Rochester, N.Y.	125	90	26	7	-	2	7
Schenectady, N.Y.	18	16	2	-	-	-	1
Scranton, Pa.	28	23	4	-	1	-	2
Syracuse, N.Y.	72	60	8	2	1	1	11
Trenton, N.J.	14	6	7	1	-	-	-
Utica, N.Y.	26	22	2	1	1	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,940	1,289	394	163	52	41	122
Akron, Ohio	28	16	1	5	3	3	-
Canton, Ohio	30	18	6	3	-	3	4
Chicago, Ill.	409	244	91	52	9	12	28
Cincinnati, Ohio	123	90	24	4	1	4	12
Cleveland, Ohio	127	77	29	15	4	2	4
Columbus, Ohio	138	99	29	7	1	2	6
Dayton, Ohio	128	97	21	6	3	1	15
Detroit, Mich.	237	133	63	28	9	4	11
Evansville, Ind.	48	34	8	4	2	-	-
Fort Wayne, Ind.	50	29	12	6	3	-	3
Gary, Ind.	10	5	1	3	1	-	-
Grand Rapids, Mich.	59	44	10	4	1	-	3
Indianapolis, Ind.	140	88	34	7	8	3	8
Lansing, Mich.	36	28	4	1	1	2	3
Milwaukee, Wis.	122	89	20	6	3	4	6
Peoria, Ill.	34	29	5	-	-	-	1
Rockford, Ill.	45	35	4	6	-	-	4
South Bend, Ind.	28	22	4	1	-	1	2
Toledo, Ohio	83	59	19	3	2	-	6
Youngstown, Ohio	65	53	9	2	1	-	6
W.N. CENTRAL	674	480	107	52	14	18	32
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	31	25	5	-	-	1	2
Kansas City, Kans.	27	18	5	3	-	1	-
Kansas City, Mo.	101	67	17	6	6	2	1
Lincoln, Nebr.	26	18	5	3	-	-	-
Minneapolis, Minn.	187	129	36	14	2	6	13
Omaha, Nebr.	73	50	13	3	2	5	6
St. Louis, Mo.	93	65	11	12	3	2	2
St. Paul, Minn.	64	47	8	8	1	-	7
Wichita, Kans.	72	61	7	3	-	1	1
S. ATLANTIC	1,248	774	283	112	40	37	58
Atlanta, Ga.	109	60	28	12	4	5	3
Baltimore, Md.	239	128	61	30	11	9	19
Charlotte, N.C.	73	48	15	6	-	4	7
Jacksonville, Fla.	118	82	26	5	3	2	3
Miami, Fla.	115	68	28	12	4	3	1
Norfolk, Va.	39	26	6	2	2	3	4
Richmond, Va.	87	51	23	5	6	2	3
Savannah, Ga.	38	20	12	4	2	-	4
St. Petersburg, Fla.	68	51	10	6	-	1	2
Tampa, Fla.	188	139	36	6	2	5	11
Washington, D.C.	153	84	35	23	6	3	1
Wilmington, Del.	21	17	3	1	-	-	-
E.S. CENTRAL	605	426	123	34	12	10	49
Birmingham, Ala.	153	119	22	7	3	2	19
Chattanooga, Tenn.	53	43	6	3	1	-	6
Knoxville, Tenn.	69	43	20	5	1	-	1
Lexington, Ky.	75	53	19	2	-	1	10
Memphis, Tenn.	U	U	U	U	U	U	U
Mobile, Ala.	77	58	12	6	1	-	1
Montgomery, Ala.	46	30	11	-	2	3	1
Nashville, Tenn.	132	80	33	11	4	4	11
W.S. CENTRAL	1,467	941	314	133	53	26	91
Austin, Tex.	64	38	14	4	5	3	4
Baton Rouge, La.	47	31	7	6	3	-	4
Corpus Christi, Tex.	58	40	14	2	1	1	6
Dallas, Tex.	164	106	28	19	3	8	6
El Paso, Tex.	79	53	14	8	4	-	9
Ft. Worth, Tex.	133	99	25	7	1	1	7
Houston, Tex.	420	245	101	52	18	4	30
Little Rock, Ark.	63	32	22	5	1	3	2
New Orleans, La.	51	28	15	5	1	2	-
San Antonio, Tex.	220	149	47	10	10	4	10
Shreveport, La.	72	45	15	7	5	-	6
Tulsa, Okla.	96	75	12	8	1	-	7
MOUNTAIN	727	501	142	50	17	17	39
Albuquerque, N.M.	83	60	12	8	2	1	2
Boise, Idaho	43	32	6	3	1	1	1
Colo. Springs, Colo.	50	42	4	-	2	2	2
Denver, Colo.	105	70	16	12	1	6	11
Las Vegas, Nev.	183	113	48	14	5	3	8
Ogden, Utah	17	12	4	-	1	-	1
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	20	15	3	1	1	-	1
Salt Lake City, Utah	90	62	14	10	2	2	5
Tucson, Ariz.	136	95	35	2	2	2	8
PACIFIC	1,786	1,249	311	143	47	36	119
Berkeley, Calif.	19	11	5	3	-	-	1
Fresno, Calif.	64	45	10	5	4	-	5
Glendale, Calif.	27	25	2	-	-	-	1
Honolulu, Hawaii	105	76	16	10	1	2	9
Long Beach, Calif.	66	48	13	4	1	-	6
Los Angeles, Calif.	526	383	73	48	12	10	27
Pasadena, Calif.	9	8	1	-	-	-	1
Portland, Oreg.	122	88	22	7	3	2	-
Sacramento, Calif.	155	107	29	13	5	1	24
San Diego, Calif.	136	90	28	10	5	3	14
San Francisco, Calif.	81	52	15	11	2	1	11
San Jose, Calif.	180	120	42	10	3	5	14
Santa Cruz, Calif.	25	18	5	2	-	-	3
Seattle, Wash.	113	66	27	13	5	2	-
Spokane, Wash.	63	42	14	3	2	2	1
Tacoma, Wash.	95	70	9	4	4	8	2
TOTAL	11,359¶	7,682	2,235	918	293	225	665

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 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

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