CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

April 13, 2001 / Vol. 50 / No. 14

MMWR™
MORBIDITY AND MORTALITY
WEEKLY REPORT

Outbreak of Acute Respiratory Febrile Illness Among College Students — Acapulco, Mexico, March 2001

On March 30, 2001, CDC was notified by Pennsylvania Department of Health (PDH) of an acute respiratory febrile illness in 44 students from two colleges who traveled to Acapulco, Mexico, for spring break vacation during March 3–18. Within 7–14 days of their return from Acapulco, 21 students presented to health-care providers with illness characterized by fever, chills, dry cough, chest pain, and headache. Two students were hospitalized. On the basis of clinical symptoms and chest radiographs that revealed bilateral, nodular patchy infiltrates, acute pulmonary histoplasmosis was the suspected illness. While in Acapulco, most of the students stayed at the Calinda Beach Hotel and participated in group activities at other recreational locations.

All state health departments and selected travel agencies were notified to identify additional students who traveled to Acapulco during March and became ill. As of April 9, 37 colleges in 18 states* and the District of Columbia have reported 221 students who returned to the United States from Acapulco with an acute respiratory febrile illness. Ten students in six states were hospitalized.

A case is defined as an acute respiratory febrile illness characterized by fever for at least 3 days and one or more of the following symptoms: cough, shortness of breath, chest pain, or headache in a student who visited Acapulco during March 2001. Preliminary laboratory test results suggest histoplasmosis, an infection caused by *Histoplasma capsulatum*, a fungus that is present in soil in areas where the disease is endemic, and is acquired through inhalation. Gomori methenamine-silver stain of transbronchial and thoracic lymph node biopsy specimens from a hospitalized student revealed the presence of yeasts consistent with *H. capsulatum.* In addition, of specimens from 27 students in three states serologically tested for histoplasmosis using immunodiffusion and complement fixation tests, five were positive (*1*). However, convalescent-phase serum specimens will be needed for confirmation. Testing continues for other possible causes (e.g., *Mycoplasma, Legionella*, and *Chlamydia*).

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*Arizona, Connecticut, Delaware, Illinois, Indiana, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, Texas, and Wisconsin.

Acute Respiratory Febrile Illness — Continued

Editorial Note: CDC recommends that students who have traveled to Acapulco since March 1 seek medical care if they develop symptoms of fever and/or cough, shortness of breath, chest pain, or headache. Most cases of acute histoplasmosis in immunocompetent persons will not require treatment; however, persons with severe histoplasmosis can be treated with 200 mg of itraconazole, an antifungal medication, once daily for 6–12 weeks (*2*). Physicians should notify state health departments of acute respiratory febrile illness among returning college students and other persons.

On April 3, PDH alerted other health departments of the outbreak through *EPI-X* (the *Epidemic Information Exchange*); on April 6, CDC issued a travelers' advisory at http://webdev.cdc.gov/travel/other/res-mexico-apr2001.htm. Information on histoplasmosis is available at http://www.cdc.gov/ncidod/dbmd/diseaseinfo. The Mexico Ministry of Health and CDC are conducting an investigation of the outbreak. Additional information is available from CDC, telephone (888) 688-2732. CDC's Mycotic Diseases Branch (MDB) is interested in receiving reports through state and local health departments of travelers to Acapulco since March who have become ill. MDB will test serum and lung tissue specimens for histoplasmosis received through state and local health departments.

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Prevalence of Risk Behaviors for HIV Infection Among Adults — United States, 1997

Human immunodeficiency virus (HIV) prevention programs are directed to persons at risk for acquiring and transmitting HIV because of their sexual behaviors or drug use. Effective HIV prevention requires monitoring risk behaviors among persons who are infected, persons who are at highest risk for infection, and the general population (*1*). The Behavioral Risk Factor Surveillance System (BRFSS) provides behavioral data at the state level. Because sexual behavior questions are not part of the BRFSS core instrument, in 1997, an optional module was developed and used by 23 states and Puerto Rico. This report summarizes the analysis of these data, which indicates that 11% of respondents had multiple sex partners and 4.2% reported other high-risk behaviors. These findings underscore the continued need for education about behaviors that place persons at risk for HIV infection, promotion of HIV testing among those who engage in these behaviors, and counseling to reduce risk.

BRFSS is a state-based, random-digit–dialed telephone survey of the civilian, noninstitutionalized U.S. population aged ≥18 years (*2*). In the 1997 survey, an optional module on sexual behavior was administered to 23 of 50 states, the District of Columbia, and Puerto Rico. For this module, the upper age limit for respondents was 49 years. The sexual behavior module included questions on the number of sex partners, condom use during most recent intercourse, and other HIV risk behaviors. To determine sexual activity, respondents were asked, "During the past 12 months, with how many people have you had sexual intercourse?" Those who reported one or more sex partners during the preceding 12 months were considered sexually active. Risk behaviors were measured by two questions: 1) having multiple (i.e., two or more) sex partners during the preceding

Risk Behaviors — Continued

year and 2) a composite measure of risk that included use of intravenous drugs, treatment for sexually transmitted disease, and anal sex without a condom during the preceding year or a positive test for HIV; specific risks were not assessed individually. Condom use was determined by the question, "Was a condom used the last time you had sexual intercourse?"

Data were weighted by demographic characteristics and selection probabilities and are representative of the adult population aged 18–49 years in each state. SUDAAN was used to account for the complex survey design. Because BRFSS data are state-specific, median values, rather than average values for the selected states, are reported. Data from the District of Columbia were not included in this analysis because it is more comparable to urban areas than to states.

A total of 33,913 respondents were included in this analysis. The median response rate was 61.7% (range: 44.2%–88.9%). A median of 3.6% of respondents (range: 0.7% [Puerto Rico]–13% [Massachusetts]) refused to answer the question about the number of sex partners during the preceding year and were not asked further questions from the sexual behavior module. The median prevalence of sexual activity among adults aged 18–49 years was 85% (Table 1); state-specific prevalences ranged from 69% (Tennessee) to 89% (Nevada and Wisconsin).

Among respondents who were sexually active, the median prevalence of having multiple sex partners was 11% (range: 5% [Montana]–18% [Nevada]). Among respondents with multiple sex partners, the median prevalence of condom use at last sex was 65%; state-specific prevalences ranged from 53% (Rhode Island) to 79% (New Jersey).

The median proportion of sexually active respondents answering "yes" to the composite question on risk was 4.2% (range: 1.9% [Montana]–5.9% [New Mexico]). The median prevalence of condom use in this group was 26.6% (range: 12.2% [Rhode Island]–43.7% [New Jersey]) compared with 23.2% (range: 15.6% [Puerto Rico]–33.8% [New Jersey]) among those who answered "no" to the question.

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Editorial Note: The findings in this report indicate that among persons aged 18–49 years in the areas surveyed, a small proportion were at risk for HIV on the basis of the composite question and a larger proportion on the basis of having multiple sex partners. The proportion of sexually active adults with multiple partners in the BRFSS data is similar to that found in other surveys of the general population (*3–5*). Responses to a question on the 1995 National Health Interview Survey that was similar to the BRFSS composite measure resulted in a prevalence of 3.4%, compared with 4.2% in BRFSS (*3*). These data indicate an ongoing need for prevention efforts focusing on HIV and other sexually transmitted diseases, including efforts to promote healthy sexual behaviors.

The findings in this report are subject to at least five limitations. First, small sample sizes, including small numbers of respondents with risk behaviors, precluded categorical analyses of sexual behaviors with other relevant variables (e.g., sex or marital status).

Risk Behaviors — Continued

TABLE 1. Percentage of persons aged 18–49 years who reported being sexually active, having multiple sex partners, and using a condom during most recent intercourse during the preceding year, by state — Behavioral Risk Factor Surveillance System, United States, 1997

Area	Sample size	Sexually active		Multiple sex partners		Condom use*	
		%	(95% CI†)	%	(95% CI)	%	(95% CI)
Alaska	1085	84.2	(±3.2)	11.6	(±3.0)	69.7	(±11.5)
Delaware	1476	86.9	(±2.2)	11.9	(±2.4)	64.8	(±10.3)
Florida	1869	86.3	(±1.8)	11.8	(±1.8)	61.9	(± 8.1)
Illinois§	934	86.0	(±2.5)	12.1	(±3.0)	¶	
Iowa	2013	86.3	(±1.8)	9.5	(±1.6)	62.7	(± 8.5)
Maine	1017	87.4	(±2.5)	9.4	(±2.5)	¶	
Maryland§	1431	69.9	(±3.2)	10.8	(±2.6)	66.3	(±11.5)
Massachusetts	1134	77.5	(±3.1)	13.6	(±2.9)	67.7	(±10.3)
Minnesota	3006	81.3	(±1.5)	11.5	(±1.5)	54.1	(± 6.8)
Mississippi	913	86.1	(±2.7)	13.3	(±3.5)	76.8	(±10.7)
Montana	1045	85.7	(±2.5)	5.4	(±1.6)	¶	
Nebraska	1526	84.5	(±2.4)	8.4	(±1.9)	54.6	(±12.0)
Nevada	1577	88.7	(±3.0)	17.6	(±4.3)	55.4	(±13.2)
New Hampshire	944	86.1	(±2.7)	9.4	(±2.7)	¶	
New Jersey	1625	80.2	(±2.3)	13.1	(±2.5)	78.8	(± 7.6)
New Mexico	1111	83.8	(±2.5)	9.4	(±2.1)	54.7	(±12.3)
New York	2184	81.3	(±1.9)	11.4	(±1.7)	71.5	(± 7.0)
North Dakota	1034	85.9	(±2.5)	8.8	(±2.1)	68.0	(±11.1)
Ohio	1671	80.7	(±2.6)	9.6	(±2.3)	66.1	(±10.7)
Puerto Rico	1328	69.5	(±2.9)	¶		¶	
Rhode Island	1080	80.3	(±2.9)	11.8	(±2.9)	53.2	(±14.0)
Tennessee§	554	69.3	(±4.7)	¶		¶	
Vermont	1955	86.0	(±1.8)	11.8	(±2.2)	67.3	(± 8.9)
Wisconsin	1401	88.9	(±2.1)	9.4	(±2.3)	61.1	(±12.3)

* Among those with multiple sex partners.
† 95% confidence interval.
§ Used split sampling method in which the sexual behavior module was administered to only half of the sample.
¶ Estimates not reliable because of small sample size and low number of respondents.

Second, because BRFSS excludes persons without telephones and those living in institutional settings, this study may have underestimated the prevalence of sexual risk behaviors in the U.S. population. Third, the measure used to assess high risk for HIV may not accurately describe all persons who may be exposed to HIV. Fourth, BRFSS data are self-reported data (*6*). Finally, because not all 50 states used the sexual behavior module and the sample was limited to those aged 18–49 years, the findings in this report may not be generalizable to the U.S. adult population. Assessments of the prevalence of risk behavior for HIV infection among youth in the U.S. population are available from the Youth Risk Behavior Survey (*7*).

General population surveys such as the BRFSS can contribute to the description and monitoring of HIV risk behaviors. BRFSS provides state-based estimates of the prevalence of sexual and other risk behaviors and enables states to project the need for HIV prevention messages to promote risk reduction in the general population.

Risk Behaviors — Continued

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Human West Nile Virus Surveillance — Connecticut, New Jersey, and New York, 2000

West Nile virus (WNV), a mosquitoborne arbovirus identified in New York in 1999, has become enzootic in the northeastern United States, affecting humans, birds, horses, and other mammals. Although no human WNV infection was identified in Connecticut or New Jersey in 1999, 62 persons with WNV illness, including seven deaths, were detected in New York City (NYC) and nearby New York counties (*1*). In 2000, these jurisdictions implemented active surveillance (AS) and enhanced passive surveillance (EPS)* to detect human illness; 21 persons were identified with acute WNV infection (14 in New York, six in New Jersey, and one in Connecticut), including two deaths (one each in New York and New Jersey) (*2*). This report summarizes the human WNV surveillance systems in Connecticut, New Jersey, New York, and NYC and recommends EPS for hospitalized patients with encephalitis of unknown etiology for the continental United States.

Connecticut

The Connecticut Department of Public Health (CTDPH) implemented EPS statewide during April 1–October 31, and AS in two southwestern counties during July 1–October 31. Surveillance criteria included all hospitalized patients with encephalitis, meningoencephalitis, or Guillain-Barre syndrome (GBS) with fever; in August, criteria were expanded to include hospitalized aseptic meningitis patients aged ≥18 years. EPS consisted of monthly mailings to physicians and all acute-care hospitals to solicit reports of patients meeting surveillance criteria. In counties participating in AS, infection-control practitioners (ICPs) were asked to review emergency department and hospital admissions and report patients meeting surveillance criteria. ICPs were contacted weekly by CTDPH

*AS=Health department-initiated contact with health-care providers to solicit reports; EPS=passive surveillance (i.e., health-care provider-initiated reports) enhanced by general alerts to key health-care personnel (e.g., primary-care providers, infectious disease physicians, and hospital infection-control personnel).

West Nile Virus — Continued

staff for follow-up on all reported patients. Serum and cerebrospinal fluid (CSF) specimens from all reported patients were tested for WNV-reactive IgM by enzyme-linked immunosorbent assays (ELISA) at the CTDPH laboratory.

During April 1–October 31, 235 patients were tested: 46 (20%) with encephalitis or meningoencephalitis, 44 (19%) with aseptic meningitis, and one (<1%) with GBS; 144 (61%) patients did not meet surveillance criteria but were tested at their physicians' requests. Of these 235 patients, one mildly symptomatic outpatient tested positive for WNV. Tested patients were not categorized by surveillance method.

New Jersey

The New Jersey Department of Health and Senior Services implemented EPS statewide during June 1–November 30, and AS in six counties near NYC during July 15–October 31. Surveillance criteria included all patients hospitalized for viral encephalitis, meningoencephalitis, or GBS and patients aged ≥17 years with aseptic meningitis. For EPS, public health staff distributed WNV fact sheets, surveillance criteria, and reporting instructions to health-care providers. For AS, ICPs in six counties reviewed emergency department and hospital admissions, surveyed physicians, and provided weekly fax reports of patients meeting surveillance criteria. ICPs and physicians were contacted weekly for follow-up on all reported patients. Serum and CSF specimens from patients who met the surveillance criteria were tested for WNV-reactive IgM and IgG by ELISA at the state's Public Health and Environmental Laboratory.

Of 55 patients tested, 18 (33%) had encephalitis, 15 (27%) had meningoencephalitis, 19 (35%) had aseptic meningitis, and three (6%) had GBS. Six patients had laboratory evidence of WNV infection; five (83%) were identified through EPS and one (17%) through AS.

New York City

The New York City Department of Health (NYCDOH) implemented EPS citywide during May 1–November 25, active physician-based surveillance (APS) during June 1–September 30, and active laboratory-based surveillance (ALS) during July 1–September 30. Surveillance criteria included all hospitalized patients with encephalitis, meningoencephalitis, or GBS with fever or altered mental status and patients aged ≥17 years with aseptic meningitis. For EPS, public health staff provided surveillance criteria and laboratory testing information to health-care providers through medical rounds, biweekly alerts, and a special issue of the NYCDOH's medical bulletin. APS was conducted at 18 sentinel sites; infectious disease and critical-care specialists and neurologists and chief medical residents were contacted biweekly for reports of patients meeting surveillance criteria. Twelve sites participated in ALS; hospital microbiology laboratories submitted CSF specimen results with parameters suggesting viral etiology for testing on a weekly basis. APS and ALS sites were selected initially on the basis of 1999 WNV activity; additional sites were added during the season as increasing WNV activity in birds and mosquitoes was detected in Staten Island and south Brooklyn. All serum and CSF specimens were tested for WNV-reactive IgM by ELISA at the NYC Public Health Laboratory.

Of 512 patients tested, 205 (40%) had encephalitis or meningoencephalitis, 236 (46%) aseptic meningitis, 22 (4%) GBS, 41 (8%) other diagnoses, and eight (2%) unknown diagnoses; 56 (11%) did not meet surveillance criteria but were tested at their physicians' request. Fourteen NYC residents had WNV infection diagnosed; 11 (79%) infections were detected at APS hospitals and three (21%) at hospitals where only EPS was conducted.

West Nile Virus — Continued

Two patients with WNV infection reported by physicians were identified simultaneously through ALS.

New York State (excluding NYC)

During May 1–October 31, the New York State Department of Health (NYSDOH) and local units conducted EPS statewide and AS in counties with WNV activity in humans, birds, mosquitoes, or horses in 1999 or 2000; in April, NYSDOH implemented commercial laboratory surveillance. Surveillance criteria included all patients with viral encephalitis or meningoencephalitis and patients aged ≥2 years with aseptic meningitis. EPS included distributing alerts that encouraged physician reporting and specimen submission instructions to all local health units. Suggested activities for local health units conducting AS included weekly contact with medical staff at sentinel acute-care hospitals about patients meeting surveillance criteria. Commercial laboratories licensed by NYSDOH to perform arbovirus testing participated in surveillance by reporting patients who tested positive for antibodies to arboviral panels. Serum and CSF specimens from reported patients were tested for WNV infection at the New York Wadsworth Laboratory; testing included WNV-reactive IgM and IgG by ELISA, polymerase chain reaction, and plaque-reduction neutralization.

Of 589 patients tested, 230 (39%) had encephalitis or meningoencephalitis, 191 (32%) had aseptic meningitis, 89 (15%) did not meet surveillance criteria, and 79 (13%) were missing data to determine clinical status. Tested patients were not categorized by surveillance method. Commercial laboratory surveillance identified four patients who had flavivirus antibodies; investigation by local health units for travel and vaccination history and additional WNV testing indicated that none had a current or nontravel-related flavivirus infection. No human WNV infection was identified in New York outside of NYC.

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Editorial Note: In 2000, public health jurisdictions used active and passive surveillance approaches based on staff and laboratory resources and degree of WNV activity identified by bird, mosquito, and mammalian surveillance. AS fostered ongoing communication between health departments and health-care providers but had variable yield. Eleven of 14 WNV-confirmed patients from NYC but only one of six in New Jersey were identified at AS hospitals. AS could have identified a higher proportion of WNV illnesses in NYC because the location of AS coincided with the epicenter of the outbreak (Staten Island). In comparison with AS, EPS was less labor intensive for health-care providers and health department staff, and intense public awareness of WNV in the northeast United States may have improved EPS effectiveness, resulting in increased reporting. However, EPS did not provide direct education about WNV to health-care providers, and in the absence of media and public interest, EPS may have missed reports of suspect illnesses. To plan future surveillance strategies, jurisdictions should evaluate the costs and yields of active and passive WNV surveillance efforts in upcoming transmission seasons.

West Nile Virus — Continued

All jurisdictions focused surveillance on severe WNV manifestations. Serologic studies suggest that approximately one in 150 infected persons develop neurologic disease requiring hospitalization (*2,3*). By monitoring patients with severe disease, the number of infected persons can be estimated; however, jurisdictions with few nonhospitalized human WNV infections may not be identified. Surveillance among patients with mild and nonspecific symptoms (e.g., fever and headache) probably would exhaust laboratory and staff resources.

Most states did not conduct WNV testing on pediatric patients with meningitis in summer months because they most likely represented enteroviral infections (*4*). In addition, most 1999 human infections were identified in older hospitalized patients. Therefore, studies during outbreaks should be considered to determine the spectrum of clinical illness and the extent to which children are affected.

In 2001, EPS for hospitalized patients with encephalitis of unknown etiology is recommended for the continental United States (*5*). All suspect WNV illnesses should be screened by testing CSF and appropriately timed acute and convalescent serum specimens for IgM ELISA antibody. Appropriately timed acute and convalescent serum samples should be tested for a four-fold or greater rise in WNV-specific neutralizing antibody. With the availability of commercial laboratory testing for WNV, jurisdictions are encouraged to identify patients with commercial laboratory reports indicative of recent WNV infection and to verify these results by viral-specific neutralizing antibody testing. Monitoring of milder illnesses (e.g., aseptic meningitis or GBS) depends on jurisdictions' resources and should be a lower priority. AS should be considered in areas with known WNV activity on the basis of bird and mosquito surveillance data. Jurisdictions in the northeastern, central, and western United States should begin human surveillance by June 2001 or earlier if other surveillance activities, such as avian mortality surveillance, demonstrate WNV activity. WNV could circulate throughout the year in some areas, especially the Gulf States; therefore, human surveillance should be considered year round in southern states. Because the ELISA and hemagglutination-inhibition test can be cross-reactive between WNV, St. Louis encephalitis, yellow fever, dengue, and Powassan viruses, patients who test positive for antibodies to these viruses should be tested for specific neutralizing antibody.

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Progress Toward Poliomyelitis and Dracunculiasis Eradication — Sudan, 1999–2000

Sudan began poliomyelitis and dracunculiasis eradication activities in 1994 and 1995, respectively, in response to resolutions by the World Health Assembly of the World Health Organization (WHO) (*1–4*). Sudan poses special obstacles to global eradication campaigns as a result of the disruption caused by ongoing civil war in the vast southern part of the country. The activities of both programs are summarized in this report, which indicated that substantial progress was made to eradicate polio and control of dracunculiasis improved slightly. Continued commitment of resources, access to persons in areas of conflict, and a peaceful resolution of civil unrest are needed to eradicate both diseases.

Polio

Reported routine coverage with three doses of oral poliovirus vaccine (OPV) was 90% in northern Sudan in 1999; preliminary data for 2000 suggest that coverage was approximately 70%. In southern Sudan, routine OPV coverage was an estimated 20%, with the lowest coverage in the Upper Nile (Operation Lifeline Sudan, southern sector, unpublished data, 1999).

During 1996–2000, routine coverage was supplemented by national immunization days (NIDs) (i.e., mass campaigns that occur over a short period, in which two OPV doses are administered usually to children aged <5 years) and subnational immunization days (SNIDs) (i.e., mass campaigns conducted in large areas of a country). During 2000, four rounds of NIDs and one round of SNIDs were conducted in northern Sudan and government-controlled areas of the south. During 1996–2000, the number of children vaccinated during NIDs increased from 3.3 to 5.4 million. During 1998–2000, two NIDs rounds* were conducted annually in southern Sudan. Approximately 1.1 million children were vaccinated during the 2000 NIDs. Health-care workers traveling door-to-door to virtually inaccessible border and remote areas vaccinated an additional 500,000 children.

During 1999–2000, acute flaccid paralysis (AFP) surveillance improved, and the performance and reliability of the national poliovirus laboratory improved; it is now accredited by WHO. In the northern states and areas of the government-controlled south, the nonpolio AFP rate† increased from 0.4 in 1999 to 1.3 in 2000, and adequate stool specimen§ collection from persons with AFP increased from 38% to 51% (Table 1). During the same period, the number of virologically confirmed polio cases decreased from nine to four. In southern Sudan, AFP surveillance began in 1998 and has expanded to approximately 200 sentinel reporting sites. One wild poliovirus was isolated in 1999 and none in 2000; the nonpolio AFP rate increased from 0.5 to 1.6.

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*In southern Sudan, NIDs were implemented with the cooperation of local health authorities and the government of Sudan, and were supported by national and international nongovernment organizations, Rotary International, the United Nations Foundation, WHO, the United Nations Children's Fund (UNICEF), the UNICEF national committees of the United States and the United Kingdom, and CDC.

† Number of nonpolio AFP case-patients per 100,000 population aged <15 years. A nonpolio AFP rate of one or more nonpolio AFP cases per 100,000 children aged <15 years is the WHO-established minimum indicative of a sensitive surveillance system.

§ Two stool specimens that are collected 24 to 48 hours apart, within 14 days of paralysis onset, and that arrive at the laboratory in good condition.

Poliomyelitis and Dracunculiasis — Continued

TABLE 1. Poliomyelitis surveillance indicators, by region — Sudan, 1999 and 2000

	Northern Sudan*		Southern Sudan	
Indicators	**1999**	**2000**	**1999**	**2000**
AFP cases	90	210	31	59
Nonpolio AFP rate†	0.4	1.3	0.5	1.6
Clinically confirmed polio cases	34	54	17	12
Virologically confirmed polio cases	9	4	1	0
Percentage of persons with AFP with adequate stool samples§	38	51	42	39

* Includes government-controlled areas of the south.
† Number of nonpolio AFP case-patients per 100,000 population aged <15 years.
§ Two stool specimens collected 24 to 48 hours apart, within 14 days of paralysis onset, and arrive at the laboratory in good condition.

Dracunculiasis

Dracunculiasis (i.e., Guinea worm disease) is a parasitic infection acquired by drinking water from ponds contaminated by copepods (water fleas) that contain immature forms of the parasite. A year after the initial infection, the 30-inch (1 meter) worm(s) emerge through the skin, usually on the lower leg. Re-infection can occur; each infection lasts approximately 1 year. The peak transmission season in Sudan is May–September. No effective treatment exists; however, several measures can prevent transmission: boiling drinking water or filtering it through a finely woven cloth, preventing persons with an emerging worm from entering water, providing clean water from bore-hole wells, and treating unsafe water sources with the larvicide Abate®¶ (temephos). Ideally, health-care workers contain the disease by detecting the infected person before or within 24 hours of worm emergence and apply control measures immediately.

Since Sudan's Guinea Worm Eradication Program began during the nationwide "Guinea Worm Cease Fire" in 1995, more progress has been made in the northern part than in the southern part of the country, which has a higher incidence of dracunculiasis (*5*) (Figure 1); 41 indigenous cases were reported in the northern states in 2000, a decrease of 77% from the 181 reported in those states during the same period in 1999. Another 49 cases were detected in persons displaced to the northern states from the embattled southern part of the country. Of these 90 cases, 72 (80%) were contained (Table 2); 90% of the remaining villages in the northern states where dracunculiasis is endemic have at least one safe source of drinking water, and 75% of the population has been educated about preventing the disease. Among all villages where disease is endemic, 3% have water treated with Abate®.

Progress in the south was limited during 2000 because of increased civil unrest. Several international nongovernment organizations withdrew from 548 (8%) southern villages where dracunculiasis is endemic because of a dispute with the forces that control much of the south. Most control indicators improved only slightly in 2000 compared

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

Poliomyelitis and Dracunculiasis — Continued

FIGURE 1. States reporting cases of dracunculiasis — Guinea Worm Eradication Program, Sudan, 2000

with 1999. The eradication program distributed approximately one million filters to households at risk and conducted approximately 30,000 health education sessions. During 2000, some southern states made progress; North Bahr al Ghazal reported 1097 cases, a 62% decrease from 2902 reported in 1999, and Lakes (Buheirat) reported 8227 cases, a 61% decrease from 21,102. The percentage of villages where dracunculiasis is endemic that submitted reports changed only slightly over this period, and the reliability of the reported decreases is uncertain because of variable access to the area.

Reported by: Sudan Country Office, World Health Organization, Khartoum, Sudan. WHO Suboffice for south Sudan, World Health Organization, Nairobi, Kenya. Eastern Mediterranean Regional Office, World Health Organization, Cairo, Egypt. Vaccines and Biologicals Dept, World Health Organization; WHO Collaborating Center for Research, Training and Eradication of Dracunculiasis, Geneva, Switzerland. Global 2000, the Carter Center, Atlanta, Georgia. Div of Parasitic Diseases, National Center for Infectious Diseases; Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program; and an EIS Officer, CDC.

Editorial Note: Progress in Sudan during 1999–2000 demonstrates that key polio and Guinea worm eradication strategies can have some success in countries experiencing internal conflict. Sudan's polio and dracunculiasis eradication programs have collaborated since 1995. Children were vaccinated against polio during the Guinea Worm Cease Fire,

TABLE 2. Provisional number of known, reporting, and accessible and served villages; percentage of villages with interventions; and number of cases reported and percentage contained, by state where dracunculiasis is endemic — Sudan, 2000

	Villages where dracunculiasis is endemic									
							(%) all	(%)	Cases	
State	Total known	Accessible and served	Total reporting	Reporting ≥1 cases	(%) reporting monthly	(%) health education	households with filters	with safe drinking water	No. reported	(%) contained
Warab	1,813	783	585	562	(18%)	(32%)	(23%)	(38%)	18,490	(44%)
Jonglei	2,234	1,042	1,251	794	(23%)	(38%)	(38%)	(30%)	17,458	(32%)
Buheirat (Lakes)	1,204	1,012	982	699	(51%)	(74%)	(33%)	(53%)	8,227	(46%)
Bahr al Jabal	360	360	333	262	(62%)	(87%)	(40%)	(38%)	3,335	(54%)
Upper Nile	200	200	125	122	(47%)	(40%)	(9%)	(19%)	2,207	(33%)
East Equatoria	295	261	202	147	(62%)	(59%)	(10%)	(60%)	1,831	(65%)
West Bahr al Ghazal	257	255	250	182	(87%)	(89%)	(73%)	(97%)	1,181	(64%)
North Bahr al Ghazal	807	710	704	340	(63%)	(71%)	(59%)	(81%)	1,097	(54%)
West Equatoria	446	446	428	144	(49%)	(96%)	(32%)	(36%)	513	(52%)
Unity	195	142	141	99	(56%)	(52%)	(31%)	(27%)	395	(35%)
West Kurdufan	38	38	38	12	(100%)	(84%)	(76%)	(92%)	30	(77%)
Sinnar	9	9	9	4	(100%)	(56%)	(78%)	(67%)	22	(82%)
North Darfur	10	10	10	6	(100%)	(100%)	(100%)	(100%)	15	(100%)
South Kurdufan	13	13	13	4	(95%)	(85%)	(92%)	(100%)	12	(67%)
White Nile	6	6	6	2	(100%)	(100%)	(50%)	(83%)	6	(100%)
South Darfur	6	6	6	4	(97%)	(100%)	(33%)	(67%)	4	(25%)
Blue Nile	5	5	5	1	(100%)	(100%)	(40%)	(100%)	1	(100%)
Khartoum	1	1	1	0	(100%)	(100%)	(0%)	(100%)	0	(0%)
Total	**7,899**	**5,299**	**5,089**	**3,384**	**(38%)**	**(54%)**	**(30%)**	**(45%)**	**54,824**	**(42%)**

Poliomyelitis and Dracunculiasis — Continued

and Guinea worm program workers have assisted during NIDs. During 1999 and 2000 NIDs, health-care workers from both programs distributed 16,000 t-shirts with a polio message on the front and a Guinea worm message on the back.

Substantial progress toward polio eradication was made during 1999–2000; the nonpolio AFP rate tripled and the quality of NIDs and SNIDs implementation, local planning, supervision, and training improved. Polio eradication in Sudan will require improving stool specimen collection, expanding and strengthening the AFP surveillance system, and multiple supplemental vaccination campaigns.

Approximately 73% of reported dracunculiasis cases worldwide are from southern Sudan, making it the main source of exported cases to the northern part of the country and to Central African Republic, Ethiopia, Kenya, and Uganda. Dracunculiasis eradication will require maintaining surveillance to identify case-patients and villages where dracunculiasis is endemic, rapidly implementing control measures, and a peaceful resolution to the war. To eradicate both illnesses will require sustained national commitment with multisectoral governmental support, ensured access to persons living in areas of conflict, ongoing coordination between the northern states and rebel-held areas in southern states, and international partners to provide human and financial resources are needed to eradicate both diseases.

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2. World Health Assembly. Elimination of dracunculiasis: resolution of the 44th World Health Assembly. Geneva, Switzerland: World Health Organization, 1991 (resolution no. WHA 44.5).
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4. CDC. Progress toward poliomyelitis eradication—Eastern Mediterranean Region, 1999–September 2000. MMWR 2000;49:1024–8.
5. CDC. Progress toward global dracunculiasis eradication, June 2000. MMWR 2000;49:731–5.

Notice to Readers

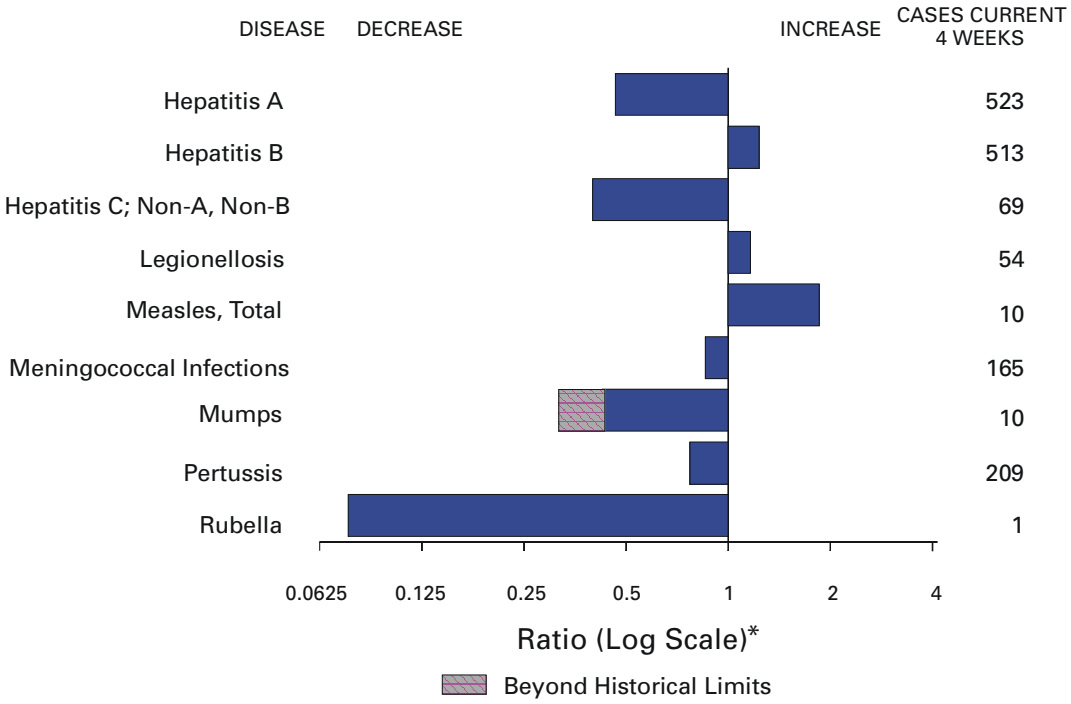
Revision of Guidelines for Surveillance, Prevention, and Control of West Nile Virus Infection

The revised "Guidelines for Surveillance, Prevention, and Control of West Nile Virus Infection—United States, 2001," is now available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/publications.htm. The revision of the 2000 Guidelines (*1*) was derived from discussions during the national meeting on West Nile virus held in Charlotte, North Carolina, during January 31–February 4, 2001 (*2*).

References

1. CDC. Guidelines for surveillance, prevention, and control of West Nile virus infection—United States. MMWR 2000;49:25–8.
2. Gubler DJ, Campbell GL, Petersen L, Roehrig JT. West Nile virus in the United States: guidelines for detection, prevention and control. Vir Immunol 2000;13:469–75.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending April 7, 2001, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 7, 2001 (14th Week)

	Cum. 2001		Cum. 2001
Anthrax	-	Poliomyelitis, paralytic	-
Brucellosis*	15	Psittacosis*	3
Cholera	-	Q fever*	3
Cyclosporiasis*	30	Rabies, human	-
Diphtheria	-	Rocky Mountain spotted fever (RMSF)	28
Ehrlichiosis: human granulocytic (HGE)*	7	Rubella, congenital syndrome	-
human monocytic (HME)*	3	Streptococcal disease, invasive, group A	972
Encephalitis: California serogroup viral*	-	Streptococcal toxic-shock syndrome*	17
eastern equine*	-	Syphilis, congenital¶	14
St. Louis*	-	Tetanus	2
western equine*	-	Toxic-shock syndrome	40
Hansen disease (leprosy)*	13	Trichinosis	5
Hantavirus pulmonary syndrome*†	2	Tularemia*	5
Hemolytic uremic syndrome, postdiarrheal*	14	Typhoid fever	43
HIV infection, pediatric*§	37	Yellow fever	-
Plague	-		

-: 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 from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update February 27, 2001.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 7, 2001, and April 8, 2000 (14th Week)

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7*			
							NETSS		PHLIS	
	Cum. 2001§	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	5,820	9,320	161,337	180,243	354	370	246	379	156	300
NEW ENGLAND	200	653	5,452	6,244	13	25	30	38	23	36
Maine	3	11	276	360	-	3	3	3	3	3
N.H.	12	9	291	297	-	-	5	4	3	4
Vt.	9	-	152	152	5	8	1	1	-	2
Mass.	118	439	2,328	2,648	4	7	16	17	11	13
R.I.	24	20	800	633	2	2	-	-	2	-
Conn.	34	174	1,605	2,154	2	5	5	13	4	14
MID. ATLANTIC	1,180	2,343	14,772	16,977	40	75	22	41	10	48
Upstate N.Y.	29	102	N	N	18	18	17	36	6	37
N.Y. City	740	1,428	7,432	7,124	20	53	-	4	1	1
N.J.	241	481	1,264	3,585	1	1	5	1	3	4
Pa.	170	332	6,076	6,268	1	3	N	N	-	6
E.N. CENTRAL	463	850	20,004	31,043	105	74	52	71	18	22
Ohio	77	112	437	8,390	28	14	19	15	10	7
Ind.	45	75	3,304	3,581	14	3	9	6	1	8
Ill.	226	535	6,014	8,830	-	7	9	23	4	-
Mich.	97	99	7,815	5,831	28	10	11	12	-	3
Wis.	18	29	2,434	4,411	35	40	4	15	3	4
W.N. CENTRAL	110	164	8,630	10,276	15	22	21	58	18	61
Minn.	29	36	1,648	2,159	-	4	3	11	8	28
Iowa	15	13	990	1,139	7	3	3	12	2	6
Mo.	38	72	2,867	3,530	4	6	10	24	5	14
N. Dak.	1	-	240	264	-	1	-	2	-	4
S. Dak.	-	2	499	483	1	3	1	1	1	1
Nebr.	9	9	768	1,015	3	2	-	4	-	5
Kans.	18	32	1,618	1,686	-	3	4	4	2	3
S. ATLANTIC	1,673	2,492	34,304	34,061	81	53	32	33	14	21
Del.	37	44	829	812	1	1	-	-	-	-
Md.	131	267	3,498	3,216	19	5	1	5	-	1
D.C.	166	186	843	808	3	-	-	-	U	U
Va.	137	158	4,649	3,993	6	2	6	6	5	5
W. Va.	12	13	599	575	-	-	1	2	-	1
N.C.	101	101	5,533	5,495	11	4	15	8	5	2
S.C.	171	174	3,428	4,140	-	-	1	2	-	-
Ga.	187	293	6,869	6,434	25	32	3	3	2	6
Fla.	731	1,256	8,056	8,588	16	9	5	7	2	6
E.S. CENTRAL	360	343	13,230	13,613	11	11	9	21	8	18
Ky.	51	56	2,352	2,166	1	-	1	7	2	6
Tenn.	132	133	3,994	3,815	2	1	4	7	5	10
Ala.	95	100	3,590	4,593	4	7	4	1	-	-
Miss.	82	54	3,294	3,039	4	3	-	6	1	2
W.S. CENTRAL	629	757	26,267	26,748	6	18	18	21	20	34
Ark.	45	30	2,224	1,372	2	1	-	4	-	3
La.	188	124	4,727	5,013	3	2	-	-	7	8
Okla.	36	31	2,520	2,317	1	1	6	4	5	3
Tex.	360	572	16,796	18,046	-	14	12	13	8	20
MOUNTAIN	241	289	8,137	10,557	34	27	26	34	16	16
Mont.	5	5	398	331	1	1	2	8	-	-
Idaho	5	4	508	518	5	3	3	4	-	1
Wyo.	-	1	175	202	-	2	-	3	-	2
Colo.	40	62	751	3,047	12	8	12	12	8	6
N. Mex.	15	40	1,520	1,301	8	1	1	-	-	-
Ariz.	93	92	3,425	3,435	1	3	5	5	4	5
Utah	23	30	279	697	7	7	2	1	3	1
Nev.	60	55	1,081	1,026	-	2	1	1	1	1
PACIFIC	964	1,429	30,541	30,724	49	65	36	62	29	44
Wash.	117	141	3,716	3,402	N	U	8	8	8	17
Oreg.	38	35	118	1,772	2	2	3	9	3	9
Calif.	798	1,215	25,202	24,148	47	63	25	39	16	13
Alaska	2	5	640	647	-	-	-	1	-	1
Hawaii	9	33	865	755	-	-	-	5	2	4
Guam	5	13	-	-	-	-	N	N	U	U
P.R.	158	184	1,451	U	-	-	-	1	U	U
V.I.	1	11	U	U	U	U	U	U	U	U
Amer. Samoa	-	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	U	U	U	U	U	U	U

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

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

† Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update February 27, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 7, 2001, and April 8, 2000 (14th Week)

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Listeriosis	Lyme Disease	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	76,692	92,868	446	879	173	183	78	521	1,093
NEW ENGLAND	1,507	1,730	5	5	7	16	10	141	166
Maine	37	21	-	-	-	2	-	-	-
N.H.	33	25	-	-	1	2	-	42	17
Vt.	23	14	3	2	3	-	-	1	-
Mass.	702	696	2	3	2	9	6	19	59
R.I.	201	159	-	-	-	-	-	-	-
Conn.	511	815	-	-	1	3	4	79	90
MID. ATLANTIC	8,829	9,530	22	181	16	37	8	246	737
Upstate N.Y.	1,839	1,514	13	13	11	15	3	190	274
N.Y. City	3,210	3,083	-	-	3	5	1	-	26
N.J.	774	2,052	-	160	1	1	1	-	95
Pa.	3,006	2,881	9	8	1	16	3	56	342
E.N. CENTRAL	10,661	18,806	54	69	54	53	8	11	26
Ohio	297	4,673	4	-	28	24	1	11	3
Ind.	1,455	1,600	-	-	6	8	1	-	-
Ill.	3,752	6,172	3	9	-	5	-	-	1
Mich.	4,393	4,455	47	60	14	8	5	-	-
Wis.	764	1,906	-	-	6	8	1	U	22
W.N. CENTRAL	3,632	4,347	81	123	13	9	2	16	15
Minn.	494	837	-	-	1	1	-	10	6
Iowa	282	268	-	-	3	3	-	-	-
Mo.	1,827	2,128	77	117	6	3	1	4	4
N. Dak.	9	13	-	-	-	-	-	-	-
S. Dak.	56	66	-	-	-	1	-	-	-
Nebr.	247	338	2	2	2	-	-	1	1
Kans.	717	697	2	4	1	1	1	1	4
S. ATLANTIC	21,112	25,803	29	19	24	36	15	87	120
Del.	439	435	-	1	-	2	-	-	16
Md.	2,127	2,221	10	3	6	11	2	76	88
D.C.	857	597	-	-	1	-	-	6	-
Va.	2,494	2,665	-	-	4	3	2	2	6
W. Va.	129	157	1	2	N	N	1	1	4
N.C.	4,440	4,874	7	7	2	4	-	2	4
S.C.	2,502	4,848	2	-	-	2	-	-	-
Ga.	3,588	4,047	-	-	2	2	4	-	-
Fla.	4,536	5,959	9	6	9	12	6	-	2
E.S. CENTRAL	8,552	9,556	63	135	16	5	6	2	1
Ky.	932	889	3	15	6	3	1	2	-
Tenn.	2,622	2,916	16	26	6	1	3	-	1
Ala.	2,960	3,430	1	3	2	1	2	-	-
Miss.	2,038	2,321	43	91	2	-	-	-	-
W.S. CENTRAL	13,034	13,958	139	267	3	4	2	-	6
Ark.	1,451	651	2	3	-	-	1	-	-
La.	3,207	3,553	55	157	2	2	-	-	2
Okla.	1,202	1,041	1	-	1	-	-	-	-
Tex.	7,174	8,713	81	107	-	2	1	-	4
MOUNTAIN	2,559	2,873	22	29	11	12	7	1	-
Mont.	19	7	-	1	-	-	-	-	-
Idaho	26	25	1	-	-	1	-	-	-
Wyo.	15	17	3	1	-	-	-	-	-
Colo.	900	934	8	11	4	6	1	-	-
N. Mex.	272	274	6	4	1	-	2	-	-
Ariz.	921	1,165	1	9	4	2	1	-	-
Utah	26	88	-	-	1	3	1	-	-
Nev.	380	363	3	3	1	-	2	1	-
PACIFIC	6,806	6,265	31	51	29	11	20	17	22
Wash.	837	619	9	6	5	5	1	1	-
Oreg.	20	231	1	12	N	N	-	-	2
Calif.	5,715	5,239	21	33	24	6	19	16	20
Alaska	75	73	-	-	-	-	-	-	-
Hawaii	159	103	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-
P.R.	364	131	-	1	2	-	-	N	N
V.I.	U	U	U	U	U	U	-	U	U
Amer. Samoa	U	U	U	U	U	U	-	U	U
C.N.M.I.	U	U	U	U	U	U	-	U	U

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

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 7, 2001, and April 8, 2000 (14th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
					NETSS		PHLIS	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	198	237	1,163	1,459	5,025	6,297	4,182	5,880
NEW ENGLAND	17	10	131	163	418	411	388	438
Maine	1	1	18	43	27	31	17	22
N.H.	1	-	5	3	35	24	29	26
Vt.	-	1	26	9	20	31	18	35
Mass.	5	6	36	48	253	240	204	239
R.I.	-	-	14	9	21	9	35	30
Conn.	10	2	32	51	62	76	85	86
MID. ATLANTIC	33	46	182	236	401	929	556	1,101
Upstate N.Y.	9	12	149	175	174	197	64	278
N.Y. City	15	24	1	3	185	273	251	302
N.J.	6	5	31	34	-	269	111	204
Pa.	3	5	1	24	42	190	130	317
E.N. CENTRAL	26	31	4	14	742	962	637	521
Ohio	5	3	-	2	288	207	221	180
Ind.	8	1	1	-	62	87	59	111
Ill.	-	16	-	-	181	348	179	1
Mich.	13	9	3	6	139	150	119	159
Wis.	-	2	-	6	72	170	59	70
W.N. CENTRAL	5	13	81	121	307	292	337	410
Minn.	1	4	15	22	31	38	109	121
Iowa	1	-	15	16	56	37	52	45
Mo.	2	1	5	3	115	97	117	123
N. Dak.	-	-	14	21	1	4	9	18
S. Dak.	-	-	9	33	23	16	12	25
Nebr.	-	2	-	-	31	45	-	35
Kans.	1	6	23	26	50	55	38	43
S. ATLANTIC	56	55	515	509	1,298	1,081	860	907
Del.	1	-	10	10	23	17	23	25
Md.	23	23	88	112	147	168	151	169
D.C.	4	-	-	-	18	-	U	U
Va.	11	15	96	123	152	120	100	125
W. Va.	-	-	36	30	9	28	18	22
N.C.	1	6	134	127	258	190	160	135
S.C.	2	-	27	32	149	94	174	82
Ga.	3	1	68	45	196	173	188	267
Fla.	11	10	56	30	346	291	46	82
E.S. CENTRAL	8	10	35	45	335	317	173	254
Ky.	2	2	5	9	61	68	33	46
Tenn.	3	1	25	28	91	64	98	112
Ala.	3	6	5	8	130	111	31	81
Miss.	-	1	-	-	53	74	11	15
W.S. CENTRAL	3	3	80	266	390	606	369	397
Ark.	-	-	-	-	57	59	29	32
La.	1	3	-	-	57	66	116	81
Okla.	1	-	21	18	27	59	26	51
Tex.	1	-	59	248	249	422	198	233
MOUNTAIN	16	15	41	46	393	533	305	488
Mont.	1	1	5	10	12	20	-	-
Idaho	1	-	-	-	18	34	4	33
Wyo.	-	-	10	22	9	8	6	6
Colo.	9	8	-	-	114	148	100	140
N. Mex.	1	-	1	3	48	51	47	45
Ariz.	1	2	25	11	126	157	81	146
Utah	2	2	-	-	44	75	44	78
Nev.	1	2	-	-	22	40	23	40
PACIFIC	34	54	94	59	741	1,166	557	1,364
Wash.	1	3	-	-	85	73	144	147
Oreg.	-	9	-	-	5	76	53	101
Calif.	32	40	66	51	642	948	284	1,054
Alaska	1	-	28	8	9	16	-	16
Hawaii	-	2	-	-	-	53	76	46
Guam	-	-	-	-	-	-	U	U
P.R.	-	2	42	14	75	90	U	U
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

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

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 7, 2001, and April 8, 2000 (14th Week)

Reporting Area	Shigellosis* NETSS Cum. 2001	Shigellosis* NETSS Cum. 2000	Shigellosis* PHLIS Cum. 2001	Shigellosis* PHLIS Cum. 2000	Syphilis (Primary & Secondary) Cum. 2001	Syphilis (Primary & Secondary) Cum. 2000	Tuberculosis Cum. 2001	Tuberculosis Cum. 2000
UNITED STATES	2,566	4,060	1,383	2,524	1,308	1,740	2,202	2,937
NEW ENGLAND	39	83	46	65	11	23	82	84
Maine	1	2	1	-	-	-	-	2
N.H.	1	1	1	1	1	-	6	2
Vt.	-	1	-	-	-	-	1	-
Mass.	28	60	28	45	7	19	47	48
R.I.	2	6	5	7	-	1	6	7
Conn.	7	13	11	12	3	3	22	25
MID. ATLANTIC	233	578	205	390	84	81	494	497
Upstate N.Y.	117	183	2	112	4	3	63	45
N.Y. City	88	295	120	163	61	36	255	293
N.J.	-	62	39	58	9	16	110	123
Pa.	28	38	44	57	10	26	66	36
E.N. CENTRAL	393	667	223	242	186	374	232	291
Ohio	118	39	65	33	21	21	41	51
Ind.	71	78	13	17	35	121	20	23
Ill.	100	261	84	2	31	125	116	172
Mich.	82	216	57	183	92	88	33	24
Wis.	22	73	4	7	7	19	22	21
W.N. CENTRAL	275	234	253	192	13	30	100	117
Minn.	66	43	132	60	6	3	53	43
Iowa	59	40	56	45	-	8	9	8
Mo.	77	116	49	68	6	15	23	48
N. Dak.	9	1	1	1	-	-	-	-
S. Dak.	15	1	1	-	-	-	2	3
Nebr.	22	21	-	11	-	2	13	3
Kans.	27	12	14	7	1	2	-	12
S. ATLANTIC	420	476	130	146	533	567	443	503
Del.	3	3	2	2	2	2	-	-
Md.	31	27	10	10	66	97	41	60
D.C.	16	-	U	U	12	17	13	-
Va.	29	16	15	21	46	36	46	52
W. Va.	4	2	6	2	-	1	8	9
N.C.	102	32	51	16	135	151	67	72
S.C.	29	5	17	4	79	57	19	18
Ga.	56	56	25	57	53	95	98	128
Fla.	150	335	4	34	140	111	151	164
E.S. CENTRAL	237	181	71	135	152	257	156	211
Ky.	88	39	25	22	12	22	15	20
Tenn.	25	86	23	106	83	167	43	82
Ala.	58	9	17	5	27	35	74	71
Miss.	66	47	6	2	30	33	24	38
W.S. CENTRAL	378	634	246	207	186	240	170	484
Ark.	141	58	65	17	14	17	34	37
La.	15	78	49	38	39	65	-	25
Okla.	4	8	-	6	22	51	27	19
Tex.	218	490	132	146	111	107	109	403
MOUNTAIN	177	254	110	147	46	47	77	115
Mont.	-	1	-	-	-	-	-	4
Idaho	5	23	-	16	-	-	4	-
Wyo.	-	1	-	1	-	-	-	-
Colo.	39	42	29	21	2	1	25	12
N. Mex.	34	25	27	15	4	6	5	17
Ariz.	76	97	36	41	32	38	23	41
Utah	10	14	10	18	6	-	5	7
Nev.	13	51	8	35	2	2	15	34
PACIFIC	414	953	99	1,000	97	121	448	635
Wash.	49	187	62	212	19	12	45	54
Oreg.	2	83	26	49	-	3	-	20
Calif.	361	666	-	728	75	106	393	516
Alaska	2	6	-	3	-	-	10	15
Hawaii	-	11	11	8	3	-	-	30
Guam	-	-	U	U	-	-	-	-
P.R.	7	14	U	U	96	47	38	21
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

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

*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 7, 2001, and April 8, 2000 (14th Week)

Reporting Area	*H. influenzae*, Invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
			A		B		Indigenous		Imported*		Total	
	Cum. 2001†	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	361	392	2,231	3,433	1,528	1,563	1	13	-	15	28	9
NEW ENGLAND	14	32	97	91	15	25	-	3	-	1	4	-
Maine	1	1	1	5	1	1	-	-	-	-	-	-
N.H.	-	6	5	8	6	6	-	-	-	-	-	-
Vt.	-	3	2	3	1	3	-	1	-	-	1	-
Mass.	13	18	35	39	1	1	-	2	-	1	3	-
R.I.	-	-	4	5	6	2	-	-	-	-	-	-
Conn.	-	4	50	31	-	12	-	-	-	-	-	-
MID. ATLANTIC	41	57	155	225	196	263	-	1	-	4	5	-
Upstate N.Y.	14	23	55	63	33	26	-	-	-	4	4	-
N.Y. City	17	19	85	124	104	147	-	-	-	-	-	-
N.J.	9	11	-	-	44	12	-	-	-	-	-	-
Pa.	1	4	15	38	15	78	-	1	-	-	1	-
E.N. CENTRAL	42	60	244	483	180	141	-	-	-	7	7	3
Ohio	24	17	76	104	34	30	-	-	-	2	2	2
Ind.	10	5	20	12	4	5	-	-	-	2	2	-
Ill.	4	24	52	207	14	2	-	-	-	3	3	-
Mich.	1	3	96	147	128	103	-	-	-	-	-	1
Wis.	3	11	-	13	-	1	-	-	-	-	-	-
W.N. CENTRAL	14	12	127	288	54	81	-	4	-	-	4	-
Minn.	6	7	7	28	4	4	-	1	-	-	1	-
Iowa	1	-	10	31	5	11	-	-	-	-	-	-
Mo.	6	4	41	181	35	53	-	3	-	-	3	-
N. Dak.	-	1	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	1	-	1	-	-	-	-	-	-	-
Nebr.	1	-	17	10	5	9	-	-	-	-	-	-
Kans.	-	-	51	38	4	4	-	-	-	-	-	-
S. ATLANTIC	138	100	477	358	349	279	1	3	-	1	4	-
Del.	-	-	-	6	-	4	-	-	-	-	-	-
Md.	37	27	66	44	41	44	-	2	-	1	3	-
D.C.	-	-	13	-	3	-	-	-	-	-	-	-
Va.	9	20	38	46	35	38	-	-	-	-	-	-
W. Va.	4	3	1	30	3	2	-	-	-	-	-	-
N.C.	20	8	34	63	80	81	-	-	-	-	-	-
S.C.	2	4	17	11	1	2	-	-	-	-	-	-
Ga.	29	26	155	47	94	45	1	1	-	-	1	-
Fla.	37	12	153	111	92	63	-	-	-	-	-	-
E.S. CENTRAL	24	17	77	146	96	113	-	-	-	-	-	-
Ky.	1	9	8	14	11	17	-	-	-	-	-	-
Tenn.	12	5	35	51	36	52	-	-	-	-	-	-
Ala.	10	3	30	21	28	9	-	-	-	-	-	-
Miss.	1	-	4	60	21	35	-	-	-	-	-	-
W.S. CENTRAL	8	22	321	658	208	177	-	1	-	-	1	-
Ark.	-	-	16	51	26	20	-	-	-	-	-	-
La.	2	7	19	28	12	44	-	-	-	-	-	-
Okla.	6	15	50	101	23	22	-	-	-	-	-	-
Tex.	-	-	236	478	147	91	-	1	-	-	1	-
MOUNTAIN	72	46	229	240	145	124	-	-	-	1	1	-
Mont.	-	-	4	1	1	3	-	-	-	-	-	-
Idaho	1	2	25	11	4	4	-	-	-	1	1	-
Wyo.	-	-	1	3	-	-	U	-	U	-	-	-
Colo.	14	11	27	51	31	26	-	-	-	-	-	-
N. Mex.	10	11	7	27	40	41	-	-	-	-	-	-
Ariz.	38	17	114	113	52	37	-	-	-	-	-	-
Utah	2	3	21	17	5	3	-	-	-	-	-	-
Nev.	7	2	30	17	12	10	-	-	-	-	-	-
PACIFIC	8	46	504	944	285	360	-	1	-	1	2	6
Wash.	1	2	21	57	23	16	-	-	-	-	-	3
Oreg.	1	15	7	73	4	32	-	-	-	-	-	-
Calif.	5	16	466	804	254	305	-	1	-	1	2	3
Alaska	1	1	10	4	4	2	-	-	-	-	-	-
Hawaii	-	12	-	6	-	5	-	-	-	-	-	-
Guam	-	-	-	-	-	-	U	-	U	-	-	-
P.R.	-	2	28	102	15	72	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U	U	U	U	U

N: Not notifiable. U: Unavailable. - : No reported cases.
*For imported measles, cases include only those resulting from importation from other countries.
† Of 69 cases among children aged <5 years, serotype was reported for 34, and of those, 7 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 7, 2001, and April 8, 2000 (14th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000
UNITED STATES	782	757	1	32	126	48	1,267	1,315	-	3	14
NEW ENGLAND	51	43	-	-	2	-	212	367	-	-	5
Maine	-	3	-	-	-	-	-	9	-	-	-
N.H.	5	3	-	-	-	-	16	48	-	-	1
Vt.	4	2	-	-	-	-	22	64	-	-	-
Mass.	29	27	-	-	-	-	168	230	-	-	3
R.I.	1	2	-	-	1	-	-	5	-	-	-
Conn.	12	6	-	-	1	-	6	11	-	-	1
MID. ATLANTIC	65	72	-	-	7	5	77	102	-	1	2
Upstate N.Y.	27	14	-	-	5	5	67	65	-	1	2
N.Y. City	16	22	-	-	-	-	-	-	-	-	-
N.J.	21	16	-	-	-	-	2	-	-	-	-
Pa.	1	20	-	-	2	-	8	37	-	-	-
E.N. CENTRAL	96	132	-	5	14	8	154	185	-	1	-
Ohio	34	23	-	1	4	4	106	108	-	-	-
Ind.	17	16	-	-	-	-	5	9	-	-	-
Ill.	18	37	-	3	3	4	11	18	-	1	-
Mich.	18	41	-	1	6	-	15	12	-	-	-
Wis.	9	15	-	-	1	-	17	38	-	-	-
W.N. CENTRAL	52	45	-	1	6	-	38	37	-	-	1
Minn.	5	3	-	-	-	-	-	15	-	-	-
Iowa	13	12	-	-	3	-	3	7	-	-	-
Mo.	20	24	-	-	1	-	23	5	-	-	-
N. Dak.	2	1	-	-	-	-	-	1	-	-	-
S. Dak.	2	2	-	-	-	-	2	1	-	-	-
Nebr.	2	2	-	-	1	-	-	2	-	-	1
Kans.	8	1	-	1	1	-	10	6	-	-	-
S. ATLANTIC	158	111	-	4	16	4	61	96	-	1	2
Del.	-	-	-	-	-	-	-	1	-	-	-
Md.	21	12	-	2	6	-	12	29	-	-	-
D.C.	-	-	-	-	-	-	-	-	-	-	-
Va.	17	19	-	1	2	2	8	5	-	-	-
W. Va.	4	3	-	-	-	-	1	-	-	-	-
N.C.	39	20	-	-	2	-	23	28	-	-	-
S.C.	14	6	-	1	5	1	8	14	-	-	1
Ga.	22	21	-	-	-	-	2	9	-	1	-
Fla.	41	30	-	-	1	1	7	10	-	-	1
E.S. CENTRAL	54	51	-	-	1	3	27	33	-	-	-
Ky.	10	10	-	-	-	-	6	22	-	-	-
Tenn.	21	22	-	-	-	3	16	2	-	-	-
Ala.	19	14	-	-	1	-	2	8	-	-	-
Miss.	4	5	-	-	-	-	3	1	-	-	-
W.S. CENTRAL	118	83	1	4	14	5	20	23	-	-	3
Ark.	8	5	-	1	1	-	2	5	-	-	-
La.	38	25	-	1	3	-	-	3	-	-	-
Okla.	13	10	-	-	-	-	1	-	-	-	-
Tex.	59	43	1	2	10	5	17	15	-	-	3
MOUNTAIN	46	48	-	4	7	22	594	228	-	-	-
Mont.	-	1	-	-	1	-	3	1	-	-	-
Idaho	3	6	-	-	-	5	156	32	-	-	-
Wyo.	-	-	U	1	-	U	-	-	U	-	-
Colo.	18	12	-	1	1	8	131	141	-	-	-
N. Mex.	8	7	-	2	1	1	16	35	-	-	-
Ariz.	9	15	-	-	-	8	278	11	-	-	-
Utah	5	5	-	-	2	-	9	5	-	-	-
Nev.	3	2	-	-	2	-	1	3	-	-	-
PACIFIC	142	172	-	14	59	1	84	244	-	-	1
Wash.	25	15	-	-	2	1	28	58	-	-	1
Oreg.	2	22	N	N	N	-	-	24	-	-	-
Calif.	114	130	-	13	52	-	56	149	-	-	-
Alaska	1	1	-	1	-	-	-	4	-	-	-
Hawaii	-	4	-	-	5	-	-	9	-	-	-
Guam	-	-	U	-	-	U	-	-	U	-	-
P.R.	1	3	-	-	-	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U	U	U	U

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

TABLE IV. Deaths in 122 U.S. cities,* week ending April 7, 2001 (14th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	644	449	126	47	9	13	56
Boston, Mass.	170	103	42	20	2	3	9
Bridgeport, Conn.	49	32	11	3	3	-	3
Cambridge, Mass.	21	20	1	-	-	-	4
Fall River, Mass.	27	22	4	1	-	-	2
Hartford, Conn.	84	50	20	10	2	2	8
Lowell, Mass.	20	12	6	2	-	-	2
Lynn, Mass.	11	8	3	-	-	-	1
New Bedford, Mass.	33	29	3	1	-	-	4
New Haven, Conn.	32	22	4	3	1	2	1
Providence, R.I.	60	49	4	3	1	3	-
Somerville, Mass.	10	6	2	2	-	-	-
Springfield, Mass.	48	35	11	1	-	1	5
Waterbury, Conn.	19	15	4	-	-	-	4
Worcester, Mass.	60	46	11	1	-	2	13
MID. ATLANTIC	2,109	1,502	433	118	29	27	104
Albany, N.Y.	47	30	11	1	3	2	4
Allentown, Pa.	17	15	2	-	-	-	-
Buffalo, N.Y.	83	58	13	7	1	4	5
Camden, N.J.	28	15	9	2	-	2	6
Elizabeth, N.J.	27	14	11	2	-	-	-
Erie, Pa.§	35	25	8	1	1	-	3
Jersey City, N.J.	51	29	17	5	-	-	-
New York City, N.Y.	1,067	754	216	69	16	12	45
Newark, N.J.	51	29	17	5	-	-	-
Paterson, N.J.	U	U	U	U	U	U	U
Philadelphia, Pa.	267	196	54	12	3	2	13
Pittsburgh, Pa.§	47	32	11	1	2	1	3
Reading, Pa.	34	25	6	3	-	-	1
Rochester, N.Y.	150	123	22	2	1	2	11
Schenectady, N.Y.	34	30	3	1	-	-	1
Scranton, Pa.§	31	25	5	-	1	-	2
Syracuse, N.Y.	105	76	20	6	1	2	8
Trenton, N.J.	15	11	4	-	-	-	-
Utica, N.Y.	20	15	4	1	-	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,109	1,427	448	143	39	50	155
Akron, Ohio	65	53	7	4	-	1	9
Canton, Ohio	36	25	10	1	-	-	4
Chicago, Ill.	395	249	101	30	9	4	26
Cincinnati, Ohio	125	88	22	7	4	4	12
Cleveland, Ohio	128	90	22	10	1	5	7
Columbus, Ohio	131	88	28	10	-	5	13
Dayton, Ohio	142	105	23	10	3	1	11
Detroit, Mich.	207	119	59	21	1	7	10
Evansville, Ind.	48	34	11	2	1	-	3
Fort Wayne, Ind.	59	42	14	2	-	1	2
Gary, Ind.	21	8	5	6	1	1	-
Grand Rapids, Mich.	53	37	13	1	-	2	8
Indianapolis, Ind.	210	127	47	17	8	11	17
Lansing, Mich.	27	17	7	2	-	1	2
Milwaukee, Wis.	124	91	21	7	1	4	15
Peoria, Ill.	43	36	5	1	-	1	-
Rockford, Ill.	62	43	13	4	2	-	5
South Bend, Ind.	42	30	8	1	3	-	5
Toledo, Ohio	116	83	22	6	4	1	2
Youngstown, Ohio	75	62	10	1	1	1	4
W.N. CENTRAL	745	537	120	49	16	23	43
Des Moines, Iowa	72	55	13	1	1	2	4
Duluth, Minn.	28	19	7	1	-	1	2
Kansas City, Kans.	46	25	10	7	3	1	1
Kansas City, Mo.	U	U	U	U	U	U	U
Lincoln, Nebr.	29	26	2	-	-	1	2
Minneapolis, Minn.	186	133	29	11	7	6	17
Omaha, Nebr.	97	77	19	-	1	-	6
St. Louis, Mo.	111	71	17	15	1	7	1
St. Paul, Minn.	79	64	6	5	2	2	3
Wichita, Kans.	97	67	17	9	1	3	7
S. ATLANTIC	1,253	804	252	90	31	38	102
Atlanta, Ga.	173	103	36	15	6	13	7
Baltimore, Md.	203	112	56	28	5	2	13
Charlotte, N.C.	101	66	24	9	-	2	15
Jacksonville, Fla.	185	129	40	7	5	4	10
Miami, Fla.	70	43	16	7	4	-	26
Norfolk, Va.	58	33	11	5	2	7	1
Richmond, Va.	57	30	19	4	3	1	6
Savannah, Ga.	41	33	6	1	1	-	5
St. Petersburg, Fla.	72	63	1	2	-	6	9
Tampa, Fla.	183	132	10	1	2	-	9
Washington, D.C.	99	49	33	11	3	3	1
Wilmington, Del.	11	11	-	-	-	-	-
E.S. CENTRAL	900	629	179	64	14	13	89
Birmingham, Ala.	177	113	43	11	4	5	14
Chattanooga, Tenn.	86	59	19	7	1	-	14
Knoxville, Tenn.	92	68	13	10	1	-	4
Lexington, Ky.	74	46	19	7	1	1	8
Memphis, Tenn.	187	142	31	8	3	3	18
Mobile, Ala.	71	49	16	6	-	-	4
Montgomery, Ala.	46	35	8	3	-	-	13
Nashville, Tenn.	167	117	30	12	4	4	14
W.S. CENTRAL	1,564	1,029	292	143	63	37	121
Austin, Tex.	76	55	11	8	2	-	8
Baton Rouge, La.	51	41	5	3	-	2	-
Corpus Christi, Tex.	71	45	20	3	1	2	9
Dallas, Tex.	176	112	32	18	6	8	15
El Paso, Tex.	93	74	12	6	1	-	4
Ft. Worth, Tex.	119	86	22	5	1	5	5
Houston, Tex.	415	231	82	61	35	6	41
Little Rock, Ark.	91	60	15	11	3	2	4
New Orleans, La.	87	54	15	12	3	3	5
San Antonio, Tex.	201	149	35	8	4	5	17
Shreveport, La.	46	33	10	-	2	1	5
Tulsa, Okla.	138	89	33	8	5	3	8
MOUNTAIN	909	629	168	64	26	22	78
Albuquerque, N.M.	120	81	21	9	5	4	8
Boise, Idaho	47	44	2	1	-	-	7
Colo. Springs, Colo.	79	47	19	6	6	1	1
Denver, Colo.	106	79	15	7	2	3	11
Las Vegas, Nev.	195	140	39	13	3	-	19
Ogden, Utah	27	22	3	1	-	1	2
Phoenix, Ariz.	187	111	40	17	9	10	10
Pueblo, Colo.	37	31	4	2	-	-	2
Salt Lake City, Utah	111	74	25	8	1	3	18
Tucson, Ariz.	U	U	U	U	U	U	U
PACIFIC	1,740	1,214	313	127	59	26	150
Berkeley, Calif.	10	5	4	1	-	-	1
Fresno, Calif.	195	139	33	15	6	2	12
Glendale, Calif.	13	-	-	2	7	4	1
Honolulu, Hawaii	89	66	17	3	1	2	5
Long Beach, Calif.	48	30	10	5	3	-	6
Los Angeles, Calif.	333	226	63	28	12	4	28
Pasadena, Calif.	18	14	4	-	-	-	4
Portland, Oreg.	137	75	25	23	12	2	12
Sacramento, Calif.	206	134	47	17	4	4	9
San Diego, Calif.	143	103	23	11	3	3	15
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	179	145	20	10	4	-	27
Santa Cruz, Calif.	32	24	6	2	-	-	2
Seattle, Wash.	146	109	29	4	3	1	12
Spokane, Wash.	70	51	12	3	1	3	8
Tacoma, Wash.	121	93	20	3	3	1	8
TOTAL	11,973¶	8,220	2,331	845	286	249	898

U: Unavailable. -:No reported cases.

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

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

¶Total includes unknown ages.

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The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to *listserv@listserv.cdc.gov*. 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.

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