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Malaria Deaths Following Inappropriate Malaria Chemoprophylaxis — United States, 2001

During January–March 2001, two U.S. citizens died from malaria after taking chloroquine alone or with proguanil for malaria chemoprophylaxis in countries with known chloroquine-resistant *Plasmodium falciparum* malaria. Chloroquine-containing chemoprophylaxis regimens are not recommended by CDC for persons traveling to areas with known chloroquine-resistant *P. falciparum*. This report summarizes the investigation of the two cases and underscores the need for clinicians and travelers to know the recommended options for malaria chemoprophylaxis when traveling to locations with chloroquine-resistant malaria.

Case Reports

Case 1. On January 11, 2001, a 12-year-old resident of Michigan was taken to a clinic with a 2-day history of fever with chills, malaise, fatigue, cough, and one episode of vomiting. At the clinic, the patient had a temperature of 102 F (39 C). The clinician noted that the patient had returned from Africa on January 6. Upper respiratory tract infection was diagnosed with nausea and vomiting, and the patient was prescribed an oral cephalosporin antibiotic and an antiemetic agent. The symptoms continued, and on January 14, the patient collapsed, was transported to a local hospital, and died in the emergency department shortly thereafter. Examination of a peripheral blood film on stored blood from January 11 and a film from blood taken January 14 demonstrated *P. falciparum* parasites with 0.8% parasitemia and 14.0%, respectively.

The patient had been born in Nigeria, had emigrated to the United States in 1991, and had returned to Nigeria for 3 weeks during December 2000–January 2001. The patient and five other family members who had traveled to Nigeria had been prescribed weekly chloroquine for malaria chemoprophylaxis. On December 1, the patient had taken the initial 500 mg dose and subsequently had followed the weekly regimen; the last dose was taken January 11. A blood sample taken postmortem revealed a chloroquine level of 1782 ng/ml whole blood, a level consistent with recent ingestion of chloroquine and sufficient to inhibit *P. falciparum* parasites sensitive to the drug (1,2). The patient's mother also had taken chloroquine for chemoprophylaxis, had *P. falciparum* malaria diagnosed in January, and later recovered.

Case 2. On March 7, 2001, a 47-year-old resident of Minnesota returned to the United States after 11 days in east Africa. Chloroquine was taken before and during the trip and proguanil was added on arrival in Africa. On returning to the United States, proguanil was discontinued, and on March 11, the scheduled dose of chloroquine was taken. On

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March 17, the patient developed a persistent headache, and on March 19, sought care for headache and dark urine at a Florida hospital emergency department. On admission, the patient's temperature was 102 F (39 C); physical examination did not reveal any abnormalities. A thick blood film obtained on admission initially was read as *Plasmodium* species (*P. falciparum* versus *P. malariae*), and later was confirmed as *P. falciparum*. The patient was admitted and treated with oral quinine and doxycycline; however, the patient developed cerebral edema and respiratory failure and died 6 days after admission. The patient had traveled to Africa with a group of 13 persons; nine had taken mefloquine for prophylaxis and four had followed the same regimen as the patient. No other malaria cases were reported from the group.

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Editorial Note: Seven malaria-related deaths among U.S. citizens who had traveled abroad following inappropriate chemoprophylaxis regimens have been reported to CDC since 1992. In all cases, the travelers received prescriptions for chloroquine compounds to be taken for travel to sub-Saharan Africa, where antimalarial resistance to this drug is widespread. The geographic spread of *P. falciparum* resistance to chloroquine is increasing. Chloroquine resistance exists throughout sub-Saharan Africa, southeast Asia, the Indian subcontinent, and over large portions of South America, including the Amazon basin (3). Among 4685 cases of imported malaria in U.S. civilian travelers during 1992–2001, 893 (19%) took an inappropriate chemoprophylaxis regimen and 2616 (56%) took no chemoprophylaxis. Among 505 persons who took an inappropriate chemoprophylaxis regimen during 1995–2001, 351 (70%) took chloroquine for travel to an area with known chloroquine resistance.

Since 1990, CDC has recommended mefloquine as antimalarial prophylaxis in regions with chloroquine-resistant malaria; doxycycline has been the recommended alternative (4). Chloroquine, ideally taken with daily proguanil (an antimalarial not marketed in the United States except in co-formulation with atovaquone), had been recommended only for persons unable to take mefloquine or doxycycline. In July 2000, Malarone* (Glaxo Wellcome Inc., Research Triangle Park, North Carolina), a combination of atovaquone and proguanil, was approved for use in the United States. Since November 2000, CDC has recommended Malarone, mefloquine, or doxycycline as options for malaria chemoprophylaxis in areas with chloroquine-resistant malaria and no longer recommends chloroquine combined with proguanil (5).

Travelers and health-care workers who provide medical advice to travelers should be aware that chloroquine is effective for malaria prophylaxis only in a few areas of the world. Recommending and prescribing inappropriate chemoprophylaxis can result in travelers becoming ill or dying from malaria. Information on malaria prevention and chemoprophylaxis is available in *Health Information for International Travel*, CDC's handbook for travelers, which is published biannually and is available and updated online at http://www.cdc.gov/travel. Information also is available by telephoning (877) FYI-TRIP ([877] 394-8747).

^{*}Use of trade names is for identification only and does not imply endorsement by the Public Health Service or by the U.S. Department of Health and Human Services.

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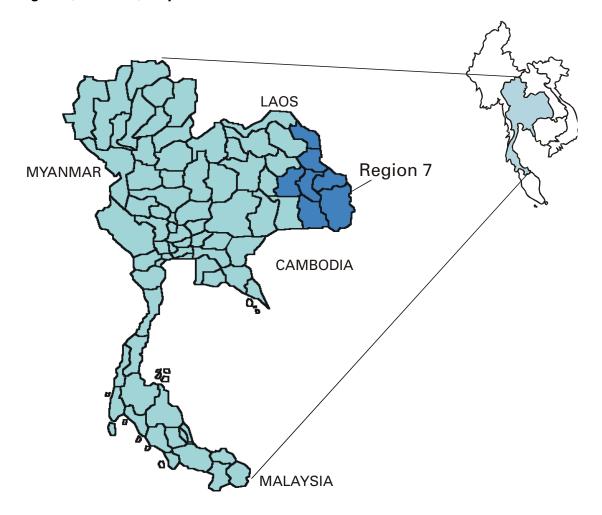
Evaluation of a Regional Pilot Program to Prevent Mother-Infant HIV Transmission — Thailand, 1998–2000

Worldwide, approximately 2.2 million women and 600,000 infants are infected with human immunodeficiency virus (HIV) each year (1). Extended zidovudine prophylaxis and other antiretroviral and obstetric interventions and the avoidance of breast-feeding have reduced dramatically mother-infant HIV transmission in countries with adequate health-care resources (2,3). However, in developing countries, where the impact of HIV is greatest, implementation has been limited by the complexity and expense of these interventions (4). In Thailand, where approximately 15,000 infants are born to HIVinfected women each year, the Ministry of Public Health (MOPH) has collaborated with other organizations to identify simpler and more cost-effective interventions to reduce mother-infant HIV transmission. In 1998, a placebo-controlled clinical trial in Thailand using a simplified zidovudine regimen from 36 weeks' gestation until delivery reduced the risk for mother-infant transmission by 50% (5). In 1998, MOPH initiated a pilot program to prevent mother-infant HIV transmission in region 7, a rural area in northeastern Thailand with an antenatal HIV prevalence of approximately 1%, to assess program feasibility, effectiveness, and acceptability (Figure 1) (6). This report summarizes an evaluation of the 2-year pilot program, which indicated that acceptance of HIV testing and adherence to zidovudine were high and HIV transmission was reduced. The findings demonstrate the feasibility of implementing programs to prevent mother-infant HIV transmission on a large scale in a developing country.

MOPH requested technical assistance from the HIV/AIDS Collaboration (a joint activity of MOPH and CDC) to monitor and evaluate the program. In region 7, routine antenatal counseling and voluntary confidential HIV testing were integrated into public antenatal clinic services by July 1998. HIV-infected pregnant women were offered zidovudine from 36 weeks' gestation and during labor and free powdered infant formula for 12 months. Program coverage was monitored through monthly reports collected from the antenatal and delivery departments in the 90 public hospitals in region 7, and summaries were disseminated regularly to participating hospitals, program staff, and policymakers.

During July 1998–June 2000, 104,393 (86%) of 122,094 new antenatal clinic clients were tested for HIV; 964 (1%) were HIV infected (Table 1). Of 153,598 women who gave birth in the 90 region 7 hospitals during the same period, 151,928 (99%) had received antenatal care, and HIV status was documented in the delivery records of 106,834 (70%).

FIGURE 1. Location of pilot program to prevent mother-infant HIV transmission — Region 7, Thailand, July 1998–June 2000



At delivery, of 922 HIV-infected women, 640 (69%) had received antenatal zidovudine prophylaxis. Testing, documentation of HIV results at delivery, and zidovudine use increased significantly during the program period (Table 1).

To evaluate the program's coverage, acceptability, and impact, two groups of women were interviewed: those who had given birth within 2 months of the interview and whose delivery record lacked documentation of HIV status and HIV-infected women who had given birth during the 12 months preceding the interview. Women were identified from hospital logs from 11 hospitals where 44% of HIV-infected women had given birth during the preceding year. All HIV-infected women and a random sample of women whose HIV status was not documented were invited by letter to attend a health-care facility. Women who agreed to participate were interviewed during April–May 2000 by trained interviewers who used structured questionnaires.

TABLE 1. Number and percentage of women reporting receipt of HIV testing and zidovudine prophylaxis, by location of receipt — Region 7, Thailand, July 1998–June 2000

	July– December 1998		January– June 1999		July– December 1999		January– June 2000		Tota	<u> </u>
Location	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Antenatal clinic										
New clients	29,510		31,299		31,811		29,474		122,094	
Tested for HIV*	22,046	(75)	26,387	(84)	28,489	(90)	27,471	(93)	104,393	(86)
HIV positive	235	(1)	260	(1)	233	(1)	236	(1)	964	(1)
Delivery room										
Deliveries No antenatal	38,682		37,062		40,816		37,038		153,598	
care	405	(1)	397	(1)	449	(1)	419	(1)	1,670	(1)
HIV status recorded*	22 210	/EQ\	24 660	(67)	20 227	(74)	20 610	(90)	106 024	(70)
	22,318	(58)	24,669	(67)	30,237	(74)	29,610	(80)	106,834	(70)
HIV positive Maternal	221	(1)	192	(1)	291	(1)	218	(1)	922	(1)
zidovudine [†]	132	(60)	134	(70)	213	(73)	161	(74)	640	(69)

^{*} Chi-square for linear trend: p<0.00001.

Of 215 women whose HIV status was not documented at delivery, 117 (54%) reported that they had had an HIV test during pregnancy. In addition, 83 (71%) of the 117 women tested knew their HIV result, and all reported a negative test result.

Of 162 HIV-infected women interviewed, 152 (94%) reported an HIV diagnosis before delivery, 159 (98%) reported that they had received posttest counseling, and 128 (79%) reported that they had taken zidovudine prophylaxis. Most women (89%) who had taken zidovudine reported not missing any doses of medication. Two (1%) women refused zidovudine prophylaxis. All HIV-infected women reported using infant formula, and 10 (6%) women reported breast-feeding for a short period. In comparison, 204 (95%) of the 215 women whose HIV status was not documented reported that they breast-fed. Of the 162 HIV-infected women, 146 (90%) reported not wanting another child, and 78 (48%) already had had a tubal ligation.

Results from HIV polymerase chain reaction (PCR) tests were used to assess the program's effectiveness in preventing HIV transmission; tests were provided as a service to children born to HIV-infected women during the latter part of the program period. One or more PCR tests were performed on 293 HIV-exposed infants after age 1 month. Of these, 19 (8%) of 229 (95% confidence interval [CI]=5%–13%) infants whose mothers had received zidovudine tested HIV positive, and nine (14%) of 64 (95% CI=7%–25%) infants whose mothers had not received zidovudine tested HIV positive and were considered infected. Overall, risk for mother-infant HIV transmission was estimated at 10% (95% CI=6%–14%).

Working groups periodically reviewed program data and developed strategies to strengthen program coverage, acceptability, and impact (6). On the basis of clinical trials and pilot projects in Thailand during 1996–1999, MOPH launched a national program to prevent mother-infant HIV transmission in Thailand in 2000 (5–8).

[†] Chi-square for linear trend: p<0.001.

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Editorial Note: The findings in this report indicate that interventions to reduce mother-infant HIV transmission can be implemented successfully on a large scale in Thailand. These interventions, integrated into existing maternal and child health-care services, were acceptable to most women and reduced mother-infant HIV transmission from an estimated 30% to approximately 10% (4,8). This report also highlights the rapid translation of research findings into a national public health prevention program in a developing country.

Despite the implementation of antenatal HIV testing, maternal zidovudine prophylaxis, and infant formula in Thailand, these interventions have not been widely implemented in countries with high HIV prevalence. Similar programs have been initiated in several sub-Saharan countries, but acceptance of HIV testing and zidovudine prophylaxis has been low. Limited access to antenatal and HIV-related health care and limited public health infrastructure represent major challenges to large-scale efforts in many countries. The nutritional, health, and social risks associated with the early use of formula also are potential threats to maternal and child health. In settings where breast-feeding is almost universal, women who do not breast-feed may be stigmatized as HIV infected. In poor, unsanitary environments, the use of formula is associated with increased morbidity and mortality from malnutrition, diarrhea, and respiratory infections (9).

In recent clinical trials, simpler, less expensive interventions using zidovudine with lamivudine or nevirapine also have prevented mother-infant HIV transmission, and these regimens might help overcome some of these barriers (10). Medications begun intrapartum, particularly nevirapine, have feasibility and cost advantages over more complex regimens and can be given to women who have received suboptimal antenatal care.

CDC and other organizations are working with many developing countries to implement simple interventions to prevent mother-infant HIV transmission in other large-scale programs. Such programs will be one component of a U.S. initiative to enhance HIV prevention and care in developing countries. The pilot program in Thailand underscores the importance of monitoring and evaluating to facilitate timely program improvements and optimize the impact and acceptability of these HIV-prevention programs. The simple, focused approach to monitoring and evaluating used in Thailand provides a useful model that minimizes the workload for limited public health personnel.

The findings in this report are subject to at least two limitations. First, estimates of program effectiveness are derived from the HIV test results of a nonrandom subset of infants who received tests as part of a clinical service. Second, HIV-infected women interviewed received care at large health-care facilities and responded to a general invitation letter; therefore, the results may not be generalizable to women attending smaller health-care facilities or to the 21% of HIV-infected women who did not respond to the invitation letter and attend an interview.

On the basis of the estimated 20% decrease in mother-infant HIV transmission among the 15,000 infants born to HIV-infected women, the Thai national program has the potential to prevent approximately 3000 infant HIV infections each year. If similar programs

were implemented worldwide, hundreds of thousands of childhood HIV infections could be prevented. In addition to reducing mother-infant HIV transmission, such programs can improve voluntary counseling and testing services, reduce the sexual transmission of HIV, promote informed decisions about childbearing, and link HIV-infected persons to health and social services.

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Hantavirus Pulmonary Syndrome — Vermont, 2000

In 1993, an outbreak of an unexplained pulmonary illness occurred in the southwestern United States. This outbreak led to the first description of hantavirus pulmonary syndrome (HPS), a rodentborne hantaviral infection. Hantaviruses have been found in rodents in rural areas throughout the United States, but most infection has occurred in the southwest (1,2). This report describes the first HPS case in Vermont and underscores the importance of preventing exposure to peridomestic rodents and recognizing the signs and symptoms of HPS.

On February 17, 2000, a 61-year-old previously healthy Vermont resident was hospitalized following three syncopal episodes and 1 week of chills, fever (\leq 102 F ([\leq 39 C]),

Hantavirus Pulmonary Syndrome — Continued

nausea, vomiting, anorexia, and right knee pain. Upon admission, the patient's temperature was 99.3 F (37.4 C), pulse rate was 90 beats per minute, and blood pressure was 135/ 90 mm Hg. On examination, the lungs were clear to auscultation, a 2 x 2 cm nontender lymph node was identified at the angle of the left jaw, and a mild effusion was present in the right knee. A complete blood count included a hematocrit of 55.6% (normal: 36%– 52%), a platelet count of 99,000/mm³ (normal: 150,000–400,000/mm³), and a white blood cell count of 6900/mm³ (normal: 4,000-10,000/mm³) with 83% granulocytes, 8.0% lymphocytes, and 8.0% monocytes. Chest radiographs were clear without infiltrates. However, 1 day after admission, the patient's condition deteriorated with onset of respiratory failure, profound hypoxemia, and hypotension requiring mechanical ventilation. Subsequent chest radiographs revealed bilateral interstitial edema consistent with acute respiratory distress syndrome (ARDS). The patient also developed disseminated intravascular coagulation and renal insufficiency (peak blood urea nitrogen: 62 mg/dL [normal: 7–18 mg/dL] and peak creatinine 2.9 mg/dL [normal: 0.5-1.4 mg/dL]). After 23 days in the hospital, including 16 days in intensive care, the patient was discharged with a diagnosis of ARDS and sepsis of uncertain etiology.

During the 2 months preceding hospitalization, the patient, who resided in a house on four rural acres, had cleaned a mouse nest from a woodpile, observed mice in the basement, and trapped two mice under the kitchen counters. The patient's reported symptoms and exposure to rodents led to the collection of two serum specimens on April 6 and 17, which were submitted to CDC for hantavirus diagnostic testing. Using an enzymelinked immunosorbent assay, immunoglobin M (lgM), and immunoglobin G (lgG), antibodies to Sin Nombre virus were detected; these antibodies indicated recent hantavirus infection (3).

During an onsite investigation conducted April 21 by the Vermont Department of Health, mice droppings were observed under the kitchen counter and in the cellar. In April and May, the wildlife services program of the U.S. Department of Agriculture trapped rodents within a 5-mile radius of the patient's house to estimate the prevalence of hantavirus infection in local rodent populations. After 1632 trapnights (i.e., number of traps times the number of nights), 46 rodents were captured, including six deer mice (*Peromyscus maniculatus*), 13 white-footed mice (*P. leucopus*), 21 woodland jumping mice (*Napaeozapus insignis*), one meadow jumping mouse (*Zapus hudsonius*), four chipmunks (*Tamias striatus*), and one vole (*Microtus* sp.). Because cases of hantavirus infection are new among humans and the rodent reservoir is not well described, especially in the northeast, most of these rodents were tested serologically at CDC for hantaviral antibodies. Among 43 rodents tested, two of five deer mice were positive for hantaviral antibodies; all other rodents were negative.

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Editorial Note: This report describes the first case of HPS acquired in New England; only 15 (5%) of the 284 cases confirmed by CDC have occurred east of the Mississippi River. Hantaviruses known to cause HPS in the United States include Sin Nombre, New York, Monongahela, Bayou, and Black Creek Canal viruses. Because rodent species that host one or more viruses are found throughout the contiguous United States, sporadic cases may occur anywhere on the mainland (4). Among approximately 115 (75%) of 153 patients with documented exposure to rodents or rodent droppings, exposure had

Hantavirus Pulmonary Syndrome — Continued

occurred in and around the house. In Vermont, the primary rodent reservoirs of these hantaviruses are likely to be the deer mouse (*P. maniculatus*) and the white-footed mouse (*P. leucopus*). Other rodent species known to carry HPS-associated hantaviruses include the rice rat (*Oryzomys palustris*) and cotton rat (*Sigmodon hispidus*) (5,6).

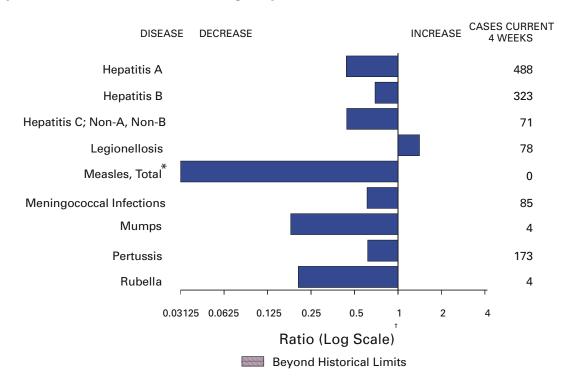
Although it was not reported in the 1993 outbreak (2), renal impairment is a component of disease associated with Sin Nombre viral infection and related viruses, as indicated in the case in this report. Renal impairment also has been predominant in disease caused by Black Creek Canal and Bayou viruses. Another component recognized since the first outbreak is disease accompanied by frank hemorrhage (7).

The case described in this report demonstrates the importance of considering hantavirus infection when diagnosing an unexplained acute respiratory distress syndrome or bilateral interstitial pulmonary infiltrates (8). Although the Vermont patient had symptoms unrelated to hantavirus infection (e.g., a nontender lymph node and knee pain), other signs, symptoms, and environmental circumstances suggested HPS. When patients may have been exposed to rodents or rodent droppings, especially in and around the house, clinicians should request serologic testing to detect hantavirus-specific IgM and IgG. Information about testing is available from local or state health departments, and testing is available at CDC. Additional information about hantaviruses and HPS is available at http://www.cdc.gov/ncidod/diseases/hanta/hantvrus.htm; telephone (877) 232-3322 or (404) 639-1115.

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FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending July 14, 2001, with historical data



^{*} No measles cases were reported for the current 4-week period yielding a ratio for week 28 of zero (0).

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending July 14, 2001 (28th Week)

		Cum. 2001		Cum. 2001
Anthrax		-	Poliomyelitis, paralytic	-
Brucellosis*		35	Psittacosis*	7
Cholera		3	Q fever*	10
Cyclosporiasis	*	61	Rabies, human	1
Diphtheria		1	Rocky Mountain spotted fever (RMSF)	213
Ehrlichiosis:	human granulocytic (HGE)*	45	Rubella, congenital syndrome	-
	human monocytic (HME)*	25	Streptococcal disease, invasive, group A	2,111
Encephalitis:		1	Streptococcal toxic-shock syndrome*	´ 33
	eastern equine*	1	Syphilis, congenital [¶]	84
	St. Louis*	-	Tetanus	12
	western equine*	-	Toxic-shock syndrome	65
Hansen diseas		39	Trichinosis	11
	Imonary syndrome*†	4	Tularemia*	42
	mic syndrome, postdiarrheal*	47	Typhoid fever	131
HIV infection,		98	Yellow fever	-
Plague	1	2		

[†] 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.

^{-:} No reported cases. *Not notifiable in all states.

[†] Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update June 26, 2001.
Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending July 14, 2001, and July 15, 2000 (28th Week)

									coli O157:H7	
	Cum.	DS Cum.	Chlan Cum.	nydia [†] Cum.	Cryptos Cum.	poridiosis Cum.	NET Cum.	Cum.	PHI Cum.	LIS Cum.
Reporting Area	2001⁵	2000	2001	2000	2001	2000	2001	2000	2001	2000
UNITED STATES NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	19,145 746 20 17 10 411 53 235	20,040 1,197 16 17 17 763 48 336	348,088 11,945 642 675 315 5,573 1,431 3,309	365,240 12,197 741 545 287 5,179 1,344 4,101	874 42 4 2 13 12 3 8	849 51 9 5 13 14 2 8	900 123 12 14 4 47 6 40	1,494 151 9 10 15 70 8 39	651 69 12 10 2 28 4 13	1,385 167 14 15 20 67 9 42
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	3,974 322 1,996 960 696	4,819 538 2,608 985 688	39,927 6,894 15,718 5,303 12,012	34,740 564 14,756 6,638 12,782	99 44 47 4 4	154 38 87 6 23	75 54 4 17 N	171 108 12 51 N	52 33 6 13	123 38 8 46 31
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	1,408 237 165 665 261 80	2,013 289 188 1,191 254 91	50,103 7,148 7,700 13,597 15,840 5,818	62,578 16,650 6,825 18,071 12,398 8,634	270 55 31 1 72 111	198 23 12 31 33 99	201 55 36 44 26 40	304 50 36 85 47 86	134 40 18 28 26 22	239 64 39 63 40 33
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	454 85 47 218 1 18 39 46	480 86 52 225 1 4 31 81	18,009 3,412 1,858 6,616 501 957 1,681 2,984	20,523 4,189 2,731 7,012 477 950 1,971 3,193	86 32 25 9 3 5 12	66 11 22 10 5 5 10 3	107 30 22 21 1 8 15	188 40 34 54 7 10 29	100 47 7 26 9 5 - 6	233 73 38 52 13 17 30
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	6,167 116 751 465 501 49 402 350 757 2,776	5,299 94 597 388 358 31 311 409 605 2,506	64,675 1,550 6,405 1,663 9,386 1,249 8,692 5,896 11,996 17,838	67,623 1,537 7,284 1,728 8,493 1,128 11,727 5,037 13,590 17,099	158 1 27 9 9 1 17 - 56 38	128 4 6 5 4 3 12 -	91 1 7 - 23 3 26 2 13 16	112 1 13 - 24 8 20 6 15 25	44 3 1 U 18 - 11 2 2 7	118 - 1 U 28 4 32 7 20 26
E.S. CENTRAL Ky. Tenn. Ala. Miss.	977 201 293 224 259	966 113 381 255 217	26,051 4,730 7,752 7,474 6,095	26,379 4,306 7,608 7,887 6,578	21 3 4 7 7	26 2 6 10 8	42 15 18 8 1	57 19 21 5 12	36 20 14 - 2	50 17 25 4 4
W.S. CENTRAL Ark. La. Okla. Tex.	2,058 104 472 107 1,375	1,837 101 318 161 1,257	54,362 3,942 8,984 5,815 35,621	54,935 3,392 10,035 4,496 37,012	18 3 7 6 2	44 1 9 4 30	35 4 2 12 17	144 36 10 9 89	52 23 14 15	176 30 26 7 113
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	714 12 15 1 140 56 295 63 132	725 9 13 6 157 86 224 62 168	19,074 1,015 890 432 2,400 3,066 7,769 906 2,596	21,391 802 1,002 410 6,384 2,662 6,777 1,322 2,032	60 5 7 1 18 12 3 12 2	42 8 3 5 12 2 2 8 2	104 6 14 6 44 7 12 9 6	151 16 19 9 60 4 25 15	55 - 1 26 5 9 13	121 - 14 6 45 5 21 24 6
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	2,647 290 112 2,204 13 28	2,704 275 88 2,252 10 79	63,942 7,252 2,023 51,273 1,440 1,954	64,874 6,848 3,770 51,067 1,315 1,874	120 N 11 106 - 3	140 U 9 131 -	122 29 20 64 2 7	216 80 36 90 2 8	109 31 15 60 - 3	158 90 40 20 1 7
Guam P.R. V.I. Amer. Samoa C.N.M.I.	9 580 2 - -	13 516 21 - -	1,540 53 U 88	257 U - U U	- - - U -	- - U U	N - - U -	N 5 - 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 June 26, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending July 14, 2001, and July 15, 2000 (28th Week)

	WCCK3 CI	liuling July			iy 13, 20	700 (20	T T	Lyme		
	Gono	rrhea	Hepati Non-A,		Legione	llosis	Listeriosis		me ease	
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000	
UNITED STATES	158,995	181,909	1,198	1,815	405	424	224	2,346	6,160	
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	3,287 70 84 39 1,707 360 1,027	3,430 44 58 32 1,373 328 1,595	14 - - 6 8 -	15 1 - 3 8 3	20 1 5 4 5 1 4	25 2 2 2 11 3 5	37 - 1 - 14 1 21	724 - 66 3 149 109 397	1,548 - 36 12 645 78 777	
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	19,255 4,269 6,603 2,584 5,799	19,479 3,572 6,149 3,796 5,962	46 32 - - 14	391 17 - 349 25	45 28 6 5 6	107 31 16 9 51	30 13 5 7 5	1,035 823 1 84 127	3,504 965 141 1,565 833	
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	27,005 4,254 3,185 8,414 9,210 1,942	36,750 9,668 3,161 11,015 9,229 3,677	105 7 1 10 87	141 4 - 15 122 -	111 56 12 - 29 14	110 39 20 11 21 19	25 6 4 - 13 2	86 43 2 - - 41	431 23 10 24 13 361	
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak.	7,478 1,091 428 3,962 16 144	8,938 1,684 580 4,361 37 145	416 2 - 409 - -	315 5 1 302 -	31 7 6 10 1 2	25 1 5 13 -	6 - 3 -	83 49 17 12 -	66 26 3 22 -	
Nebr. Kans.	555 1,282	746 1,385	1 4	2 5	4 1	1 4	1 2	2 3	2 13	
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	39,845 887 3,433 1,468 5,010 327 7,854 4,229 6,520 10,117	47,138 874 4,835 1,228 5,171 359 9,531 4,807 8,462 11,871	58 - 10 - - 6 10 4 - 28	49 2 6 2 2 9 13 1 2 12	85 2 23 2 11 N 5 3 6 33	76 4 25 - 12 N 8 2 4 21	35 - 4 - 5 4 2 3 8 9	329 22 205 7 61 8 10 2	499 99 310 2 57 10 13 2	
E.S. CENTRAL Ky. Tenn. Ala. Miss.	16,677 1,835 5,128 5,769 3,945	18,737 1,816 5,939 6,164 4,818	120 4 37 2 77	261 18 58 7 178	34 8 16 8 2	13 6 4 2 1	10 4 3 3	14 5 6 3	22 5 13 2 2	
W.S. CENTRAL Ark. La. Okla. Tex.	26,295 2,438 6,256 2,609 14,992	28,630 1,821 7,036 1,949 17,824	161 3 74 3 81	498 4 264 4 226	5 - 2 3 -	18 - 7 1	5 1 - 1 3	7 - 1 - 6	34 2 3 - 29	
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	5,448 53 39 32 1,671 487 2,152 79 935	5,532 26 49 30 1,681 560 2,302 136 748	199 1 1 159 13 10 9 1	38 2 3 2 6 10 11 -	31 - 1 3 9 1 11 4 2	19 - 4 - 6 1 3 5	23 1 1 3 6 6 1 5	8 - 3 3 1 - - 1	4 - 1 2 - - - 1	
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	13,705 1,577 295 11,309 201 323	13,275 1,192 490 11,167 180 246	79 16 8 55 -	107 16 20 69 - 2	43 6 N 33 -	31 11 N 20	53 3 1 48 - 1	60 2 5 51 2 N	52 3 3 45 1 N	
Guam P.R. V.I. Amer. Samoa C.N.M.I.	423 6 U 5	26 283 - U U	1 - U -	2 1 U U	2 - U	- - U U	- - - -	N U	N U U	

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending July 14, 2001, and July 15, 2000 (28th Week)

	TVCCKS (eks ending July		oi, and J	Salmonellosis*							
	Ma	laria	Rabio	es, Animal	NE	TSS		PHLIS				
Donoutina Avoc	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.				
Reporting Area UNITED STATES	2001 495	2000 661	2001 3,089	2000 3,525	2001 14,842	2000 17,208	2001 11,756	2000 15,345				
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	33 3 2 - 10 3 15	32 4 1 2 11 5	318 36 7 37 110 29	385 78 8 36 122 17	1,348 110 97 36 627 66 412	1,068 76 69 62 634 45 182	987 83 103 38 460 82 221	1,118 61 75 60 626 79 217				
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	92 25 42 19 6	152 30 81 21 20	478 359 11 88 20	616 378 5 83 150	1,577 531 442 419 185	2,473 561 639 612 661	1,841 479 597 344 421	2,559 652 661 479 767				
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	52 12 12 1 19 8	81 12 4 41 17 7	42 14 1 4 17 6	47 11 - 4 23 9	2,121 661 233 548 396 283	2,426 562 282 784 454 344	1,535 483 188 302 357 205	1,497 548 292 1 474 182				
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	19 6 3 6 - 2 2	36 13 1 9 2 - 5 6	182 19 42 16 24 21 4 56	315 49 46 17 74 62 - 67	866 211 148 253 14 70 60 110	1,106 242 149 364 27 37 102 185	901 306 95 325 32 50	1,270 342 176 424 42 53 81 152				
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	145 1 59 9 30 1 6 4 8 27	142 3 46 12 30 2 11 1 4 33	1,134 18 138 - 228 69 315 73 174 119	1,242 20 238 - 321 66 303 71 157 66	3,557 44 379 39 589 53 518 368 546 1,021	3,058 51 383 31 413 74 404 292 512 898	2,064 43 366 U 495 59 272 291 351 187	2,642 66 366 U 440 75 444 245 775 231				
E.S. CENTRAL Ky. Tenn. Ala. Miss.	11 2 6 3	22 6 5 10 1	109 11 71 27	99 14 53 32	885 160 248 273 204	888 181 207 229 271	614 101 242 211 60	762 132 352 233 45				
W.S. CENTRAL Ark. La. Okla. Tex.	6 3 1 1	38 1 6 4 27	503 19 - 42 442	521 1 35 485	1,187 254 249 138 546	2,126 252 372 166 1,336	1,079 92 344 132 511	1,289 207 281 134 667				
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	27 2 3 - 13 1 3 3	24 1 2 - 11 - 3 3 4	126 20 2 20 5 76 2	132 34 1 34 - 13 47 2	1,000 39 71 32 278 123 279 110 68	1,326 58 75 37 399 118 307 199 133	705 - 4 22 236 100 216 104 23	1,246 66 31 377 114 321 204 133				
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	110 4 5 93 1 7	134 12 23 92 - 7	197 - - 161 36 -	168 - 2 142 24	2,301 227 106 1,754 22 192	2,737 230 169 2,209 29 100	2,030 358 159 1,332 2 179	2,962 331 213 2,285 23 110				
Guam P.R. V.I. Amer. Samoa C.N.M.I.	3 - U	- 4 - U U	61 - U -	- 41 - U U	302 - U 6	17 299 - U U	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 July 14, 2001, and July 15, 2000 (28th Week)

	<u>weeks e</u>			<u>01, and Jւ</u>	<u>ıly 15, 20</u>	000 (28th V	Veek)	
	NET		llosis*	PHLIS		philis & Secondary)	Tube	rculosis
B A	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.
Reporting Area UNITED STATES	2001 7,040	2000 10,682	2001 3,349	2000 5,907	2001 2,870	2000 3,241	2001 6,102	2000 7,314
NEW ENGLAND	133	187	102	184	27	48	222	209
Maine N.H.	5 2	5 4	1 2	7	1	1	7 11	8 7
Vt.	3	2	2	-	2	-	2	3
Mass. R.I.	72 8	134 12	63 12	123 18	16 3	32 3	117 21	120 23
Conn.	43	30	22	36	5	11	64	48
MID. ATLANTIC Upstate N.Y.	595 321	1,501 431	461 64	937 156	260 19	161 6	1,173 164	1,198 142
N.Y. City N.J.	179 40	663 274	232 100	428 229	139 51	68 36	601 269	642 286
Pa.	55	133	65	124	51	51	139	128
E.N. CENTRAL Ohio	1,215 633	2,263 148	535 274	670 123	480 45	669 42	627 101	693 153
Ind.	126	837	20	100	99	219	49	74
III. Mich.	199 155	631 453	117 109	2 409	116 204	241 136	326 116	311 106
Wis.	102	194	15	36	16	31	35	49
W.N. CENTRAL Minn.	776 217	1,038 275	514 252	862 300	34 17	42 5	213 108	258 85
lowa Mo.	239 144	239 387	85 103	192 269	1 8	10 22	18 55	23 94
N. Dak.	13	4	6	4	-	-	3	2
S. Dak. Nebr.	84 37	2 37	48	3 37	-	2	8 21	9 11
Kans.	42	94	20	57	8	3	-	34
S. ATLANTIC Del.	1,113 5	1,300 8	301 4	497 10	1,056 7	1,067 5	1,283 9	1,485 7
Md. D.C.	58 29	71 20	33 U	37 U	125 21	156 21	109 15	137 11
Va.	106	210	56 6	183	64	69	124	144
W. Va. N.C.	5 203	3 65	78	3 43	243	2 305	16 185	18 206
S.C. Ga.	143 121	65 125	48 57	54 104	142 158	114 199	117 235	150 305
Fla.	443	733	19	63	296	196	473	507
E.S. CENTRAL Ky.	747 284	499 144	315 135	310 47	325 25	483 51	385 6 9	495 58
Tenn. Ala.	48 146	217 29	51 113	237 23	179 64	299 64	128 140	191 165
Miss.	269	109	16	3	57	69	48	81
W.S. CENTRAL Ark.	991 360	1,741 108	683 155	513 40	361 21	433 57	660 73	1,095 111
La.	108	162	106	92	69	105	-	71
Okla. Tex.	20 503	63 1,408	10 412	23 358	37 234	67 204	<i>7</i> 5 512	85 828
MOUNTAIN	424	477	236	319	122	115	208	273
Mont. Idaho	19	4 31	-	22	-	1	4	6 4
Wyo. Colo.	2 82	2 86	- 65	2 42	23	1 5	1 60	1 39
N. Mex. Ariz.	සි 199	51 190	40 99	29 126	10 78	10 93	11 82	39 28 113
Utah	27	36	24	42	7	1	15	25
Nev. PACIFIC	32 1,046	77 1,676	8 202	56 1,615	4 205	4 223	35 1,331	57 1,608
Wash.	97	320	119	289	32	35	119	135
Oreg. Calif.	34 883	102 1,224	55 -	64 1,239	4 163	8 179	48 1,055	47 1,289
Alaska Hawaii	4 28	6 24	1 27	3 20	- 6	- 1	25 84	64 73
Guam	-	24	U	U	-	2	-	32
P.R. V.I.	6	19	U U	U U	111	99	54 -	70
Amer. Samoa C.N.M.I.	U 4	U U	Ŭ U	Ŭ U	U -	U U	U 19	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 July 14, 2001, and July 15, 2000 (28th Week)

	U :=#.		T L	epatitis (V	iral\ By Ty		VVEC	K,	Mose	les (Rubec	vla)	
		<i>ienzae,</i> isive		epatitis (v	нан, ву гу В	pe	Indige	nous	Impo		Tota	
Reporting Area	Cum. 2001 [†]	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	772	738	4,799	6,785	3,247	3,677		43	-	200 i 27	70	<u>55</u>
NEW ENGLAND Maine N.H.	42 1 -	59 1 9	223 5 8	190 10 16	57 5 11	60 5 11	-	4 -	- - -	1 - -	5 - -	3 -
Vt. Mass.	1 32	4 29	6 66	5 78	2	5 6	-	1 2	-	- 1	1 3	3
R.I.	2	1	11	7	12	9	-	-	-	-	-	-
Conn.	6	15	127	74 724	24	24	-	1	-	-	1	-
MID. ATLANTIC Upstate N.Y. N.Y. City N.J.	93 40 24 26 3	136 50 38 28	415 144 169 70	724 124 266 123	441 76 258 64	631 64 300 104	-	2 1 - 1	-	5 4 - 1	7 5 - 1	20 9 10 -
Pa. E.N. CENTRAL	100	20 111	32 534	211 876	43 406	163 390	-	-	-	10	1 10	1 6
Ohio	47	36	125	146	62	66	U	-	U	3	3	2
Ind. III.	28 10	12 41	50 146	29 380	23 56	28 60	-	-	-	4 3	4 3	3
Mich. Wis.	5 10	7 15	175 38	271 50	265 -	218 18	- U	-	- U	-	-	1 -
W.N. CENTRAL Minn.	36 20	34 16	211 16	461 123	111 13	167 19	-	4 2	-	-	4 2	1 1
lowa	-	-	18	46	13	16	-	-	-	-	-	-
Mo. N. Dak.	10 4	11 2	58 2	203 2	57 -	90 2	Ū	2	Ū	-	2	-
S. Dak. Nebr.	- 1	3	1 27	20	1 14	- 25	-	-	-	-	-	-
Kans.	1	2	89	67	13	15	U	-	U	-	-	-
S. ATLANTIC Del.	236	173 -	1,089	690 10	706 -	623 8	-	3	-	1 -	4	-
Md. D.C.	55 -	50	146 22	81 14	85 9	75 17	-	2	-	1	3	-
Va.	18	28 4	6 8	82	80	79	-	-	-	-	-	-
W. Va. N.C.	8 31	15	7 77	45 92	16 110	6 141	-	-	-	-	-	-
S.C. Ga.	5 60	7 47	34 444	30 112	15 176	5 98	-	1	-	-	1	-
Fla.	59	22	291	224	215	194	-	-	-	-	-	-
E.S. CENTRAL Ky.	56 2	33 12	177 37	260 31	215 17	254 53	-	2 2	-	-	2 2	-
Tenn. Ala.	28 25	14 5	75 57	94 33	110 49	113 26	-	-	-	-	-	-
Miss.	1	2	8	102	39	62	-	-	-	-	-	-
W.S. CENTRAL Ark.	29	42	604 40	1,243 95	354 54	565 61	-	1	-	-	1	-
La.	3 26	12	46 85	45 153	28 60	83 70	-	-	-	-	-	-
Okla. Tex.	-	28 2	433	950	212	351	Ū	1	Ū	-	1	-
MOUNTAIN	107	75	445	462	311	266	-	-	-	1	1	12
Mont. Idaho	1	3	6 47	2 18	2 7	3 4	-	-	-	1	1	-
Wyo. Colo.	13 23	1 15	21 40	4 110	28 62	- 46	-	-	-	-	-	2
N. Mex. Ariz.	23 13 42 6	16 31	17 233	42 220	78 98	86 90	-	-	-	-	-	-
Utah Nev.	6 9	6	41 40	31 35	14 22	14 23	-	-	-	-	-	3 7
PACIFIC	73	75	1,101	1,879	646	721	-	27	-	9	36	13
Wash. Oreg.	1 16	3 21	55 46	159 123	67 42	44 59	-	13 3	-	2	15 3	3
Calif. Alaska	16 32 3	29 4	987 12	1,575 11	521 4	604 6	-	8	-	4	12	7 1
Hawaii	21	18	1	11	12	8	-	3	-	3	6	2
Guam P.R.	- 1	1 3	- 54	1 170	- 98	9 143	U -	-	U -	-	-	2
V.I. Amer. Samoa	Ū	Ū	Ū	Ū	Ū	Ū	U U	Ū	U	Ū	Ū	Ū
C.N.M.I.	-	Ŭ	-	Ŭ	20	Ŭ	-	-	-	-	-	Ŭ

N: Not notifiable. U: Unavailable. -: No reported cases.
*For imported measles, cases include only those resulting from importation from other countries.
† Of 157 cases among children aged <5 years, serotype was reported for 71, and of those, 11 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending July 14, 2001, and July 15, 2000 (28th Week)

and July 15, 2000 (28th Week)												
	Dise	jococcal ease		Mumps			Pertussis			Rubella		
Reporting Area	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	
UNITED STATES	1,367	1,373	1	101	203	40	2,297	3,039	2	15	95	
NEW ENGLAND	78	83	-	-	3	4	246	835	-	-	11	
Maine N.H.	1 10	6 9	-	-	-	4	- 25	14 62	-	-	2	
Vt. Mass.	4 44	2 48	-	-	- 1	-	24 181	157 561	-	-	- 8	
R.I.	2	6	-	-	1	-	2	11	-	-	-	
Conn.	17	12	-	-	1	-	14	30	-	-	1	
MID. ATLANTIC Upstate N.Y.	114 43	152 40	-	5 1	13 5	4 4	146 106	255 136	-	4 1	8 1	
N.Y. City N.J.	28 33	32 27	-	4	5 -	-	23 8	42	-	2 1	7	
Pa.	10	53	-	-	3	-	9	77	-	-	-	
E.N. CENTRAL	168	237		12	17	2	271	346		3	1	
Ohio Ind.	57 27	51 30	U	1 1	7 -	U 1	167 24	178 36	U	- 1	-	
III. Mich.	20 33	61 71	-	8 2	5 4	1	29 27	28 39	-	2	1	
Wis.	31	24	Ū	-	1	Ū	24	65	Ū	-	-	
W.N. CENTRAL	100	91	-	5	10	1	117	147	-	2	1	
Minn. Iowa	15 20	7 21	-	2	- 5	-	31 16	65 23	-	- 1	-	
Mo. N. Dak.	38 5	46 2	- U	-	2	1 U	51	28 1	Ū	-	-	
S. Dak.	4	5	-	-	-	-	3	3	-	-	-	
Nebr. Kans.	9 9	4 6	Ū	1 2	1 2	Ū	3 13	4 23	Ū	- 1	1	
S. ATLANTIC	262	195	-	18	29	5	119	219	_	3	50	
Del. Md.	2 31	- 19	-	- 4	- 6	-	- 18	5 55	-	-	-	
D.C.	-	-	-	-	_	-	1	1	-	-	-	
Va. W. Va.	28 8	33 8	-	2	5 -	-	12 1	28 1	-	-	-	
N.C. S.C.	55 24	29 15	-	1 1	4 9	-	40 22	51 19	-	2	42 6	
Ga.	36	36	-	7	2	1	7	20	-	-	-	
Fla.	78	55	-	3	3	4	18	39	-	1	2	
E.S. CENTRAL Ky.	94 16	98 20	-	3 1	4	6	54 11	61 31	1 -	1 -	4 1	
Ténn. Ala.	41 29	40 28	-	-	2 2	3 3	23 17	16 11	1	1	3	
Miss.	8	10	-	2	-	-	3	3	-	-	-	
W.S. CENTRAL	165	147	-	7	22	-	157	138	-	-	6	
Ark. La.	10 54	8 3 4	-	1 2	1 4	-	7 2	14 8	-	-	1 1	
Okla. Tex.	21 80	21 84	Ū	- 4	- 17	Ū	1 147	9 107	Ū	-	- 4	
MOUNTAIN	73	61	-	7	14	16	904	401	1	1	2	
Mont.	3	1	-	-	1	-	10	11	-	-	-	
ldaho Wyo.	7 6	6 -	-	1	- 1	1 -	166 1	41 1	-	-	-	
Colo. N. Mex.	25 10	20 6	-	1 2	- 1	1 1	160 61	223 70	1	1	1	
Ariz.	11	19	-	1	3	-	460	37	-	-	1	
Utah Nev.	7 4	6 3	-	1 1	4 4	13 -	37 9	12 6	-	-	-	
PACIFIC	313	309	1	44	91	2	283	637	-	1	12 7	
Wash. Oreg.	45 21	33 36	N	1 N	3 N	2	79 27	197 60	-	-	7	
Calif.	237	227	1	25 1	70	-	158 2	345	-	-	5	
Alaska Hawaii	2 8	5 8	-	17	7 11	-	17	11 24	-	1	-	
Guam	-	-	U	-	10	U	-	3	U	-	1	
P.R. V.I.	3	7 -	Ū	-	-	Ū	2	4 -	Ū	-	-	
Amer. Samoa C.N.M.I.	U -	U U	U	U -	U	U -	U -	U U	U -	U -	U U	

N: Not notifiable.

TABLE IV. Deaths in 122 U.S. cities,* week ending July 14, 2001 (28th Week)

	July 14, 20							i (28th wee	/VEEK/						
		All Cau	ıses, By	Age (Y	ears)		P&I⁺			All Cau	ıses, By	Age (Y	ears)		P&I⁺
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND Boston, Mass. Bridgeport, Conn Cambridge, Mass Fall River, Mass. Hartford, Conn. Lowell, Mass. Lynn, Mass. New Bedford, Ma New Haven, Conn Providence, R.I. Somerville, Mass Springfield, Mass Waterbury, Conn. Worcester, Mass. MID. ATLANTIC Albany, N.Y. Allentown, Pa. Buffalo, N.Y. Camden, N.J. Elizabeth, N.J.	. 17 30 U 18 8 sss. 24 . 25 U 2 . 42	315 89 26 16 24 U 15 6 15 21 U 2 32 23 46 1,530 42 23 50 50	33 5 1 6 0 2 2 5 1 0 7 7 2 8 454 9 2 1 12 12 12 12 12 14 15 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	33 14 4 - - - - - 3 1 1 U - 2 2 6 1 188 1 10 2 2	9 8	3 	38 18 1 1 4 U 1 - 2 2 U - 2 3 4 112 8 1 8 2 1	S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, F Tampa, Fla. Washington, D.G. Wilmington, D.G. E.S. CENTRAL Birmingham, Al. Chattanooga, Te Knoxville, Tenn. Lexington, Ky. Memphis, Tenn. Mobile, Ala. Montgomery, A	80 58 60 57 Fla. 69 192 C. 199 l. 10 780 a. 175 nnn. 79 110 58 110 54	876 966 1322 75 1022 335 34 55 1422 1266 5 527 117 53 79 35 69 43 33	299 21 54 20 34 22 16 13 16 12 32 54 5 160 38 17 22 27 9	122 15 31 6 14 11 5 11 2 2 13 12 5 5 7 7 7	32 7 5 4 2 3 1 1 4 1 - 1 2 5 7 3 2 2 3 1 1 4 1 2 2 7 1 2 1 2 1 1 2 1 2 1 2 1 2 1 2 1	21 2 2 1 3 1 1 1 4 - 3 3 - 14 1 1 2 1 6 -	77 17 9 8 12 3 4 2 5 11 6 - 65 14 8 14 8 14
Erie, Pa.§ Jersey City, N.J. New York City, N.Y. Newark, N.J. Paterson, N.J. Philadelphia, Pa. Pittsburgh, Pa.§ Reading, Pa. Rochester, N.Y. Schenectady, N.Y. Scranton, Pa.§ Syracuse, N.Y. Trenton, N.J. Utica, N.Y. Yonkers, N.Y.	46 40 40 41 1,187 21 376 41 18 112 22 22 25 83 24 20 U	32 20 830 U 11 229 27 11 79 19 35 66 19 13 U	8 10 232 U 6 90 8 5 22 2 8 9 3 6 U	88 98 U 1 44 3 2 8 1 4 4 1 1 U	2 2 15 U 1 8 1 - 2 - 2 3	4 11 U 2 5 2 - 1 - 1 1 - U	2 47 U - 18 2 1 8 2 4 6 2 U	Nashville, Tenn. W.S. CENTRAL Austin, Tex. Baton Rouge, La Corpus Christi, 1 Dallas, Tex. El Paso, Tex. Houston, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La San Antonio, Te Shreveport, La. Tulsa, Okla.	141 1,460 79 42 Tex. 65 198 66 117 413 51 . 79 x. 235 30 85	94 882 57 21 43 106 46 70 219 28 41 164 24 63	26 324 11 15 47 14 31 95 11 20 51 3	12 137 5 5 2 30 5 9 48 5 11 9	6 77 5 2 3 9 1 4 37 2 7	3 40 1 3 2 6 3 14 5 4	15 70 3 3 5 9 16 4 16 6 5
E.N. CENTRAL Akron, Ohio Canton, Ohio Canton, Ohio Chicago, III. Cincinnati, Ohio Cleveland, Ohio Columbus, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Grand Rapids, Mi Indianapolis, Ind. Lansing, Mich. Milwaukee, Wis. Peoria, III. Rockford, III. South Bend, Ind. Toledo, Ohio Youngstown, Ohi W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans Kansas City, Kans Kansas City, Mo. Lincoln, Nebr. Minneapolis, Min Omaha, Nebr. St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	199 57 125 47 60 41 82 0 60 838 41 41 41 . 64 U	1,175 23 32 U 84 92 120 88 127 34 46 9 28 136 40 95 33 43 U 22 150 67 74 74 71 115	7 10 U 19 322 4417 555 9 7 2 6 6 3513 17 8 8 6 6 13 10 143 6 7 13 U 8 29 13 6 18	127 2 U 11 923 7 7 7 3 9 6 3 16 2 8 1 5 3 1 1 65 4 1 6 U 2 21 5 13 6 7	48 1 · U 4 3 6 4 5 1 4 1 1 7 2 2 2 2 3 1 · 1 12 1 · · · U · 1 · 5 2 3	41 U 5 5 1 1 1 10 - 3 3 - 6 5 5 - 3 3 1 2 2 U - 1 1 - 6 6 - 2	119 24 U 13 7 16 11 13 3 4 · 3 10 3 9 7 4 4 4 4 2 52 2 1 5 U 5 17 8 · 2 12	MOUNTAIN Albuquerque, N Boise, Idaho Colo. Springs, C Denver, Colo. Las Vegas, Nev. Ogden, Utah Phoenix, Ariz. Pueblo, Colo. Salt Lake City, U Tucson, Ariz. PACIFIC Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawa Long Beach, Cali Los Angeles, Cal Pasadena, Calif. Portland, Oreg. Sacramento, Cal San Diego, Calif. Santa Cruz, Calif. Seattle, Wash. Spokane, Wash. Total	46 olo. 48 119 181 31 181 26 tah 99 177 1,555 12 91 22 ii 84 if. 50 iif. 398 iif. 210 alif. U 5. 4136	658 51 32 29 79 124 24 103 21 66 130 1,054 8 55 18 60 36 279 18 77 137 U U U 32 88 37 7,624	187 20 6 10 21 38 5 34 5 18 30 30 4 3 21 15 10 67 4 32 5 4 32 5 15 10 67 4 32 5 4 4 5 5 10 10 10 10 10 10 10 10 10 10 10 10 10	102 11 5 8 15 12 28 10 12 120 1 11 5 13 4 5 8 15 18 U U 5 7 7 1 9 9 948	26 3 3 - 2 11 - 2 2 42 - 2 - 1 3 10 1 1 1 5 9 1 U - 5 4 1 3 12	22 2 1 2 5 - 5 4 3 3 - 8 8 2 1 1 5 5 5 U U 3 3 - 2 2 1 4	51 6 - 1 8 13 2 7 2 5 7 123 - 4 1 7 5 28 2 5 7 19 0 0 4 6 6 9 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9

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.

¹Pneumonia 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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