

MMWRTM
**MORBIDITY AND MORTALITY
WEEKLY REPORT**

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**Use of Hospital Discharge Data to Monitor Uterine Rupture —
Massachusetts, 1990–1997**

Uterine rupture (UR), a potentially life-threatening condition for both mother and infant, occurs in <0.1% of all pregnant women and <1% of women attempting vaginal birth after cesarean section (VBAC) (1–4). During 1990–1997, the proportion of vaginal deliveries among women who had previous cesarean sections (CS) in Massachusetts increased 50%, from 22.3% to 33.5% (5). Concern about a corresponding increase in UR prompted the Massachusetts Department of Public Health and CDC to initiate a state-wide investigation that included an assessment of the validity and reliability of *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) (6), codes in hospital discharge data to identify UR cases. This report summarizes the results of the investigation, which indicate that ICD-9-CM codes related to UR, designed before increased concern about UR, lack adequate specificity for UR surveillance and have not been applied consistently over time.

Using 1990–1997 state hospital discharge data, suspected UR cases were identified based on three ICD-9-CM diagnostic codes (6). Suspected cases were defined as women discharged from Massachusetts hospitals from 1990 through 1997 with an ICD-9-CM diagnostic code in any of the 10 diagnostic fields of 665.0 (“rupture of uterus before onset of labor”), 665.1 (“rupture of uterus during labor,” including “rupture of uterus not otherwise specified”), or 674.1 (“disruption of cesarean wound,” including “dehiscence or disruption of uterine wound”). Women with and without a history of CS were included. The four-digit ICD-9 codes 665.0 and 665.1 are contained within the larger three-digit category of code 665, “other obstetrical trauma,” that also includes “damage from instruments.” In addition, the ICD-9-CM index directs coders to use 665.1 for “laceration of the uterus, obstetrical trauma not elsewhere classifiable (NEC),” a frequent incidental complication that occurs during delivery of the fetus through the uterine incision.

To identify cases of UR, hospital medical records of suspected cases, including registration sheets, discharge summaries, and surgical reports, were obtained and reviewed by two clinicians to confirm a UR. UR was defined as any unintentional disruption of the uterine wall in a pregnant woman regardless of cause, size, degree of severity, or location and was described in the hospital chart as a rupture, dehiscence, separation, window, or rent. URs occurring in women with and without prior CS scars were included. Incidental extensions or lacerations of a uterine incision during a CS, postpartum separation of the uterine scar resulting from infection, or extremely thin lower uterine segments without disruption of the uterine wall were not considered URs. Positive predictive

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values (PPVs) were calculated as the number of confirmed cases divided by the number of reviewed suspected cases multiplied by 100. PPVs were calculated for codes 665.0 and 665.1 combined, for code 674.1, and for all three codes combined, by year and overall.

From 1990 through 1997, 1244 suspected cases were identified. Of these, 608 (48.8%) had ICD-9-CM code 665.0 or 665.1, 629 (50.5%) had code 674.1, and seven (1.0%) were coded with both 665.1 and 674.1 (Table 1). Of the 1207 (97.0%) hospital records that were reviewed, 480 (39.8%) cases were confirmed as URs. Among the confirmed cases of UR, 442 (92.1%) occurred among women with at least one previous CS, 33 (6.9%) among women with an unscarred uterus, and five (1.0%) among women who had another type of uterine scar (e.g., myomectomy).

The average PPV during the 8-year period was 50.7% for ICD-9-CM codes 665.0 and 665.1 and 28.6% for code 674.1. The overall PPV of the three codes was 39.8%. The number of suspected UR cases coded with 665.0 or 665.1 increased steadily from 1990 through 1997. However, the number of confirmed cases and PPV increased during 1990–1994, but from 1994 through 1997 the number fluctuated while PPV declined. The number of suspected and confirmed cases and the PPV of ICD-9-CM code 674.1 remained relatively stable during the same time period.

Of the 726 suspected cases confirmed as nonruptures, 694 (95.6%) of the charts contained enough information to identify a reason for the use of one of the three diagnostic codes for UR. Codes were used correctly in 81.3% of the nonrupture charts to record a condition that falls within the ICD-9-CM definitions. Among the 19.7% of records where the codes were not used correctly, 14.0% were miscoded (i.e., a condition was recorded that should have been coded with a different ICD code), 4.0% were data entry errors, and 0.6% could not be categorized because no condition mentioned in the chart appeared to be related to one of the three ICD-9-CM codes (Table 2).

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TABLE 1. Number of suspected and confirmed cases of uterine rupture and positive predictive value (PPV) of *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM), codes 665.0 and 665.1* and 674.1†, by year — Massachusetts, 1990–1997

Year	ICD-9-CM 665.0 and 665.1			ICD-9-CM 674.1			Total [§]		
	Suspected	Confirmed	PPV [¶]	Suspected	Confirmed	PPV	Suspected	Confirmed	PPV
1990	67	26	39.4	87	17	20.5	154	43	28.9
1991	68	19	28.4	78	24	29.3	144	41	29.3
1992	70	27	39.7	82	21	26.6	152	48	32.7
1993	73	33	47.8	91	24	27.5	162	55	37.2
1994	72	48	67.6	76	27	35.5	148	75	51.0
1995	81	52	64.2	75	22	28.8	154	73	48.0
1996	83	44	53.7	80	26	33.3	163	70	43.8
1997	101	57	57.0	67	18	27.7	167	75	45.7
Total	615	306	50.7	636	179	28.6	1244	480	39.8

*Rupture of the uterus before onset or during labor, including rupture of uterus not otherwise specified.

† Disruption of cesarean wound, including dehiscence or disruption of uterine wound.

§ Seven suspected cases were coded with ICD-9-CM 665.1 and 674.1, of which five were confirmed as a uterine rupture.

¶ PPV based on number of hospital records reviewed (n=1207 [97.0%]).

*Uterine Rupture — Continued***TABLE 2. Number and percentage of cases without uterine rupture*, by reason for use of *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) code, by year — Massachusetts, 1990–1997**

Year	Correct [†]		Miscode [§]		Error [¶]		Undetermined**		Total
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	
1990	93	(87.7)	9	(8.6)	3	(2.9)	1	(1.0)	106
1991	78	(78.8)	14	(14.1)	6	(6.1)	1	(1.0)	99
1992	86	(86.9)	7	(7.1)	5	(5.1)	1	(1.0)	99
1993	78	(83.9)	13	(14.0)	2	(2.2)	0	—	93
1994	42	(68.9)	16	(26.2)	3	(4.9)	0	—	61
1995	52	(83.9)	8	(12.9)	2	(3.2)	0	—	62
1996	67	(78.8)	11	(12.9)	6	(7.1)	1	(1.2)	85
1997	68	(76.4)	19	(21.3)	2	(2.2)	0	—	89
Total	564	(81.3)	97	(14.0)	29	(4.2)	4	(0.6)	694

* Includes one confirmed nonrupture that was coded with ICD-9-CM 665.1 and 674.1, and excludes 70 records that did not contain enough information to classify (n=32) or have not been received (n=38).

[†] Correct use of code based on ICD-9-CM definitions (i.e., disruption of uterine wound, extension or laceration of uterine incision, or instrument damage).

[§] Incorrect use of code (e.g., laceration of cervix).

[¶] Codes on registration sheet do not match codes in hospital discharge data.

** No mention of any condition in chart that would indicate why either ICD-9-CM 665.1 or 674.1 was used.

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Editorial Note: Administrative information, such as hospital discharge data, is often used for surveillance purposes. This study indicates that hospital discharge data alone cannot be used to monitor trends in UR because ICD-9-CM codes lack the required specificity and consistency in application. However, even though the PPV of codes 665.0 and 665.1 was higher than the PPV of code 674.1, the number of URs would have been undercounted by one third without including records with diagnostic code 674.1.

The purpose of the ICD-9 and the ICD-9-CM classification systems is to place conditions into relevant categories for statistical purposes (6,7). ICD-9-CM is adapted from ICD-9, which was published in 1977 before concern about rising CS rates. It was not designed to monitor UR as a complication of labor; therefore, the low overall PPVs can be explained by including other conditions in ICD-9-CM codes 665.0, 665.1, and 674.1. Reasons for the decline in the PPV of ICD-9-CM codes 665.0 and 665.1 during 1994–1997 are unclear but may represent changes in coding practices, an actual shift in clinical outcomes, or a combination of both. Coding practices may have been affected by obstetric coding guidelines issued in 1995 by CDC's National Center for Health Statistics to standardize the application of ICD-9-CM codes across facilities, and by changes in obstetric reimbursement policies that may have encouraged more extensive reporting. Clinical outcomes may have been affected by a decline in the proportion of births delivered by CS and an increase in VBACs.

International Classification of Diseases and Related Health Problems, 10th Revision (ICD-10) was published in 1992, also before increased concern about URs, and is scheduled to replace ICD-9-CM for coding of morbidity in 2005. However, ICD-10 does not

Uterine Rupture — Continued

address the lack of specificity of codes to identify UR cases accurately (8). Future revisions to ICD-10 and ICD-10-CM should include a code specifically for "uterine rupture associated with previous CS scar."

An alternate data source for monitoring URs will be the revised national standard certificate of live birth, scheduled to go into use in 2003. It will contain a checklist for maternal morbidity including UR. This data source will need to be validated for its sensitivity and specificity through medical records review.

VBAC generally is considered safe practice, and 75% of women attempting a VBAC are successful (2). However, the greatest risk factor for UR is labor among women with a previous CS. The findings in this report indicate that the number of URs increased from 1990 to 1994, with a notable increase from 1993 to 1994. This pattern is similar to the change in the proportion of VBACs among women with a previous CS. Data to estimate the frequency of VBAC attempts are unavailable; therefore, the risk for UR among women attempting VBAC is unknown.

The incidence of UR may have been higher than that reported in this study. The negative predictive value of the three diagnostic codes is unknown because the probability that persons who were not reported to have a UR were free of UR could not be ascertained. In addition, the severity of UR varies from inconsequential to catastrophic; therefore, minor cases may remain clinically undetected and unreported. The need to monitor and assess the competing risks for morbidity associated with different methods of delivery will continue to be important.

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Imported Dengue — United States, 1997 and 1998

Dengue is a mosquito-transmitted acute viral disease caused by one of four dengue virus serotypes (DEN-1, DEN-2, DEN-3, and DEN-4). Dengue is endemic in most tropical areas of the world and has occurred in U.S. residents returning from travel to such areas. CDC maintains a laboratory-based passive surveillance system for imported dengue among U.S. residents. The system relies principally on reports by clinicians to state

Imported Dengue — Continued

health departments, which forward patient specimens to CDC for diagnostic testing. This report summarizes information about imported dengue cases among U.S. residents for 1997 and 1998, which indicates that most persons with a known travel history probably acquired infection in the Caribbean islands or Asia.

Serum samples from 349 persons who had suspected dengue based on clinical presentation and onset of symptoms (1) in 1997 and 1998 were submitted to CDC from 40 states and the District of Columbia. From these samples, 143 (38%) cases were laboratory diagnosed as dengue, 133 (93%) cases had IgM antibody in early convalescent samples or single high titers of IgG antibody in acute serum samples, and 10 (7%) cases had isolation of dengue virus. In three cases, positive by detection of anti-dengue IgM antibody, virus serotype was identified by polymerase chain reaction (PCR). Overall, DEN-4 was identified in five (39%) cases, DEN-2 in four (31%) cases, and DEN-1 and DEN-3 in two (15%) cases each (Table 1). Dengue diagnosis was negative in 129 (37%) patients and indeterminate in 77 (22%) patients because convalescent samples for serologic testing were unavailable.

Of the 143 persons with laboratory-diagnosed dengue, sex was known for 130; 65 (50%) were males. Age was reported for 99 persons and ranged from age <1–70 years (median: 34 years). States reporting the highest number of cases were Florida (12) in 1997 and New York (22) in 1998. Travel histories within the 2 weeks before illness, available for 122 persons, indicated that infections probably were acquired in the Caribbean islands (61 cases), Asia (30), Central America (23), South America (four), Africa (three), and the Pacific islands (one). In 1998, 90 laboratory-diagnosed cases were reported, a 70% increase from the 53 cases reported in 1997. Among the 90 cases, 35 (39%) persons reported traveling to the Caribbean islands in 1998 compared with 14 (26%) in 1997.

Clinical information was available for 85 patients with laboratory-diagnosed dengue. Commonly reported symptoms were fever (94%), headache (69%), myalgia (53%), rash (53%), arthralgia (32%), retro-orbital pain (27%), nausea or vomiting (25%), chills (24%), diarrhea (19%), and petechiae or ecchymoses (15%). At least seven patients were hospitalized, and one patient died (diagnosed with DEN-2 by immunohistochemistry on autopsy tissue).

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Editorial Note: The principal vector of dengue is the mosquito *Aedes aegypti*, which has a wide distribution in most tropical and subtropical areas. In the United States, *Ae. aegypti* can be found during summer months in many states. Most U.S. residents with dengue become infected during travel to tropical areas, although autochthonous transmission of dengue was documented in Texas in 1999 (2,3).

The incubation period of dengue is 4–7 days (range: 3–14 days). Dengue virus infection can be asymptomatic or cause illnesses ranging from mild undifferentiated fever to severe disease, including hemorrhagic manifestations and shock (4). Dengue hemorrhagic fever (DHF) is characterized by fever, minor or major bleeding phenomena, thrombocytopenia ($\leq 100,000$ platelets/mm³), and evidence of increased vascular permeability (e.g., hemoconcentration [hematocrit increased by at least 20% from baseline], pleural or abdominal effusions, or hypoproteinemia) (4). Dengue shock syndrome (DSS) is DHF with signs of circulatory failure, including narrow pulse pressure (≤ 20 mmHg), hypotension, or shock, and may result in death rates of approximately 10% (5).

Imported Dengue — Continued

TABLE 1. Suspected and laboratory-diagnosed cases of imported dengue, by state — United States, 1997 and 1998

State	1997 Cases		1998 Cases		Travel history, if known, of persons with laboratory-diagnosed dengue (serotype, if known)
	Suspected	Laboratory diagnosed	Suspected	Laboratory diagnosed	
Alabama	0	0	1	0	
Alaska	0	0	1	1	Jamaica
Arizona	1	0	1	1	Thailand
Arkansas	0	0	2	2	Honduras; Philippines and Hong Kong (DEN-3)
California	4	2	2	1	
Colorado	7	1	8	4	Singapore; Japan; India
Delaware	0	0	1	1	Puerto Rico
District of Columbia	3	0	10	0	
Florida*	26	12	8	6	Puerto Rico (three cases); St. Croix; Bahamas
Georgia	5	1	11	1	Honduras
Hawaii	5	5	11	3	
Illinois	4	2	0	0	
Iowa	0	0	2	1	Vietnam
Kansas	2	0	1	0	
Maine	0	0	2	1	Brazil
Maryland	15	6	10	8	Puerto Rico (two cases); El Salvador (two cases); Indonesia; Bangladesh (two cases); Dominican Republic
Massachusetts	14	1	25	12	Colombia; Philippines; Puerto Rico (three cases, one DEN-4); Thailand; El Salvador; Grenadine Islands; St. Croix
Michigan	6	4	3	1	Nicaragua
Minnesota	2	1	6	3	Philippines (two cases); Thailand

Imported Dengue — Continued

Mississippi	1	1	Honduras	1	0	Puerto Rico
Montana	2	0		2	1	Puerto Rico (DEN-1)
North Carolina	8	4	Japan; Mexico (two cases)	3	1	
New Hampshire	0	0		0	0	
New Jersey	0	0		1	1	Puerto Rico
New Mexico	0	0		3	0	
New York	14	7	Philippines; Guatemala; Colombia; Barbados	35	22	Barbados; Honduras; Philippines; Puerto Rico (seven cases, two DEN-4) Dominican Republic (three cases); El Salvador; Haiti; Guatemala; Thailand; South Africa; India; St. Martin (one fatal case, DEN-2); one case (DEN-4) with unknown travel history
Ohio	4	1		5	3	Haiti (two cases); Thailand
Oklahoma	1	0		2	2	Nicaragua; Brazil
Oregon	8	2	Indonesia	11	2	Thailand; Indonesia
Pennsylvania	5	1	Ecuador	2	0	
Rhode Island	1	0		1	1	Puerto Rico
South Carolina	1	0		0	0	
Tennessee	2	0		1	0	
Texas ^s	1	0		0	0	
Utah	0	0		2	0	Belize
Vermont	0	0		1	1	
Virginia	0	0		2	0	
Washington	4	1	One case (DEN-2) with unknown travel history	12	4	Ethiopia; Thailand (two cases); India
Wisconsin	3	1	Barbados	10	5	Dominican Republic; El Salvador (two cases); Philippines; Nicaragua
Wyoming	0	0		1	1	Puerto Rico
Total	149	53		200	90	

*Conducted active surveillance from April 1, 1997, to March 31, 1998.

[†] Polymerase chain reaction.

[§] The Texas laboratory-based surveillance system detected 16 serologically documented cases during 1997–1998, which were not included in this report; six (38%) diagnoses were based on results from commercial laboratories. Among the 16 cases, four occurred in patients who had no history of international travel.

Imported Dengue — Continued

From 1993 through 1998, the number of imported laboratory-diagnosed U.S. cases increased, reflecting the impact of travel and the occurrence of epidemic activity, especially in the Caribbean and Central America. In 1998, laboratory-diagnosed cases of dengue were more than double the number reported in 1997. This pattern is consistent with the increased number of cases of dengue/DHF in the Americas for 1998 (741,794) compared with 1997 (364,945) (6).

The findings in this report are subject to at least two limitations. First, the number of dengue cases referred to CDC for diagnosis represents a minimum estimate of the actual number of U.S. travelers with dengue fever or its complication, DHF or DSS. Because dengue is not a nationally notifiable disease, diagnostic samples may not be sent for testing or may be sent to laboratories other than CDC; therefore, many imported cases may not be counted. For example, Florida implemented an active laboratory-based surveillance system from April 1, 1997, through March 31, 1998, which resulted in an increased detection of laboratory-positive cases from a previous 30-year annual mean of 1.4 cases to 18 cases during this period (7); five of the 18 cases were reported from private clinical laboratories. Second, travel histories and clinical information were not available for all persons with dengue, and they may not be representative of all persons with imported dengue.

Persons traveling to areas where dengue is endemic should avoid exposure to mosquitoes by using repellents, wearing protective clothing, and remaining in well-screened or air-conditioned areas. No vaccine is available for preventing dengue infection. The *Ae. aegypti* mosquito is well adapted to urban environments and can be found in or near human dwellings, where the mosquito can be found in closets, bathrooms, behind curtains, and under beds. The species usually bites during the early morning and late afternoon, but may feed at any time during the day when indoors or during overcast periods (8).

With an increase in traveling to and from endemic areas, more cases of imported dengue may be expected and health-care providers should consider dengue in the differential diagnosis of illness for all patients who have fever and a history of travel to tropical areas within 2 weeks before the onset of symptoms. Supportive measures should be given, and only acetaminophen is recommended for management of pain and fever. Acetylsalicylic acid (i.e., aspirin) and other nonsteroidal anti-inflammatory agents are contraindicated because of their anticoagulant properties. Acute-phase and convalescent-phase serum samples should be obtained for viral isolation and diagnosis and sent for confirmation through state or territorial health departments to CDC's Dengue Branch, Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases, 2 Calle Casia, San Juan, PR 00921-3200; telephone (787) 766-5181; fax (787) 766-6596. Serum samples should be accompanied by a summary of clinical and epidemiologic information, including date of onset of disease, date of collection of sample, and a detailed recent travel history.

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Progress Toward Poliomyelitis Eradication — Democratic Republic of Congo, 1996–1999

In 1988, the World Health Assembly resolved to eradicate poliomyelitis by December 31, 2000 (1). Although progress has been extraordinary (2), full implementation of polio eradication strategies has been delayed in several countries affected by war. The Democratic Republic of Congo (DRC) has experienced continual armed conflict since October 1996. As a result, DRC is the last country in the African Region of the World Health Organization (WHO) to implement National Immunization Days (NIDs*). DRC is an important global reservoir for wild poliovirus and shares more than 5580 miles (9000 km) of border with nine countries†; in at least seven of these countries polio is endemic. The large area of DRC, substantial amount of poverty, weak health-care infrastructure, poor transportation and communication, and competing demands for resources present considerable challenges to polio eradication. This report summarizes information on the existing health-care infrastructure and routine coverage, information from NIDs carried out in 1999, and results from the recently established surveillance system for acute flaccid paralysis (AFP).

Existing Health-Care Infrastructure and Routine Vaccination Coverage

DRC has an estimated population of 48.7 million persons[§]; 70% live in rural areas. As a result of armed conflict, health-care administration and logistics have become divided into two operational sectors. The western sector receives vaccine, cold chain equipment, and other supplies through Kinshasa while the eastern sector is supplied through Goma. The Ministry of Health (MOH) is supported by WHO, the United Nations Children's Fund (UNICEF), and national and international nongovernment organizations. In DRC during 1984–1995, mortality in infants (127 per 1000) and children aged <5 years (205 per 1000) remained static. Life expectancy is 45 years, and the maternal mortality rate is among the highest in the world (870 per 100,000 births).

Expanded Program on Immunization (EPI) activities are coordinated by 42 subprovincial offices; each is headed by an EPI office and comprises several of the

* Nationwide mass campaigns over a short period (days to weeks), in which two doses of oral poliovirus vaccine are administered to all children in the target age group (usually aged <5 years), regardless of vaccination history, with an interval of 4–6 weeks between doses.

† Angola, Burundi, Central African Republic, Congo, Rwanda, Sudan, Tanzania, Uganda, and Zambia.

§ Based on the results of the 1999 NIDs.

Poliomyelitis Eradication — Continued

307 health zones. Coverage in the western sector with three doses of oral poliovirus vaccine (OPV3) among children aged <1 year was an estimated 20%. Coverage with OPV3 in the eastern sector of North Kivu was 36% for the first 6 months of 1999. No data are available for the other eastern sector provinces where coverage is estimated to be lower. In 1998, a survey estimated 59% OPV3 coverage nationwide among children aged 12–23 months. Except for Angola (3), DRC is the only other African country where large outbreaks have been reported since polio eradication activities began in Africa in 1996. In 1995, approximately 1000 polio cases were reported in Mbuji May (Kasai Oriental). In 1997, 30 cases (and three deaths) were reported in Walikale (North Kivu), and 25 cases (no deaths) were reported in Inongo (Bandundu). In 1998, 87 cases (14 deaths) were reported in Walikale and seven cases (three deaths) in Kiri (Bandundu).

National Immunization Days

During January–October 1996, Local Immunization Days (LIDs) were conducted in DRC's 32 most populous cities; 1,134,416 children aged 0–59 months (89% of the target population) received two doses of OPV. In 1997, LIDs were carried out in the 47 most populous cities and in 98 health zones along the eastern border. Reported coverage was 97% for Kinshasa and 80%–85% for other cities. In August 1998, the first NIDs were disrupted by the resumption of war. Although hostilities made nationwide implementation impossible, subnational NIDs were conducted in five of the country's 11 provinces; 3.4 million children (92% of the target population) were vaccinated with OPV. In 1999, three rounds of NIDs were planned for August, September, and October. The United Nations General Secretary arranged a cease-fire between the DRC government and the main opposing forces, and urged all factions to observe days of tranquility during NIDs. Vitamin A supplementation (4) was added to the second round of NIDs and measles vaccination to the third round in selected health zones. Because war created difficulty of movement between the eastern and western sectors, a team based in Goma planned and supervised NIDs for the eastern sector while the Kinshasa-based team planned and monitored NIDs for the western sector. Supplies for the east and west came through Goma and Kinshasa, respectively.

Of the country's 307 health zones, 298 (97%) developed a plan to implement NIDs, and these plans were integrated into the overall national plan. Despite the agreement, on August 13, the first NIDs round, targeting all children aged 0–59 months, was disrupted by renewed fighting in the eastern sector; however, 80,000 health-care workers vaccinated in 11 provinces and 298 (97%) health zones were reached (Table 1). In nine health zones, no vaccination activity occurred; only one round was conducted in three zones (1%); 47 (15%) health zones conducted only two rounds. This accounts for the disparities in the numbers of children vaccinated in each round in some provinces (Table 1); 71%, 86%, and 81% of children in the target age group received OPV in the first, second, and third round, respectively; 6,098,500 (67%) children aged 6–59 months received a supplemental dose of vitamin A during the second round, and 3,321,832 children aged 9–59 months (80% of those targeted) were vaccinated against measles.

AFP Surveillance

In early 1999, AFP surveillance was initiated throughout DRC. The chief medical officers of each health zone are responsible for AFP surveillance and are supported by provincial EPI coordinators who report to the national EPI coordinator. Seven WHO sub-offices created in 1995 provide MOH with logistic and technical assistance for AFP

Poliomyelitis Eradication — Continued

TABLE 1. Number of children aged 0–59 months*, number receiving oral poliovirus vaccine (OPV) during National Immunization Days† (NIDs), number of reported cases of acute flaccid paralysis (AFP), and nonpolio AFP rates, by province — Democratic Republic of Congo, 1999

Province	No. children aged <5 years	NIDs			AFP surveillance			
		No. children vaccinated			No. reported AFP cases	Nonpolio AFP rate	% AFP cases with adequate‡ specimens	Confirmed cases of polio (wild poliovirus)
		Round 1	Round 2	Round 3				
Bandundu	1,155,038	1,074,623	1,046,912	1,084,102	9	0.12	44%	2
Bas Congo	489,420	466,359	474,806	476,674	5	0.23	80%	5
Equateur	1,155,412	243,566	740,826	581,754	3	0.06	67%	0
Kasai Occidental	945,767	758,035	856,129	844,970	11	0.33	64%	3
Kasai Oriental	1,144,150	1,062,951	1,097,437	1,106,067	6	0.20	67%	2 (1)
Katanga	1,470,803	1,104,720	1,298,339	1,419,219	6	0.19	100%	1
Kinshasa	867,300	827,128	850,704	833,247	32	0.74	48%	20
Maniema	255,379	151,923	210,272	235,834	12	0.00	0	12
North Kivu	776,701	690,585	702,219	738,198	1	0.06	100%	0
Oriental	1,532,158	852,154	1,293,695	1,361,262	0	0.00	NA	0
South Kivu	670,161	547,653	599,744	577,095	0	0.00	NA	0
Total	10,462,289	7,779,697	9,171,083	9,258,422	85	0.17	51%	45 (1)

*Denominator data based on 1988 census, or maximum number of children vaccinated if higher, and may be unreliable if used to calculate coverage.

†Nationwide mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children in the target age group (usually aged <5 years), regardless of vaccination history, with an interval of 4–6 weeks between doses.

‡Two stool specimens collected 24 hours apart and within 14 days after the onset of paralysis.

Poliomyelitis Eradication — Continued

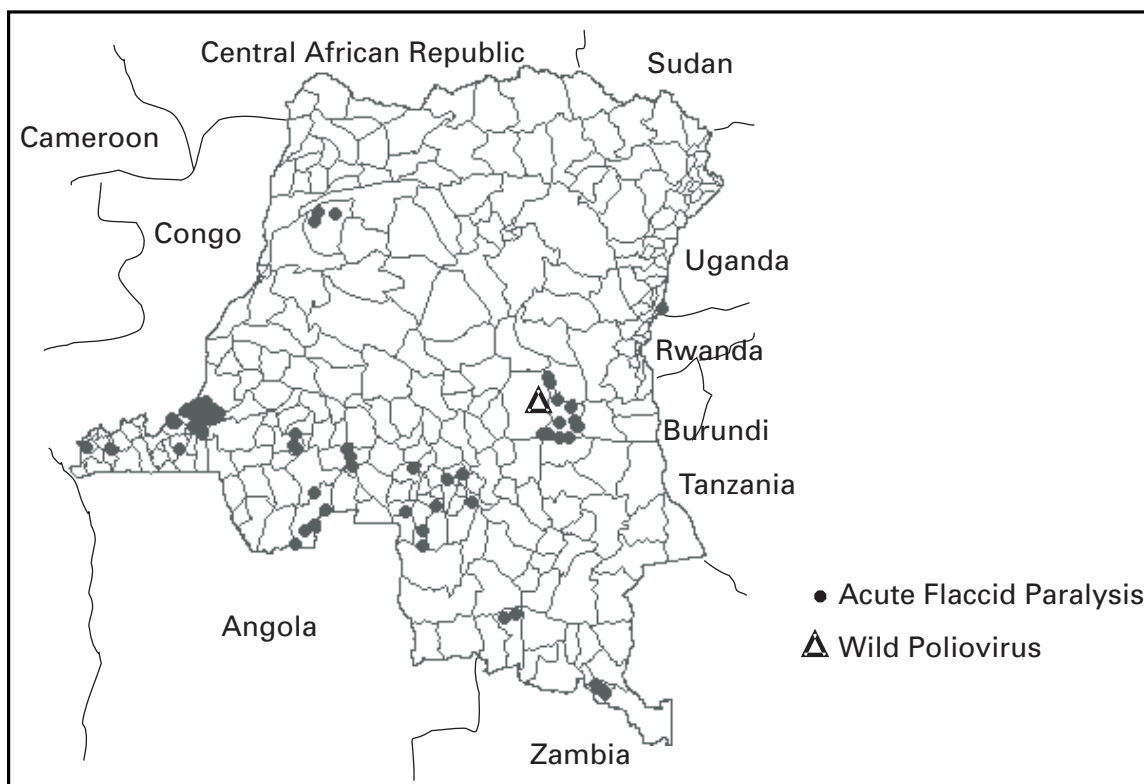
surveillance activities. Although medical personnel have been trained in AFP surveillance in all provinces, surveillance is largely passive (there is no zero-case reporting from health facilities). From each of the 11 provinces, one national surveillance officer is recruited and provided with transportation. The National Institute for Biomedical Research was identified as the national polio reference laboratory and obtained WHO accreditation in December 1999.

During 1999, 85 AFP cases were reported (Figure 1). All 85 had at least one stool specimen collected. Adequate[†] stool specimens were collected from 44 case-patients; 43 were negative for wild poliovirus and were classified as nonpolio. In 1999, three rounds of NIDs were planned for August, September, and October. Wild poliovirus type 3 was isolated from a stool specimen taken 30 days after onset of paralysis from a case-patient in Mbuji May (Kasai Oriental). Sixty-day follow-up examinations were not conducted for the 41 cases with inadequate specimens, which were confirmed as polio on clinical case classification criteria^{**}. The overall nonpolio AFP rate was 0.17 per 100,000 children aged <15 years.

[†] Two stool specimens collected at an interval of at least 24 hours within 14 days of paralysis onset.

^{**} AFP cases are confirmed as polio if wild poliovirus is isolated from two specimens, if follow-up examinations 60 days after onset show residual paralysis, or if no follow-up could be conducted (i.e., patient died or was lost to follow-up).

FIGURE 1. Acute flaccid paralysis (AFP) and wild poliovirus cases, by district — Democratic Republic of Congo, 1999



Poliomyelitis Eradication — Continued

Reported by: World Health Organization (WHO) Country Office, Kinshasa, Democratic Republic of Congo (DRC); United Nations Children's Fund (UNICEF) Country Program, Kinshasa, DRC. Regional Office for Africa, WHO, Harare, Zimbabwe. Regional UNICEF Office for West and Central Africa Region, Abidjan, Côte d'Ivoire. UNICEF, New York. Vaccines and Biologicals Dept, WHO, Geneva, Switzerland. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

Editorial Note: The goal of global polio eradication will not be achieved unless strategies are implemented effectively in all countries where polio is endemic, including those affected by civil unrest or war. This report from DRC, together with reports from Afghanistan (5), Somalia, southern Sudan (6), and other war-torn areas (7), suggests that even under extremely adverse conditions, effective polio eradication strategies can be implemented.

NIDs in DRC that reached almost all health zones and the initiation of AFP surveillance demonstrate that armed conflict does not present an insurmountable barrier to implementing eradication strategies. Despite the successes, however, future NIDs must cover all areas of the country. Nine health zones, with a combined target population of 270,000 children aged <5 years, were not reached during the 1999 NIDs; conflict prevented another 57 health zones from completing OPV3 rounds.

In 2000, a cease-fire, days of tranquility for NIDs respected by all armed groups, and completion of three NIDs rounds in all 307 DRC health zones are factors critical to eradication efforts. Plans for polio eradication in DRC in 2000 include strengthening routine EPI; conducting three rounds of intensified NIDs in July, August, and September 2000 (including house-to-house vaccination in much of the country); and expanding AFP surveillance. The long-term success of NIDs in DRC requires the negotiation of a formal cease-fire; the strong commitment of the DRC government; a solid partnership between MOH, United Nations agencies, and other organizations; commitment of the necessary funds and resources to overcome the limitations of the existing infrastructure; and a decentralized approach to planning and implementation.

The detection of 85 AFP cases also demonstrates that AFP surveillance can be initiated in countries affected by war and limited infrastructure. Cases already have been reported from nine of the country's 11 provinces. The success is primarily the result of MOH commitment and the establishment of a surveillance infrastructure. The sensitivity, quality, and geographic extent of AFP surveillance must be enhanced to ensure that data can be used to target mopping-up activities as polio transmission becomes focused in DRC. Active surveillance with zero-case reporting from the main referral hospitals must be initiated. If DRC is to eradicate polio by the end of 2000, the necessary human, material, and financial resources must be made available in a timely manner^{††}. International, national, and local efforts pressing for peace or at least access to children for vaccination and other health activities must be a priority.

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^{††}Polio eradication in DRC is supported by the DRC government; external support is provided by WHO, UNICEF, Rotary International, and the government of the United States (through U.S. Agency for International Development and CDC).

Poliomyelitis Eradication — Continued

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Public Opinion About Public Health — United States, 1999

Previous surveys have documented a substantial gap in the public's understanding and attitudes about public health (1). The Pew Charitable Trusts, a Philadelphia-based philanthropy that supports nonprofit activities in the areas of culture, education, the environment, health and human services, public policy, and religion, commissioned two firms, the Mellman Group and Public Opinion Strategies, to conduct both qualitative and quantitative research in 1999 to characterize the public's attitudes about public health. In particular, the Pew Charitable Trusts asked the groups to explore 1) perceptions about public health in general, including levels of support and importance compared with other national priorities; 2) opinions about environmental health and its role in causing disease and promoting health; and 3) opinions about the public health infrastructure. This report summarizes the results of this survey, which indicate that the term "public health" is misunderstood, persons are concerned about the quality of the public health system, increased government spending for public health is a greater priority than other key national concerns, and that the public regard environmental factors as important contributors to certain health problems.

During March 24–31, 1999, the groups conducted a national telephone survey of 1234 registered voters. Registered voters, selected by random-digit-dialing, were chosen because of their potential influence on setting government priorities. Respondents were first asked to respond to a series of statements defining public health. Respondents were then given a definition of public health (i.e., protecting the population from disease) and asked a series of questions about federal resources devoted to public health and other programs. Respondents also were asked about their beliefs on the links between environmental factors and disease. The sampling margin of error was $\pm 2.8\%$ at the 95% confidence level.

Respondents were asked "When you hear the term 'public health,' what do you think of?" and then given a choice of four descriptions. Approximately half (57%) of the respondents could not define public health as either protecting the population from disease or policies and programs that promote healthy living conditions for everyone.

Interviewers then defined public health and asked respondents to rate (i.e., excellent, good, fair, or poor) the current system for protecting public health. Most (57%) respondents offered negative evaluations of the public health system. Respondents also were asked whether sufficient resources were being dedicated to public health; 65% said that the United States should do more to protect public health. When asked to compare public health as a spending priority with several other key programs, most said public health was more deserving of additional funds than building roads and highways (80%), missile defense (73%), and cutting taxes (63%). Only education was viewed as a greater priority for additional resources (24%).

Public Opinion — Continued

When asked about environmental factors (e.g., pollution) and their relation to public health, 85% said they believed that environmental factors are important determinants of disease and health problems. Of these, 38% considered environmental factors very important.

Respondents were asked to indicate how much impact environmental problems have on the public health. Most respondents believed that environmental factors play an important role in causing certain diseases. Sinus and allergy problems (54%), childhood asthma (54%), childhood cancer (39%), colds and influenza (35%), and birth defects (36%) were the health problems seen as most likely resulting from environmental factors (Table 1).

Respondents were given nine environmental issues and asked what impact each had on the population's health (a great deal, some, not too much, not at all, or don't know). Contaminated drinking water (58%), toxic waste (56%), air pollution (53%), foods contaminated with bacteria (53%), and pesticides in foods (47%) were considered to have the greatest impact (Table 2).

Reported by: SA Hearne, DrPH, PA Locke, DrPH, Pew Environmental Health Commission, Johns Hopkins School of Public Health, Baltimore, Maryland. M Mellman, P Loeb, L Dropkin, Mellman Group; G Bolger, N Fink, Public Opinion Strategies, Washington, DC. M Byrnes, MPA, Pew Charitable Trusts, Philadelphia, Pennsylvania.

Editorial Note: Societal support is critical for public health efforts, which target population-based disease prevention and collective action. Since 1981, financial support for public health infrastructure has decreased (2,3), and national expenditures for health-care services have increased (4,5). The diminishing resources for public health combined with the increasing costs of medical intervention may indicate a failure to communicate the efficacy of public health practices and programs.

The findings in this report are subject to at least two limitations. First, the survey design defined public health but not the public health system. Second, spending priorities do not necessarily address support of specific public health initiatives. The survey does indicate substantial support for public health when the public understands the concept, which has important implications for how public health professionals communicate with the public, policymakers, and the media.

TABLE 1. Percentage of participants' responses to the level of impact of environmental factors on selected health problems — Pew Charitable Trusts Public Health Survey, United States, 1999

Health problem	Very important	Somewhat important	Not too important	Not at all	Don't know
Sinus problems/allergies	54%	35%	24%	22%	24%
Asthma in children	54%	35%	4%	3%	5%
Colds/Influenza	35%	41%	11%	10%	3%
Childhood cancer	39%	35%	8%	8%	10%
Birth defects	36%	37%	9%	7%	10%
Breast cancer	28%	33%	15%	13%	12%
Brain tumors	24%	32%	12%	14%	18%
Infertility	20%	36%	15%	14%	16%
Learning disabilities	21%	29%	21%	19%	11%
Prostate cancer	20%	29%	17%	17%	17%
Behavioral disorders	18%	28%	21%	21%	12%
Childhood injury	15%	24%	23%	29%	10%

*Public Opinion — Continued***TABLE 2. Percentage of participants' responses to the level of impact the environment has on a person's health, by environmental problem — Pew Charitable Trusts Public Health Survey, United States, 1999**

Problem	Great deal	Some	Not much	Not at all	Don't know
Air pollution	53%	38%	25%	22%	22%
Sick buildings	26%	36%	10%	5%	22%
Contaminated drinking water	58%	28%	8%	3%	3%
Food contaminated with bacteria	53%	34%	9%	2%	1%
Pesticides in foods	47%	36%	10%	4%	3%
Toxic waste	56%	29%	9%	2%	5%
Chemicals in consumer products	35%	42%	15%	5%	3%
Depletion of ozone layer	36%	33%	12%	9%	10%
Electromagnetic fields created by power lines	19%	32%	17%	16%	17%

The findings in the survey indicate that most registered voters believe the environment is an important determinant in maintaining good health. The identification of environmental health issues with public health may enable public health professionals to better inform the public about the importance of a population-based focus on disease prevention.

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Notice to Readers**Alternate Two-Dose Hepatitis B Vaccination Schedule
for Adolescents Aged 11–15 Years**

In September 1999, Merck Vaccine Division (Merck & Co., Inc., West Point, Pennsylvania*) received approval from the Food and Drug Administration for an optional two-dose schedule of Recombivax HB® for vaccination of adolescents aged 11–15 years. The Advisory Committee on Immunization Practices approved the optional two-dose schedule in October 1999 and recommended to include this schedule in the Vaccines for Children Program in February 2000. Using the two-dose schedule, the adult dose of Recombivax HB® (1.0 mL dose containing 10 µg of hepatitis B surface antigen [HBsAg]) is administered to adolescents aged 11–15 years, with the second dose given 4–6 months after the first dose. In immunogenicity studies among adolescents aged 11–15 years, antibody concentrations and end seroprotection rates (≥ 10 milli-international units per mL of antibody to HBsAg) were similar with the two-dose schedule (1.0 mL dose containing 10 µg of HBsAg) and the currently licensed three-dose schedule (0.5 mL dose containing 5 µg of HBsAg). The overall frequency of adverse events was similar for the two-dose schedule and the three-dose schedule. Short-term (2-year) follow-up data indicate that the rate of decline in antibody levels for the two-dose schedule was similar to that for the three-dose schedule. No data are available to assess long-term protection (beyond 2 years) or immune memory following vaccination with the two-dose schedule, and it is not known whether booster doses of vaccine will be required. As with other hepatitis B vaccination schedules, if administration of the two-dose schedule is interrupted it is not necessary to restart the series. Children and adolescents who have begun vaccination with a dose of 5 µg of Recombivax HB® should complete the three-dose series with this dose. If it is not clear which dose an adolescent was administered at the start of a series, the series should be completed with the three-dose schedule.

*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.

Notice to Readers**Injury-Related Mortality Reports Database Available on Internet**

WISQARS™ (Web-based Injury Statistics Query and Reporting System), pronounced “whiskers,” is an interactive system that provides injury-related mortality data useful for research and for making informed public health decisions. Mortality data for 1981–1997 are produced in two report formats: 1) Injury Mortality Reports, which can be used to determine injury deaths and death rates for specific external causes of injuries, and 2) Leading Causes of Death Reports, which can be used to determine the number of injury-related deaths relative to the number of other leading causes of death in the United States or in individual states. The report is available at <http://www.cdc.gov/ncipc/wisqars>.

Notices to Readers — Continued

Both reports are available by year, age, race, sex, Hispanic origin, and state. Reports can be requested by 5-year age ranges (e.g., 0–4 years or 5–9 years) or a custom-defined range (e.g., 13–19 years or all 6-year-olds only). Race categories are white, black, American Indian/Alaskan Native, Asian and Pacific Islander, and other (all nonwhite and nonblack and may include other races not listed). In addition, Injury Mortality Reports can be requested by these specific definitions and other parameters (e.g., a report for a mechanism/cause and manner/intent in a specific state by sex and race).

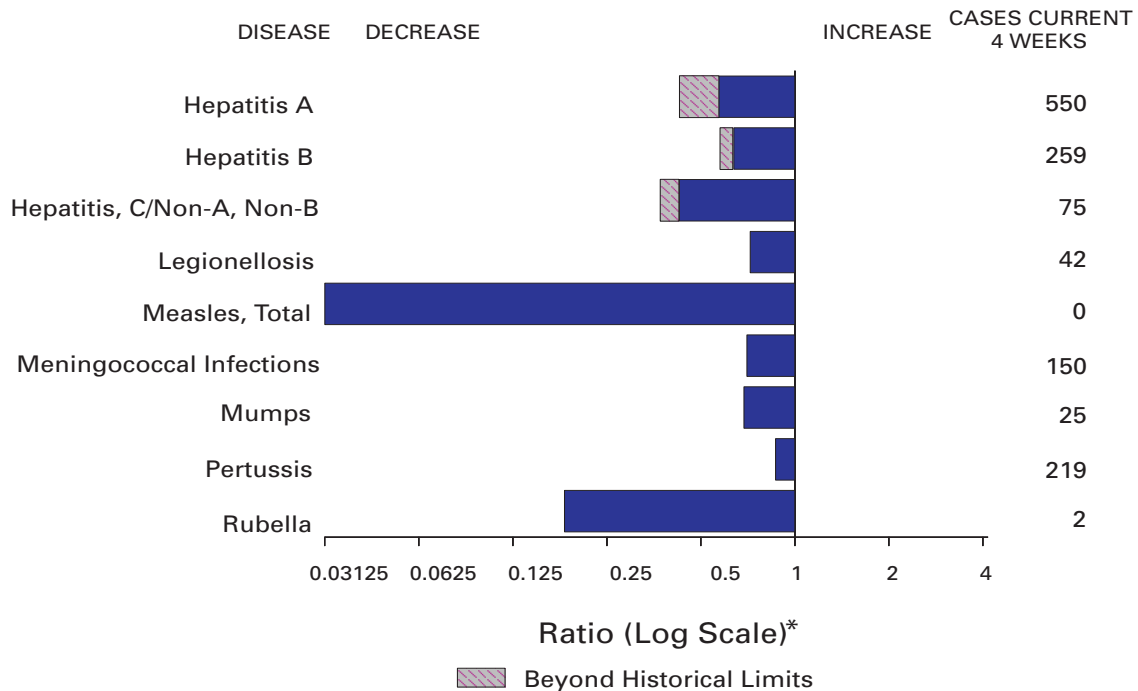
*Notice to Readers***National Vaccine Program Office Workshop on Aluminum in Vaccines**

CDC's National Vaccine Program Office will sponsor Workshop on Aluminum in Vaccines during May 11–12, 2000. The workshop will be held at the Caribe Hotel in San Juan, Puerto Rico, immediately following the Metal Ions in Biology and Medicine Conference. Discussion topics include vaccine adjuvants, aluminum salts in vaccines, the pharmacology and toxicology of aluminum, and macrophagic myofascitis. Additional information is available on the World-Wide Web at <http://www.cdc.gov/od/nvpo/calendar>, or telephone (404) 687-6672.

Erratum: Vol. 49, No. SS-1

In the *MMWR Surveillance Summaries*, "Surveillance for Foodborne-Disease Outbreaks—United States, 1993–1997," Table B has two errors on page 61. In the *Cryptosporidium parvum* section, under Confirmation, the second option should read "Demonstration of organism in epidemiologically implicated food." In the following section, the agent listed should be "*Cyclospora cayatenensis*."

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending March 25, 2000, with historical data — United States



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

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending March 25, 2000 (12th Week)

	Cum. 2000		Cum. 2000
Anthrax	-	HIV infection, pediatric**§	34
Brucellosis*	6	Plague	2
Cholera	-	Poliomyelitis, paralytic	-
Congenital rubella syndrome	1	Psittacosis*	4
Cyclosporiasis*	2	Rabies, human	-
Diphtheria	-	Rocky Mountain spotted fever (RMSF)	29
Encephalitis: California* serogroup viral	2	Streptococcal disease, invasive Group A	656
eastern equine*	-	Streptococcal toxic-shock syndrome*	31
St. Louis*	-	Syphilis, congenital†	6
western equine*	-	Tetanus	3
Ehrlichiosis human granulocytic (HGE)*	13	Toxic-shock syndrome	31
human monocytic (HME)*	1	Trichinosis	1
Hansen Disease*	10	Typhoid fever	63
Hantavirus pulmonary syndrome**†	-	Yellow fever	-
Hemolytic uremic syndrome, post-diarrheal*	20		

-: 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, 2000.

¶ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 25, 2000, and March 27, 1999 (12th Week)

Reporting Area	AIDS		Chlamydia [§]		Cryptosporidiosis		Escherichia coli O157:H7*			
	Cum. 2000 [†]	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	NETSS		PHLIS	
							Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	6,288	9,714	111,781	150,870	260	310	293	265	181	212
NEW ENGLAND	511	520	4,586	4,787	12	15	26	39	23	35
Maine	6	5	274	153	3	1	2	3	2	-
N.H.	5	19	229	242	-	1	4	2	4	2
Vt.	1	4	131	107	6	1	1	3	2	-
Mass.	370	355	1,881	2,060	1	9	7	18	6	17
R.I.	17	20	525	510	2	-	-	1	-	1
Conn.	112	117	1,546	1,715	-	3	12	12	9	15
MID. ATLANTIC	1,592	2,334	4,398	18,133	23	59	27	14	38	2
Upstate N.Y.	65	354	N	N	16	20	27	10	32	-
N.Y. City	986	1,193	-	8,749	4	30	-	1	-	1
N.J.	387	507	1,034	2,988	-	3	-	3	1	1
Pa.	154	280	3,364	6,396	3	6	N	N	5	-
E.N. CENTRAL	590	791	19,623	23,481	41	61	37	49	8	34
Ohio	92	106	5,170	7,566	13	8	11	20	3	9
Ind.	56	124	2,726	2,604	3	5	5	10	1	7
Ill.	353	401	5,386	6,281	-	6	11	9	-	6
Mich.	67	125	4,728	4,398	7	8	10	10	2	6
Wis.	22	35	1,613	2,632	18	34	N	N	2	6
W.N. CENTRAL	151	197	5,478	8,494	18	21	70	59	40	55
Minn.	32	40	1,397	1,787	4	10	18	11	17	13
Iowa	10	13	683	606	3	1	11	6	4	2
Mo.	70	87	902	3,177	7	4	32	4	11	3
N. Dak.	-	3	-	203	1	-	2	2	2	1
S. Dak.	2	3	398	477	1	2	1	1	1	1
Nebr.	7	10	743	854	2	2	2	21	2	35
Kans.	30	41	1,355	1,390	-	2	4	14	3	-
S. ATLANTIC	1,531	2,798	22,070	30,932	44	46	28	26	16	13
Del.	26	40	690	694	-	-	-	1	-	-
Md.	153	338	1,423	3,046	5	4	5	1	1	-
D.C.	112	70	697	N	-	3	-	-	U	U
Va.	115	129	3,140	3,481	1	1	6	6	5	2
W. Va.	6	18	450	505	-	-	2	-	1	1
N.C.	75	197	4,470	5,061	3	1	6	7	2	5
S.C.	156	191	669	5,071	-	-	-	1	-	1
Ga.	183	209	4,268	6,207	27	32	3	1	3	U
Fla.	705	1,606	6,263	6,867	8	5	6	9	4	4
E.S. CENTRAL	281	489	11,071	11,081	8	3	14	20	11	11
Ky.	37	70	1,831	1,810	-	1	6	5	3	4
Tenn.	105	210	2,956	3,418	1	1	5	8	8	3
Ala.	92	109	4,031	3,289	7	1	1	4	4	3
Miss.	47	100	2,253	2,564	-	-	2	3	-	1
W.S. CENTRAL	542	1,163	19,459	19,852	8	21	11	9	18	16
Ark.	20	45	1,080	1,325	1	-	4	2	1	2
La.	92	108	3,887	2,391	-	13	-	3	9	3
Okla.	16	36	1,559	1,937	1	1	4	3	3	2
Tex.	414	974	12,933	14,199	6	7	3	1	5	9
MOUNTAIN	213	282	4,982	7,964	18	23	27	15	11	12
Mont.	3	4	-	271	1	1	8	-	-	-
Idaho	3	5	64	432	1	2	4	-	-	2
Wyo.	1	2	185	190	1	-	2	1	2	1
Colo.	52	74	814	1,797	5	3	8	5	5	2
N. Mex.	26	13	436	1,080	1	10	-	1	-	-
Ariz.	56	87	2,287	3,073	2	7	3	3	3	1
Utah	28	37	573	412	7	N	1	5	1	5
Nev.	44	60	623	709	-	-	1	-	-	1
PACIFIC	877	1,140	20,114	26,146	88	61	53	34	16	34
Wash.	102	58	2,841	2,820	N	N	5	4	7	14
Oreg.	22	32	1,162	1,345	2	3	7	12	6	10
Calif.	727	1,023	14,927	20,777	86	58	38	18	-	10
Alaska	-	6	551	457	-	-	-	-	-	-
Hawaii	26	21	633	747	-	-	3	-	3	-
Guam	9	1	-	103	-	-	N	N	U	U
P.R.	153	324	142	U	-	-	-	1	U	U
V.I.	6	3	-	U	-	U	-	U	U	U
Amer. Samoa	-	-	-	U	-	U	-	U	U	U
C.N.M.I.	-	-	-	U	-	U	-	U	U	U

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

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

† 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, 2000.

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

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 25, 2000, and March 27, 1999 (12th Week)

Reporting Area	Gonorrhea		Hepatitis C/NA,NB		Legionellosis		Lyme Disease	
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	58,659	81,470	443	800	136	205	701	1,009
NEW ENGLAND	1,344	1,661	-	3	10	14	98	252
Maine	15	10	-	-	2	2	-	1
N.H.	20	19	-	-	2	1	15	-
Vt.	10	13	-	2	-	3	-	-
Mass.	532	638	-	1	3	4	43	100
R.I.	132	126	-	-	-	1	-	8
Conn.	635	855	-	-	3	3	40	143
MID. ATLANTIC	3,411	10,044	11	31	22	56	474	528
Upstate N.Y.	1,130	1,307	11	18	12	13	190	119
N.Y. City	-	4,100	-	-	-	8	2	16
N.J.	579	1,775	-	-	-	5	-	116
Pa.	1,702	2,862	-	13	10	30	282	277
E.N. CENTRAL	12,089	13,998	58	431	38	62	4	41
Ohio	3,016	3,802	-	-	20	17	4	10
Ind.	1,226	1,549	-	-	5	5	-	1
Ill.	3,403	4,503	4	7	1	10	-	2
Mich.	3,443	3,050	54	114	7	17	-	1
Wis.	1,001	1,094	-	310	5	13	U	27
W.N. CENTRAL	1,906	3,631	62	46	8	8	24	17
Minn.	545	652	-	-	1	-	6	3
Iowa	149	220	-	-	2	3	-	2
Mo.	367	1,748	56	41	4	3	5	4
N. Dak.	-	16	-	-	-	-	-	1
S. Dak.	58	39	-	-	-	1	-	-
Nebr.	239	413	1	1	-	1	-	-
Kans.	548	543	5	4	1	-	13	7
S. ATLANTIC	15,636	23,874	20	56	29	24	77	119
Del.	379	403	-	-	2	2	6	5
Md.	683	3,399	2	20	7	4	55	96
D.C.	536	1,566	-	-	-	-	-	1
Va.	2,029	2,368	-	6	3	4	5	-
W. Va.	118	137	1	6	N	N	4	2
N.C.	4,060	4,449	7	12	3	4	4	13
S.C.	574	2,415	-	9	2	5	-	1
Ga.	2,831	4,228	-	1	1	-	-	-
Fla.	4,426	4,909	10	2	11	5	3	1
E.S. CENTRAL	7,856	8,832	84	47	3	12	-	14
Ky.	736	878	10	5	1	6	-	-
Tenn.	2,286	2,662	20	22	1	5	-	4
Ala.	3,020	3,005	3	1	1	1	-	6
Miss.	1,814	2,287	51	19	-	-	-	4
W.S. CENTRAL	10,488	11,408	103	88	-	1	-	-
Ark.	541	659	3	3	-	-	-	-
La.	2,850	2,454	44	66	-	1	-	-
Okla.	735	1,009	-	2	-	-	-	-
Tex.	6,362	7,286	56	17	-	-	-	-
MOUNTAIN	2,004	2,263	60	62	9	14	1	2
Mont.	-	5	-	4	-	-	-	-
Idaho	4	26	-	4	1	-	-	-
Wyo.	17	8	43	24	1	-	-	1
Colo.	824	504	9	8	4	1	-	-
N. Mex.	78	206	4	8	-	1	-	1
Ariz.	765	1,161	4	11	-	1	1	-
Utah	75	44	-	1	3	6	-	-
Nev.	241	309	-	2	-	5	-	-
PACIFIC	3,925	5,759	45	36	17	14	23	36
Wash.	525	496	5	2	5	2	-	-
Oreg.	135	206	10	4	N	N	1	1
Calif.	3,120	4,843	30	30	12	12	22	35
Alaska	68	92	-	-	-	-	-	-
Hawaii	77	122	-	-	-	-	N	N
Guam	-	17	-	-	-	-	-	-
P.R.	30	68	1	-	-	-	N	N
V.I.	-	U	-	U	-	U	-	U
Amer. Samoa	-	U	-	U	-	U	-	U
C.N.M.I.	-	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 March 25, 2000, and March 27, 1999 (12th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	NETSS		PHLIS	
					Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	157	267	876	1,149	4,610	5,560	2,829	5,143
NEW ENGLAND	1	4	112	180	325	303	268	340
Maine	1	-	24	32	30	27	12	17
N.H.	-	-	2	14	23	9	18	12
Vt.	-	-	7	34	21	12	14	14
Mass.	-	4	38	42	183	180	159	182
R.I.	-	-	-	15	8	13	12	31
Conn.	-	-	41	43	60	62	53	84
MID. ATLANTIC	18	88	193	234	430	827	546	611
Upstate N.Y.	9	20	150	147	140	152	130	186
N.Y. City	4	37	U	U	148	257	194	242
N.J.	-	23	27	51	-	211	51	177
Pa.	5	8	16	36	142	207	171	6
E.N. CENTRAL	14	25	8	1	611	871	313	744
Ohio	2	2	2	-	171	189	107	139
Ind.	1	4	-	-	61	47	46	52
Ill.	3	10	-	-	190	271	1	265
Mich.	8	6	6	1	119	210	114	204
Wis.	-	3	-	-	70	154	45	84
W.N. CENTRAL	6	11	80	164	252	321	230	357
Minn.	4	-	22	19	42	85	75	124
Iowa	-	3	10	21	31	38	23	37
Mo.	-	6	2	5	87	70	70	105
N. Dak.	-	-	13	29	4	2	15	11
S. Dak.	-	-	18	38	12	13	15	18
Nebr.	1	-	-	1	34	27	7	27
Kans.	1	2	15	51	42	86	25	35
S. ATLANTIC	47	60	369	393	883	1,025	504	889
Del.	-	-	10	7	12	17	11	21
Md.	20	20	84	93	143	119	111	117
D.C.	-	6	-	-	-	20	U	U
Va.	13	10	81	98	96	126	66	112
W. Va.	-	1	26	17	23	19	14	22
N.C.	5	5	88	90	162	211	89	184
S.C.	-	-	26	24	85	60	63	61
Ga.	-	6	28	33	138	209	150	255
Fla.	9	12	26	31	224	244	-	117
E.S. CENTRAL	6	5	37	56	245	322	112	200
Ky.	2	1	8	17	52	68	19	44
Tenn.	-	2	23	22	56	90	67	83
Ala.	4	2	6	17	96	94	23	60
Miss.	-	-	-	-	41	70	3	13
W.S. CENTRAL	1	9	11	26	277	395	364	559
Ark.	-	1	-	-	49	56	22	44
La.	1	6	-	-	27	62	84	74
Okla.	-	1	11	26	44	51	35	35
Tex.	-	1	-	-	157	226	223	406
MOUNTAIN	13	11	34	31	438	412	283	404
Mont.	1	1	9	12	18	4	-	1
Idaho	-	1	-	-	26	16	-	20
Wyo.	-	-	16	8	6	3	3	6
Colo.	7	4	-	1	100	129	88	128
N. Mex.	-	1	2	-	45	54	28	53
Ariz.	2	3	7	10	142	119	108	111
Utah	2	1	-	-	65	51	56	58
Nev.	1	-	-	-	36	36	-	27
PACIFIC	51	54	32	64	1,149	1,084	209	1,039
Wash.	3	3	-	-	63	74	99	149
Oreg.	5	7	-	-	56	77	68	108
Calif.	42	39	25	61	970	859	-	714
Alaska	-	-	7	3	13	8	8	5
Hawaii	1	5	-	-	47	66	34	63
Guam	-	-	-	-	-	16	U	U
P.R.	-	-	6	14	10	62	U	U
V.I.	-	U	-	U	-	U	U	U
Amer. Samoa	-	U	-	U	-	U	U	U
C.N.M.I.	-	U	-	U	-	U	U	U

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

*Individual cases may 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 March 25, 2000, and March 27, 1999 (12th Week)

Reporting Area	Shigellosis*				Syphilis (Primary & Secondary)		Tuberculosis	
	NETSS		PHLIS		Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999 [†]
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999				
UNITED STATES	2,827	2,792	1,221	1,545	1,213	1,522	1,833	2,754
NEW ENGLAND	65	70	47	67	14	15	56	81
Maine	2	1	-	-	-	-	-	3
N.H.	1	4	1	5	-	-	1	-
Vt.	1	3	-	3	-	1	-	-
Mass.	45	47	34	42	12	8	41	41
R.I.	7	9	4	8	1	1	4	15
Conn.	9	6	8	9	1	5	10	22
MID. ATLANTIC	208	230	163	144	22	68	387	462
Upstate N.Y.	132	42	56	19	1	7	28	41
N.Y. City	56	82	60	72	6	25	241	239
N.J.	-	68	15	53	4	16	90	108
Pa.	20	38	32	-	11	20	28	74
E.N. CENTRAL	425	484	160	254	275	229	215	263
Ohio	32	161	17	19	16	20	34	64
Ind.	62	19	9	9	104	65	15	23
Ill.	120	183	2	172	83	111	135	124
Mich.	180	60	126	40	56	26	19	39
Wis.	31	61	6	14	16	7	12	13
W.N. CENTRAL	198	156	107	134	16	41	91	96
Minn.	46	19	45	27	2	5	36	35
Iowa	26	2	21	3	6	3	8	4
Mo.	96	105	33	89	5	28	34	42
N. Dak.	-	1	-	2	-	-	-	1
S. Dak.	1	-	-	1	-	-	3	3
Nebr.	20	9	4	5	2	2	4	4
Kans.	9	20	4	7	1	3	6	7
S. ATLANTIC	357	437	73	110	384	570	319	443
Del.	3	5	2	1	2	1	-	4
Md.	26	27	8	5	66	118	44	50
D.C.	-	19	U	U	15	33	-	10
Va.	14	18	12	5	30	39	-	44
W. Va.	2	3	1	1	1	1	8	10
N.C.	18	59	8	33	121	130	43	70
S.C.	3	26	1	10	11	59	18	81
Ga.	41	52	20	18	64	106	99	82
Fla.	250	228	21	37	74	83	107	92
E.S. CENTRAL	125	303	82	179	191	273	120	152
Ky.	32	29	16	22	19	28	-	22
Tenn.	58	222	63	145	123	132	52	45
Ala.	9	29	1	12	26	76	68	67
Miss.	26	23	2	-	23	37	-	18
W.S. CENTRAL	273	455	287	498	189	228	28	450
Ark.	48	30	3	20	16	24	20	27
La.	19	35	45	30	50	36	-	U
Okla.	9	114	5	29	41	61	8	22
Tex.	197	276	234	419	82	107	-	401
MOUNTAIN	220	161	68	97	36	34	90	69
Mont.	-	3	-	-	-	-	4	-
Idaho	22	2	-	3	-	-	-	-
Wyo.	1	2	1	1	-	-	-	-
Colo.	31	31	16	20	3	-	6	U
N. Mex.	25	19	13	13	3	-	16	11
Ariz.	86	85	28	44	28	33	40	31
Utah	6	12	10	13	-	1	7	11
Nev.	49	7	-	3	2	-	17	16
PACIFIC	956	496	234	62	86	64	527	738
Wash.	168	15	182	31	11	5	35	32
Oreg.	75	14	45	16	2	1	-	20
Calif.	700	453	-	-	73	56	463	641
Alaska	3	-	1	-	-	1	12	10
Hawaii	10	14	6	15	-	1	17	35
Guam	-	3	U	U	-	-	-	-
P.R.	1	7	U	U	20	52	-	-
V.I.	-	U	U	U	-	U	-	U
Amer. Samoa	-	U	U	U	-	U	-	U
C.N.M.I.	-	U	U	U	-	U	-	U

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

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

[†] Cumulative reports of provisional tuberculosis cases for 1999 are unavailable ("U") for some areas using the Tuberculosis Information System (TIMS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 25, 2000, and March 27, 1999 (12th Week)

Reporting Area	<i>H. influenzae</i> , invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
	Cum. 2000 ^a	Cum. 1999	A		B		Indigenous		Imported*		Total	
			Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	2000	Cum. 2000	2000	Cum. 2000	Cum. 2000	Cum. 1999
UNITED STATES	268	297	2,599	4,229	1,018	1,339	-	4	-	-	4	23
NEW ENGLAND	22	21	55	45	11	39	-	-	-	-	-	2
Maine	1	2	1	2	1	-	-	-	-	-	-	-
N.H.	4	2	7	5	6	2	-	-	-	-	-	1
Vt.	2	3	3	-	2	1	-	-	-	-	-	-
Mass.	11	10	21	18	2	21	-	-	-	-	-	1
R.I.	-	-	-	-	-	2	-	-	-	-	-	-
Conn.	4	4	23	20	-	13	-	-	-	-	-	-
MID. ATLANTIC	38	44	105	260	94	194	-	-	-	-	-	-
Upstate N.Y.	20	19	53	56	22	36	-	-	-	-	-	-
N.Y. City	6	12	52	82	72	61	-	-	-	-	-	-
N.J.	10	12	-	35	-	26	-	-	-	-	-	-
Pa.	2	1	-	87	-	71	-	-	-	-	-	-
E.N. CENTRAL	31	39	317	922	115	128	-	3	-	-	3	-
Ohio	16	16	92	190	24	27	-	2	-	-	2	-
Ind.	3	3	5	32	5	4	-	-	-	-	-	-
Ill.	9	17	93	174	-	-	-	-	-	-	-	-
Mich.	3	3	121	505	86	90	-	1	-	-	1	-
Wis.	-	-	6	21	-	7	-	-	-	-	-	-
W.N. CENTRAL	13	18	276	213	56	69	-	1	-	-	1	-
Minn.	6	5	23	11	3	8	-	-	-	-	-	-
Iowa	-	3	31	36	10	14	-	-	-	-	-	-
Mo.	3	4	141	122	25	34	-	-	-	-	-	-
N. Dak.	1	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	1	-	2	-	-	-	-	-	-	-	-
Nebr.	1	1	10	20	7	8	-	-	-	-	-	-
Kans.	2	4	71	22	11	5	-	1	-	-	1	-
S. ATLANTIC	72	65	303	359	214	206	-	-	-	-	-	-
Del.	-	-	-	-	-	-	-	-	-	-	-	-
Md.	22	21	35	94	30	47	-	-	-	-	-	-
D.C.	-	2	-	15	-	6	-	-	-	-	-	-
Va.	14	9	45	30	34	23	-	-	-	-	-	-
W. Va.	1	1	28	2	-	1	-	-	-	-	-	-
N.C.	6	11	58	38	81	44	-	-	-	-	-	-
S.C.	3	2	5	5	2	25	-	-	-	-	-	-
Ga.	19	15	42	95	13	30	-	-	-	-	-	-
Fla.	7	4	90	80	54	30	-	-	-	-	-	-
E.S. CENTRAL	13	23	84	107	63	108	-	-	-	-	-	-
Ky.	7	5	7	19	14	8	-	-	-	-	-	-
Tenn.	4	8	21	49	28	52	-	-	-	-	-	-
Ala.	2	8	18	24	6	28	-	-	-	-	-	-
Miss.	-	2	38	15	15	20	-	-	-	-	-	-
W.S. CENTRAL	17	21	404	893	50	183	-	-	-	-	-	2
Ark.	-	-	42	9	15	13	-	-	-	-	-	-
La.	3	6	11	39	18	46	-	-	-	-	-	-
Okla.	14	13	87	142	17	29	-	-	-	-	-	-
Tex.	-	2	264	703	-	95	-	-	-	-	-	2
MOUNTAIN	37	36	191	394	84	106	-	-	-	-	-	-
Mont.	-	1	1	4	3	1	-	-	-	-	-	-
Idaho	2	1	8	9	4	6	-	-	-	-	-	-
Wyo.	-	1	6	1	-	1	-	-	-	-	-	-
Colo.	11	2	43	76	20	22	-	-	-	-	-	-
N. Mex.	10	9	21	8	22	30	-	-	-	-	-	-
Ariz.	12	19	85	241	28	21	-	-	-	-	-	-
Utah	2	3	13	16	3	7	-	-	-	-	-	-
Nev.	-	-	14	39	4	18	U	-	U	-	-	-
PACIFIC	25	30	864	1,036	331	306	-	-	-	-	-	19
Wash.	2	-	50	66	9	7	-	-	-	-	-	4
Oreg.	8	10	56	62	25	23	-	-	-	-	-	8
Calif.	5	17	755	903	293	266	-	-	-	-	-	7
Alaska	1	2	3	3	3	6	-	-	-	-	-	-
Hawaii	9	1	-	2	1	4	-	-	-	-	-	-
Guam	-	-	-	2	-	2	U	-	U	-	-	-
P.R.	-	-	15	18	8	27	U	-	U	-	-	-
V.I.	-	U	-	U	-	U	U	-	U	-	-	U
Amer. Samoa	-	U	-	U	-	U	U	-	U	-	-	U
C.N.M.I.	-	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.

^aOf 64 cases among children aged <5 years, serotype was reported for 26 and of those, 5 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 25, 2000, and March 27, 1999 (12th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999
UNITED STATES	576	668	9	93	104	60	844	1,258	-	5	9
NEW ENGLAND	32	37	1	2	3	7	204	125	-	1	2
Maine	3	3	-	-	-	-	7	-	-	-	-
N.H.	-	3	-	-	1	3	45	18	-	1	-
Vt.	1	2	-	-	-	3	51	9	-	-	-
Mass.	21	24	-	-	2	-	90	92	-	-	2
R.I.	1	2	-	1	-	1	7	2	-	-	-
Conn.	6	3	1	1	-	-	4	4	-	-	-
MID. ATLANTIC	47	69	-	5	14	9	80	174	-	2	-
Upstate N.Y.	11	11	-	3	2	9	54	129	-	2	-
N.Y. City	11	25	-	-	3	-	-	10	-	-	-
N.J.	12	15	-	-	-	-	-	5	-	-	-
Pa.	13	18	-	2	9	-	26	30	-	-	-
E.N. CENTRAL	89	105	-	11	13	-	140	142	-	-	-
Ohio	20	43	-	3	6	-	108	83	-	-	-
Ind.	17	6	-	-	-	-	8	8	-	-	-
Ill.	18	35	-	3	3	-	8	20	-	-	-
Mich.	24	11	-	5	4	-	6	14	-	-	-
Wis.	10	10	-	-	-	-	10	17	-	-	-
W.N. CENTRAL	49	85	-	10	3	2	30	45	-	2	-
Minn.	3	18	-	-	-	1	10	-	-	-	-
Iowa	10	16	-	3	2	-	8	8	-	-	-
Mo.	31	30	-	1	1	1	4	9	-	-	-
N. Dak.	1	-	-	-	-	-	1	-	-	-	-
S. Dak.	2	5	-	-	-	-	1	2	-	-	-
Nebr.	1	3	-	4	-	-	2	1	-	-	-
Kans.	1	13	-	2	-	-	4	25	-	2	-
S. ATLANTIC	100	90	1	11	15	20	73	69	-	-	2
Del.	-	2	-	-	-	-	1	-	-	-	-
Md.	10	17	1	4	3	4	18	25	-	-	1
D.C.	-	1	-	-	1	-	-	-	-	-	-
Va.	17	14	-	1	2	2	5	7	-	-	-
W. Va.	2	1	-	-	-	-	-	-	-	-	-
N.C.	18	14	-	2	3	13	28	22	-	-	1
S.C.	6	16	-	4	2	1	12	5	-	-	-
Ga.	19	14	-	-	-	-	9	5	-	-	-
Fla.	28	11	-	-	4	-	-	5	-	-	-
E.S. CENTRAL	36	57	-	1	3	-	20	29	-	-	-
Ky.	9	12	-	-	-	-	12	9	-	-	-
Tenn.	14	19	-	-	-	-	1	13	-	-	-
Ala.	12	16	-	1	1	-	7	6	-	-	-
Miss.	1	10	-	-	2	-	-	1	-	-	-
W.S. CENTRAL	25	58	1	1	14	1	5	32	-	-	4
Ark.	4	13	1	1	-	1	5	3	-	-	-
La.	13	30	-	-	2	-	-	2	-	-	-
Okla.	8	12	-	-	1	-	-	3	-	-	-
Tex.	-	3	-	-	11	-	-	24	-	-	4
MOUNTAIN	39	55	1	4	7	5	187	197	-	-	1
Mont.	1	-	1	1	-	-	1	1	-	-	-
Idaho	5	6	-	-	-	1	32	80	-	-	-
Wyo.	-	2	-	-	-	-	-	1	-	-	-
Colo.	9	17	-	-	2	3	99	42	-	-	-
N. Mex.	6	7	-	1	N	1	32	10	-	-	-
Ariz.	11	18	-	-	-	-	17	40	-	-	-
Utah	6	3	-	-	4	-	4	21	-	-	1
Nev.	1	2	U	2	1	U	2	2	U	-	-
PACIFIC	159	112	5	48	32	16	105	445	-	-	-
Wash.	13	16	-	2	-	14	41	172	-	-	-
Oreg.	17	25	N	N	N	-	16	3	-	-	-
Calif.	126	63	5	45	26	2	45	254	-	-	-
Alaska	1	4	-	-	1	-	2	2	-	-	-
Hawaii	2	4	-	1	5	-	1	14	-	-	-
Guam	-	-	U	-	1	U	-	-	U	-	-
P.R.	-	2	U	-	-	U	-	-	U	-	-
V.I.	-	U	U	-	U	U	-	U	U	-	U
Amer. Samoa	-	U	U	-	U	U	-	U	U	-	U
C.N.M.I.	-	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
March 25, 2000 (12th Week)**

Reporting Area	All Causes, By Age (Years)						P&I [†] Total	Reporting Area	All Causes, By Age (Years)						P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	593	436	112	32	8	5	66	S. ATLANTIC	1,631	1,041	366	140	41	41	108
Boston, Mass.	160	110	36	11	3	-	18	Atlanta, Ga.	U	U	U	U	U	U	U
Bridgeport, Conn.	35	28	4	2	-	1	3	Baltimore, Md.	196	106	50	25	5	10	27
Cambridge, Mass.	22	17	3	1	-	1	5	Charlotte, N.C.	117	75	26	10	1	5	10
Fall River, Mass.	25	23	2	-	-	-	1	Jacksonville, Fla.	113	79	24	4	2	4	7
Hartford, Conn.	57	36	12	5	2	2	4	Miami, Fla.	102	62	29	9	1	1	8
Lowell, Mass.	30	24	4	1	1	-	4	Norfolk, Va.	73	45	15	6	3	4	5
Lynn, Mass.	11	10	-	1	-	-	1	Richmond, Va.	66	48	14	3	1	-	11
New Bedford, Mass.	25	21	4	-	-	-	3	Savannah, Ga.	56	45	6	4	-	1	2
New Haven, Conn.	41	26	10	4	-	1	7	St. Petersburg, Fla.	U	U	U	U	U	U	U
Providence, R.I.	34	29	4	1	-	-	1	Tampa, Fla.	184	128	35	15	5	-	16
Somerville, Mass.	5	5	-	-	-	-	-	Washington, D.C.	698	441	159	58	23	16	22
Springfield, Mass.	48	38	8	1	1	-	6	Wilmington, Del.	26	12	8	6	-	-	-
Waterbury, Conn.	28	20	5	3	-	-	4	E.S. CENTRAL	868	594	156	80	13	25	86
Worcester, Mass.	72	49	20	2	1	-	9	Birmingham, Ala.	158	102	30	15	3	8	20
MID. ATLANTIC	2,381	1,652	487	162	37	42	117	Chattanooga, Tenn.	114	85	18	9	1	1	11
Albany, N.Y.	42	32	5	4	1	-	7	Knoxville, Tenn.	99	73	16	6	2	2	5
Allentown, Pa.	U	U	U	U	U	U	U	Lexington, Ky.	28	18	5	5	-	-	7
Buffalo, N.Y.	82	59	16	4	1	2	4	Memphis, Tenn.	176	110	35	22	1	8	11
Camden, N.J.	27	17	4	3	2	1	1	Mobile, Ala.	100	75	15	8	-	2	5
Elizabeth, N.J.	19	17	-	2	-	-	-	Montgomery, Ala.	53	37	7	7	2	-	12
Erie, Pa.‡	51	34	12	2	3	-	2	Nashville, Tenn.	140	94	30	8	4	4	15
Jersey City, N.J.	36	24	7	5	-	-	-	W.S. CENTRAL	1,612	1,057	318	132	58	44	136
New York City, N.Y.	1,122	756	262	77	12	14	25	Austin, Tex.	53	37	11	2	3	-	4
Newark, N.J.	56	27	18	5	3	3	6	Baton Rouge, La.	41	28	9	2	2	-	2
Paterson, N.J.	20	8	10	1	1	-	2	Corpus Christi, Tex.	75	51	13	5	5	1	9
Philadelphia, Pa.	420	276	83	35	10	16	33	Dallas, Tex.	199	133	36	16	5	9	21
Pittsburgh, Pa.‡	45	31	4	6	1	3	6	El Paso, Tex.	89	51	20	9	3	3	2
Reading, Pa.	44	31	7	4	2	-	-	Ft. Worth, Tex.	125	93	22	7	1	2	19
Rochester, N.Y.	130	106	19	5	-	-	7	Houston, Tex.	432	233	96	59	28	16	28
Schenectady, N.Y.	27	22	5	-	-	-	-	Little Rock, Ark.	68	47	14	4	1	2	4
Scranton, Pa.‡	30	27	3	-	-	-	3	New Orleans, La.	117	78	27	8	3	1	10
Syracuse, N.Y.	177	143	24	7	1	2	16	San Antonio, Tex.	221	163	40	11	2	5	20
Trenton, N.J.	32	25	5	1	-	1	3	Shreveport, La.	88	67	14	2	4	1	11
Utica, N.Y.	21	17	3	1	U	U	2	Tulsa, Okla.	104	76	16	7	1	4	6
Yonkers, N.Y.	U	U	U	U	U	U	U	MOUNTAIN	1,050	681	222	88	28	27	93
E.N. CENTRAL	1,994	1,352	409	145	50	36	186	Albuquerque, N.M.	102	70	18	8	3	3	7
Akron, Ohio	49	30	15	2	2	-	5	Boise, Idaho	45	35	5	4	1	-	2
Canton, Ohio	33	20	8	5	-	-	2	Colo. Springs, Colo.	58	42	8	6	2	-	3
Chicago, Ill.	469	311	96	40	11	9	61	Denver, Colo.	118	63	30	14	2	9	9
Cincinnati, Ohio	129	94	26	5	1	3	16	Las Vegas, Nev.	219	146	55	12	2	3	22
Cleveland, Ohio	U	U	U	U	U	U	U	Ogden, Utah	30	25	3	1	1	-	1
Columbus, Ohio	205	132	41	20	9	3	17	Phoenix, Ariz.	173	85	50	21	10	6	18
Dayton, Ohio	125	90	22	6	3	4	6	Pueblo, Colo.	31	22	7	2	-	-	2
Detroit, Mich.	186	100	54	24	6	2	14	Salt Lake City, Utah	110	67	23	11	3	6	20
Evansville, Ind.	36	28	7	1	-	-	2	Tucson, Ariz.	164	126	23	9	4	-	9
Fort Wayne, Ind.	62	45	11	4	-	2	3	PACIFIC	1,753	1,266	313	122	29	23	149
Gary, Ind.	14	4	4	2	3	1	-	Berkeley, Calif.	14	9	4	-	-	1	-
Grand Rapids, Mich.	35	25	6	2	-	2	2	Fresno, Calif.	101	67	27	3	2	2	14
Indianapolis, Ind.	199	130	50	8	7	4	27	Glendale, Calif.	32	30	1	1	-	-	7
Lansing, Mich.	28	19	8	1	-	-	1	Honolulu, Hawaii	62	48	7	4	1	2	3
Milwaukee, Wis.	118	86	24	6	-	2	11	Long Beach, Calif.	89	56	20	9	-	4	12
Peoria, Ill.	49	43	2	2	-	2	3	Los Angeles, Calif.	563	430	91	32	8	2	60
Rockford, Ill.	40	31	4	4	1	-	4	Pasadena, Calif.	36	27	4	5	-	-	3
South Bend, Ind.	54	36	10	3	4	1	4	Portland, Oreg.	110	81	20	6	2	1	5
Toledo, Ohio	86	61	16	6	3	-	6	Sacramento, Calif.	U	U	U	U	U	U	U
Youngstown, Ohio	77	67	5	4	-	1	2	San Diego, Calif.	173	121	37	12	2	1	12
W.N. CENTRAL	826	608	128	44	22	24	57	San Francisco, Calif.	U	U	U	U	U	U	U
Des Moines, Iowa	83	65	13	3	1	1	5	San Jose, Calif.	199	134	39	17	5	4	15
Duluth, Minn.	27	20	3	1	2	1	1	Santa Cruz, Calif.	31	26	3	2	-	-	5
Kansas City, Kans.	27	20	4	1	1	1	2	Seattle, Wash.	174	113	34	15	7	5	2
Kansas City, Mo.	103	75	13	7	5	3	4	Spokane, Wash.	56	42	8	5	-	1	6
Lincoln, Nebr.	52	47	4	-	1	-	3	Tacoma, Wash.	113	82	18	11	2	-	5
Minneapolis, Minn.	148	116	18	6	3	5	21	TOTAL	12,708 [†]	8,687	2,511	945	286	267	998
Omaha, Nebr.	90	64	18	2	1	5	4								
St. Louis, Mo.	127	70	28	17	6	6	4								
St. Paul, Minn.	102	80	14	5	2	1	5								
Wichita, Kans.	67	51	13	2	-	1	8								

U: Unavailable -no reported cases

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more.

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

‡Pneumonia and influenza.

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

¶Total includes unknown ages.

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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/> or from CDC's file transfer protocol server at <ftp.cdc.gov>. 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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