CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

March 29, 1996 / Vol. 45 / No. 12

MMWR™
MORBIDITY AND MORTALITY WEEKLY REPORT

Outbreak of *Escherichia coli* O157:H7 Infection — Georgia and Tennessee, June 1995

On June 26, 1995, the Division of Public Health, Georgia Department of Human Resources (GDPH), was notified of three cases of *Escherichia coli* O157:H7 infection among residents of a community in north Georgia who had onsets of illness within a 24-hour period (onset during June 19–20); in comparison, during 1993–1994, only two cases of this infection had been reported in the same community. Because of the proximity of this community to the Tennessee border, on June 28 GDPH notified the Tennessee Department of Health (TDH) about these cases. TDH subsequently identified two confirmed cases with onsets of illness during June 23–24. Both of these cases were among persons residing in eastern Tennessee approximately 100 miles from the community in Georgia, and one occurred in an 11-year-old boy who was hospitalized with hemolytic uremic syndrome (HUS). This report summarizes the investigation of this outbreak, which implicated eating hamburgers purchased at a fast-food restaurant chain (i.e., chain A) as the source of infection.

Active surveillance for additional cases was initiated in hospitals in both states. Cases were defined as laboratory-confirmed *E. coli* O157:H7 infection among persons who became ill during June 11–25, or abdominal cramps and bloody diarrhea of at least 72 hours' duration among persons residing in the same household as a person with a culture-confirmed case. A matched case-control study was conducted to assess potential sources of the outbreak. Only the first case (index case) in each household was included in the study. For each case, two neighborhood controls matched by age range were selected. Laboratory analyses included O157 and H7 agglutination tests and pulsed-field gel electrophoresis for DNA analysis of *E. coli* O157:H7 isolated from stool. Case-patients and controls were interviewed to collect information about food exposures and potential risk behaviors within 7 days before onset of illness.

GDPH and TDH identified 10 case-patients with onset of illness during June 13–23. Patients ranged in age from 7 to 89 years (mean: 32 years), and seven were male. Excluding the HUS case, the median duration of illness was 7 days. All case-patients had had grossly bloody diarrhea and severe abdominal cramps for >72 hours.

Eight of the 10 case-patients were included in the case-control study. One was excluded because his parents declined participation and another because a spouse was the index patient in the household. Eating hamburgers purchased at one of three chain A restaurants (two in Tennessee and one in Georgia) during June 13–21 was

reported by seven of the eight patients and one of the 16 controls (matched odds ratio=infinity, 95% confidence interval=2.5–infinity). No other exposures were significantly associated with *E. coli* O157:H7 infection. All three restaurants obtained unfrozen ground beef patties from the same meat processing plant and reported complete turnover of stock, generally within 3 days.

Seven of the eight cases were confirmed by isolation of *E. coli* O157:H7 from stool specimens; DNA patterns were identical for six of these patients. The single case-patient for whom the isolate had a different DNA pattern did not recall eating at a chain A restaurant and had onset of illness on June 13. Inspections of chain A restaurants in Georgia and Tennessee did not identify deficiencies in cooking temperature or procedures, but did identify potential opportunities for cross-contamination from the ground beef. Meat samples obtained at least 4 days after the case-patients visited the restaurants were negative for *E. coli* O157:H7.

Based on the epidemiologic and laboratory findings, GDPH and TDH concluded that hamburgers served at chain A restaurants were the source of this outbreak, most likely as a result of undercooking of or cross-contamination from the ground beef to the buns or other items on the hamburger. GDPH and TDH recommended a thorough assessment of food-handling and cooking procedures at chain A restaurants. In addition, chain A restaurants instituted a training program for workers in proper food-handling practices.

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Editorial Note: *E. coli* O157:H7 was first recognized as a human pathogen in 1982. Infection with this pathogen may be asymptomatic or associated with a range of manifestations including mild diarrhea, severe hemorrhagic colitis, HUS, thrombotic thrombocytopenic purpura, and death (*1,2*). From January 1, 1993, through September 14, 1995, a total of 63 clusters or outbreaks of *E. coli* O157:H7 infection were reported to CDC by 32 states; these outbreaks accounted for 1734 cases (CDC, unpublished data). In three U.S. studies conducted during 1985–1990, *E. coli* O157:H7 was the third or fourth most common bacterial pathogen isolated from stool specimens (*2*) and, among stool cultures at 10 hospitals throughout the United States, *E. coli* O157:H7 was isolated from 8% of visibly bloody stools (*3*).

Ground beef is the most common vehicle for *E. coli* O157:H7 transmission in investigated outbreaks. Since January 1993, ground beef has been identified as the primary vehicle of infection in 25 (40%) of the 63 reported outbreaks of this infection. *E. coli* O157:H7 can be recovered from the intestines of approximately 1% of cattle; because of processing practices, meat from many animals may comprise one hamburger (*2*). Although current U.S. Department of Agriculture regulations specify only gross inspection of carcasses, more comprehensive regulations—including process controls that incorporate guidelines for microbiologic testing of meat—have been proposed and already have been implemented by some producers. Complete implementation of

these production practices should decrease *E. coli* O157:H7 contamination of the meat supply.

Ground beef contaminated with *E. coli* O157:H7 can cause illness when the meat is not thoroughly cooked (to an internal temperature of at least 155 F [68 C]) or when raw or undercooked meat cross-contaminates other food items. Because the infectious dose is low, even limited deficiencies in food preparation or handling can result in exposure and infection (*2*). Although this investigation did not identify deficiencies in hamburger cooking temperatures, opportunities for cross-contamination were detected. Measures for preventing cross-contamination include washing hands and surfaces after contact with raw ground beef, storing raw ground beef to ensure that drippings do not contaminate other foods, and using different utensils to handle raw and cooked meat.

As of January 1996, reporting of *E. coli* O157:H7 infection was required by 38 states (W. Keene, Oregon Department of Human Resources, personal communication, 1996), including Georgia and Tennessee; neither state had required reporting of *E. coli* O157:H7 at the time of this outbreak. The outbreak described in this report underscores the need for clinical laboratories to screen stool specimens for *E. coli* O157:H7 on sorbitol-MacConkey (SMAC) agar. In this outbreak, *E. coli* O157:H7 was detected by a laboratory in Georgia that routinely screened for this pathogen. In a recent survey of clinical microbiology laboratories in the United states, only 54% screened all bloody stool specimens on SMAC agar (*4*). CDC recommends that laboratories in all states screen at least all bloody stools for *E. coli* O157:H7.

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Recall of Philip Morris Cigarettes, May 1995–March 1996

On May 26, 1995, Philip Morris U.S.A.* announced a voluntary recall of 36 cigarette product lines (approximately 8 billion cigarettes) because, during production, the company detected unusual tastes and peculiar odors and identified methyl isothiocyanate (MITC) in the cigarette filters. During June 6–8, 1995, public health officials in Minnesota, Oregon, and Texas requested CDC's assistance in investigating consumer health complaints associated with smoking Philip Morris cigarettes near the time of the recall. This report summarizes CDC's ongoing investigation, which suggests that prolonged cigarette smoking caused most of the health complaints; in addition, the investigation has not identified a distinguishing chemical characteristic of the recalled cigarettes.

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

Cigarette Recall — Continued

Reports of cases of illness near the time of the recall were identified through passive surveillance by direct telephone calls to CDC. CDC used a standardized form to interview persons who reported illness and, when possible, collected cigarette samples. To verify self-reported data, a medical records review was conducted. Cigarettes included in the recall had been manufactured during May 13–22. Philip Morris U.S.A. provided CDC with samples of recalled cigarettes (manufactured on May 19, 1995) and, for comparative analyses, provided samples of cigarettes manufactured before (on March 3, 1995) and after (on June 12, 1995) the recall.

Reports of Illness

During June–July 1995, CDC received reports of illness from 72 persons in 27 states who had smoked Philip Morris cigarette brands on or after May 13, 1995. The 72 persons comprised 36 men and 36 women; the mean age of these persons was 40 years (range: 15 years–67 years). A total of 41 (57%) persons reported onsets of illness before the recall, and 31 (43%) reported onsets after the recall. Of the 72 persons, 51 (71%) reported no preexisting health conditions; 42 (58%) reported experiencing serious health problems from smoking near the time of the recall. A case definition could not be developed because no common pattern of symptoms was identified; however, the most frequently reported manifestation was at least one respiratory or nasopharyngeal symptom (61 [85%]); other frequently reported symptoms included headache (18 [25%]), dizziness (15 [21%]), and ophthalmologic problems (15 [21%]). A total of 59 (82%) persons sought medical treatment for their symptoms; 14 (19%) were hospitalized.

All 72 persons reported smoking cigarettes manufactured by Philip Morris the day they became ill. Most persons (43 [60%]) smoked Marlboro brand cigarettes. The average duration of smoking was 20 years (range: <1 year–45 years), and the average number of cigarettes smoked per day was 23 (range: <1 cigarette–50 cigarettes).

Medical Records Review

Because a case definition could not be specified, further investigation was restricted to 29 persons who reported no preexisting health conditions and who reported experiencing serious health problems associated with smoking near the time of the recall. Of these persons, medical records were obtained for 20. Based on review of these records, the conditions most frequently diagnosed in these persons near the time of the recall were pneumonia (four persons), exacerbation of asthma (four), bronchitis (three), chronic obstructive pulmonary disease (three), eosinophilic pneumonitis (two), and laryngitis (two). The review suggested that most (18 [90%]) of these illnesses were associated with cigarette smoking, preexisting medical conditions resulting from prolonged cigarette smoking, or infectious agents.

Laboratory Analyses

CDC analyzed cigarette samples using high-resolution gas chromatography/high-resolution mass spectrometry. MITC was detected in samples of filter and samples of tobacco and paper obtained from prerecall, recall, and postrecall cigarettes provided by Philip Morris. MITC levels were higher in cigarettes packaged in hard packs than in soft packs (e.g., 102 ng per filter versus 15 ng per filter, $p<0.01$, $n=21$ [14 hard packs and seven soft packs]). MITC also was detected in Philip Morris cigarettes produced at least 1 year before the recall. Seven packs of cigarettes from five other manufacturers were purchased at local stores in Atlanta; MITC was detected in cigarettes from each of these packs.

Cigarette Recall — Continued

Cigarettes obtained from Philip Morris were analyzed for the eight compounds reported by Philip Morris[†] to have caused the taste and odor problems. Of the eight compounds, three (butyric acid; 1,2-propanediol diacetate; and 2-ethylhexyl acetate) were detected in prerecall, recall, and postrecall cigarettes; the other five compounds were not detected. Compared with prerecall and postrecall cigarettes, there was no distinctive increase in one or more of these compounds in the recall cigarettes.

Cigarette samples also were analyzed to identify a unique chemical profile that distinguished the recall cigarettes from the prerecall or postrecall cigarettes. Analysis of volatile organic compounds from the filter and from the tobacco and paper of these cigarettes did not identify such a profile. In addition, analysis of cigarette smoke from recall cigarettes did not contain a unique chemical pattern.

Laboratory analysis is ongoing of cigarettes obtained from the 72 persons who reported illnesses. However, as of March 22, 1996, no unique chemical pattern had been identified.

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Editorial Note: Based on the medical records review and laboratory analyses in this report, prolonged cigarette smoking—rather than smoking contaminated cigarettes—caused most of the health complaints from persons reporting illness associated with smoking Philip Morris cigarette brands near the time of the recall. Smoking is the leading preventable cause of diseases associated with premature death in the United States; in 1990, approximately 419,000 deaths were attributed to smoking (*1*). The estimated number of compounds in tobacco smoke exceeds 4000, including many that are pharmacologically active, toxic, mutagenic, and carcinogenic (*2*).

Although Philip Morris reportedly recalled cigarettes in part because of the recent detection of MITC, the laboratory analyses in this report indicate that MITC was present in cigarettes manufactured by Philip Morris up to 1 year before the recall and in cigarettes from other manufacturers. MITC is a decomposition product of 3,5-dimethyl-1,3,5,2H-tetrahydrothiadizine-2-thione, which is used as a preservative in the manufacture and coating of paperboard[§] and as a pesticide (dazomet) that can be used as a soil fumigant on tobacco plants, turf, and ornamental plants (*3*). MITC also is a decomposition product of sodium N-methyldithiocarbamate, a pesticide with uses similar to dazomet (*3*). Although adverse health effects from MITC exposure (e.g., mucosal irritation of the respiratory and gastrointestinal tracts, conjunctival irritation, and neurologic symptoms) have been documented (*4,5*), there have been no assessments of the possible health effects of burned and inhaled tobacco that contains the levels of MITC detected in this investigation or of inhaling heated MITC found in filters.

The findings of this investigation are subject to at least four limitations. First, reports of illness were identified by passive surveillance; therefore, persons with health problems who contacted CDC may not be representative of all persons who smoked

[†] Butyric acid; methanediol diacetate; 1,1-ethanediol diacetate; 1,2-ethanediol diacetate; 1,2-propanediol diacetate; 2-ethylhexyl acetate; 1,2-butanediol diacetate; and 1,3-propanediol diacetate in one lot of plasticizer (a substance sprayed on cigarette filters) (M. Firestone, Philip Morris U.S.A., personal communication, June 30, 1995).

[§] 21 CFR 176.230. Paperboard is used to produce hard-pack cigarette packaging.

Cigarette Recall — Continued

Philip Morris cigarettes near the time of the recall and who may have incurred related adverse effects. Second, the recalled cigarettes provided by Philip Morris may not be representative of all the cigarettes eligible for recall. Third, because of the protracted time between the occurrence of clinical manifestations and the delivery of cigarette samples to CDC, some of the volatile components may have evaporated from the cigarettes. Fourth, identification of possible contaminants was complicated by lack of access to the manufacturer's cigarette brand ingredients. Although Section 7 of the Cigarette Labeling and Advertising Act of 1996, as amended¶, requires that cigarette companies annually submit to the Secretary of the U.S. Department of Health and Human Services confidential lists of ingredients added to tobacco in the manufacture of cigarettes, the law does not require companies to provide brand-specific information about additives or information about the quantity of each additive used in the manufacture of cigarettes. Therefore, CDC could not compare the standard brand ingredients with those in recalled cigarettes; the identification of either unusual chemicals or unusual quantities was based on comparisons between the recalled cigarettes and samples of cigarettes produced before or after the recall.

Other than the well-established health risks associated with smoking, this investigation did not detect additional health problems related to smoking cigarettes recalled by Philip Morris. Laboratory analyses of potential contaminants in cigarettes is ongoing. However, smoking cessation is the only effective strategy to reduce the risks associated with cigarette smoking.

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¶15 U.S.C. §1335a.

Workshop on the Public Health Response to Nasopharyngeal Radium Irradiation — September 1995

During September 27–28, 1995, a workshop entitled "Public Health Response to Nasopharyngeal Radium Irradiation" was convened in New Haven, Connecticut, to address issues regarding possible adverse health effects of this former medical treatment. Workshop participants discussed the strengths and weaknesses of possible epidemiologic studies.

Radium — Continued

From 1940 through the mid-1960s, nasopharyngeal (NP) radium was used to treat hearing loss, chronic otitis, and other conditions in children and was used to treat aerotitis media in submariners and aviators in the military. The goal of this approach was to reduce swelling of enlarged lymphoid tissue, which was believed to be a cause of both hearing loss and aerotitis media. Treatment usually included insertion of an applicator with a capsule of radium through each nostril and placement of the radium near the eustachian tube opening for 8–12 minutes.

Workshop participants presented estimates of the numbers of persons treated and of the doses to nearby organs. An estimated 500,000–2 million persons may have received NP radium treatments. Radiation doses to nearby organs were estimated on the basis of bilateral use in an adult of 50 mg of radium sulfate in a 0.5-mm platinum capsule for 12 minutes per session for three sessions. Estimates were 2000 rads to local tissue, 24 rads to the pituitary gland, 5 rads to the brain, and 2 rads to the thyroid.

Based on a cohort study in Maryland of 904 exposed and 2021 unexposed persons during 1943–1960, the risk for all head and neck cancers combined was higher among persons who had received the treatment than among persons who had not (*1*); however, this finding was based on small numbers of cancers (three brain and one soft palate cancer) and was statistically significant only after categories were combined. A cohort study in the Netherlands of 2510 exposed and 2199 unexposed persons did not document a statistically significant increase in head and neck cancers in the exposed group (*2*). Follow-up studies of both cohorts are under way.

A panel of medical and public health experts and representatives of veterans' and civilians' groups then discussed and provided comments for a workshop report. The report encouraged CDC and the U.S. Department of Veterans Affairs (VA) to collaborate on the following public health activities:

1. Continue the follow-up studies of existing cohorts, and if possible, combine the data from these studies, include noncancer endpoints in the follow-up studies, and evaluate the results of the follow-up studies before considering an additional cancer incidence study of persons who received NP radium treatments. Although studies of persons who self-report exposure to the treatment are useful in generating hypotheses, such self-reporting should not be the means of identifying formal "case-subjects" in epidemiologic studies.
2. Veterans who received NP radium treatments should be provided access to the Ionizing Radiation Registry maintained by the VA and to priority medical care at VA medical facilities.
3. Rather than screening asymptomatic persons, physicians should be educated about how to obtain more complete and accurate histories from patients who received NP radium treatments. Subspecialists should be provided specific information about NP radium exposure.

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Editorial Note: Nasopharyngeal radium was one of several radiation treatments used to treat benign conditions before 1950. Other approaches included use of external x-irradiation to treat hearing loss, acne, tinea capitis, and enlarged thymus, and the use of radon and radium to treat hemangiomas (*3–7*). When radium treatments were de-

Radium — Continued

veloped and used, other options were either not available, were considered more invasive, or involved external irradiation. Following the publication during the 1950s of findings regarding long-term effects of radiation, health-care providers reserved therapeutic radiation only for serious or life-threatening conditions.

Because most of the radiation from NP radium was in the form of beta particles, the highest dose was delivered to the soft tissue of the nasopharynx, in which the background rate of cancer is low (0.6 per 100,000 persons) (*8*) and which has not been documented to be as sensitive to radiation as thyroid or brain tissue.

In collaboration with workshop cosponsors, CDC plans wider published dissemination of the proceedings of the workshop. The VA is seeking legislation to provide veterans who received NP radium treatments with access to the VA Ionizing Radiation Registry and priority medical care at VA medical facilities. CDC, VA, and the Association of State and Territorial Health Officers are developing a live satellite videoconference for physicians on NP radium, which will be aired on September 5, 1996, from 12:30 p.m. to 2:30 p.m. eastern daylight time.

Current studies do not indicate substantial increases in risks for neoplastic or other disease among those who received NP radium treatments. Because the workshop discussion discouraged medical screening, diagnostic tests and procedures for asymptomatic persons are not warranted. However, physicians may consider performing thorough head and neck examinations of patients with a history of NP radium treatments. In addition, physicians who provide care for patients aged ≥35 years with head and neck complaints should ask the patients whether they have a history of NP radium treatments or other head and neck radiation. Persons who recall being treated or believe they were treated with NP radium should inform their physicians of the exposure.

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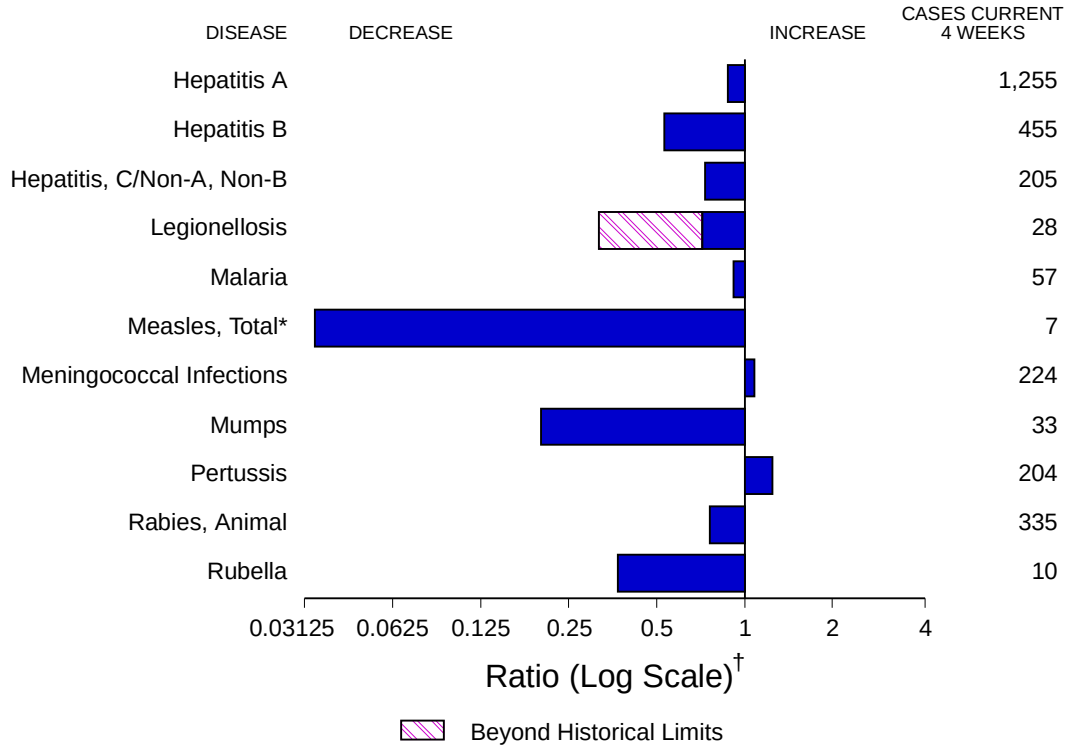
FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending March 23, 1996, with historical data — United States



*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline.

†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 — cases of selected notifiable diseases, United States, cumulative, week ending March 23, 1996 (12th Week)

	Cum. 1996		Cum. 1996
Anthrax	-	HIV infection, pediatric*§	49
Brucellosis	9	Plague	-
Cholera	1	Poliomyelitis, paralytic¶	-
Congenital rubella syndrome	-	Psittacosis	4
Cryptosporidiosis*	289	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	19
Encephalitis: California*	-	Streptococcal toxic shock syndrome*	9
eastern equine*	1	Syphilis, congenital**	-
St. Louis*	-	Tetanus	3
western equine*	-	Toxic-shock syndrome	27
Hansen Disease	22	Trichinosis	6
Hantavirus pulmonary syndrome*†	1	Typhoid fever	47

*Not notifiable in all states.
†Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services (NCPS), last update February 27, 1996.
¶No suspected cases of polio reported for 1996.
**Updated quarterly from reports to the Division of STD Prevention, NCPS. First quarter 1996 is not yet available.
-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending March 23, 1996, and March 25, 1995 (12th Week)

Reporting Area	AIDS*		Chlamydia	*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB		Legionellosis	
				NETSS†	PHLIS§						
	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	10,058	16,914	47,253	141	50	61,684	88,496	701	912	137	252
NEW ENGLAND	454	808	2,228	20	3	1,746	1,266	16	24	4	3
Maine	8	15	-	3	-	9	16	-	-	1	-
N.H.	14	24	142	1	1	33	26	1	2	-	-
Vt.	5	6	-	3	2	17	7	9	2	-	-
Mass.	250	447	1,545	9	-	534	728	5	20	2	2
R.I.	17	55	541	2	-	144	138	1	-	1	1
Conn.	160	261	-	2	-	1,009	351	-	-	N	N
MID. ATLANTIC	2,863	4,125	6,281	23	14	5,033	10,187	59	85	30	34
Upstate N.Y.	324	277	N	12	9	988	2,014	54	34	7	8
N.Y. City	1,615	2,302	765	-	-	1,012	3,524	1	1	-	1
N.J.	554	980	1,247	8	-	703	1,024	-	39	5	9
Pa.	370	566	4,269	N	5	2,330	3,625	4	11	18	16
E.N. CENTRAL	822	1,405	9,064	21	2	10,131	18,882	93	68	46	91
Ohio	250	379	1,907	16	-	1,033	6,124	3	2	21	37
Ind.	91	104	2,124	3	-	1,688	1,893	3	-	11	19
Ill.	315	578	-	2	1	3,989	4,701	7	27	1	13
Mich.	108	270	4,095	-	1	2,909	4,575	80	39	12	12
Wis.	58	74	938	N	-	512	1,589	-	-	1	10
W.N. CENTRAL	254	391	5,545	14	12	3,802	4,975	84	21	10	32
Minn.	56	91	-	2	8	975	705	-	-	-	-
Iowa	23	20	549	4	1	197	372	56	2	2	7
Mo.	93	146	3,355	1	-	1,943	2,909	26	14	1	23
N. Dak.	-	-	2	1	1	1	7	-	-	-	-
S. Dak.	3	1	249	-	-	40	42	-	1	2	-
Nebr.	22	38	388	1	-	57	250	-	2	5	1
Kans.	57	95	1,002	5	2	589	690	2	2	-	1
S. ATLANTIC	2,485	4,057	11,736	10	1	24,642	25,333	32	59	14	41
Del.	72	69	-	-	-	357	477	1	-	-	-
Md.	198	626	1,300	N	-	3,159	3,292	-	2	2	10
D.C.	125	236	N	-	-	1,076	1,359	-	-	1	3
Va.	129	326	2,678	N	1	2,184	2,448	1	-	5	2
W. Va.	19	20	-	N	-	99	141	4	14	1	3
N.C.	34	245	-	4	-	4,706	5,734	8	17	3	7
S.C.	93	167	-	1	-	2,808	2,728	7	1	1	5
Ga.	446	507	2,863	2	-	6,095	4,278	-	9	-	5
Fla.	1,369	1,861	4,895	-	-	4,158	4,876	11	16	1	6
E.S. CENTRAL	360	556	4,293	5	1	6,447	10,586	95	350	14	8
Ky.	66	62	-	-	-	951	1,179	4	7	2	2
Tenn.	141	220	2,225	N	1	2,126	2,881	90	342	6	3
Ala.	90	157	2,027	-	-	3,203	4,478	1	1	-	2
Miss.	63	117	41	2	-	167	2,048	-	-	6	1
W.S. CENTRAL	956	1,372	1,437	6	1	3,477	8,210	78	42	1	3
Ark.	45	63	-	4	-	656	975	1	-	-	-
La.	225	286	-	N	1	1,898	2,796	29	17	-	1
Okla.	28	83	1,437	1	-	923	701	34	19	1	2
Tex.	658	940	-	1	-	-	3,738	14	6	-	-
MOUNTAIN	254	558	4,055	18	8	1,641	2,161	140	103	5	27
Mont.	3	8	-	-	-	4	24	8	4	-	2
Idaho	4	17	356	7	4	20	35	37	13	-	1
Wyo.	-	4	149	-	-	9	13	41	40	-	-
Colo.	85	214	-	6	4	470	727	4	20	4	14
N. Mex.	20	42	-	-	-	198	274	24	15	-	2
Ariz.	96	135	2,733	N	-	734	703	18	5	-	1
Utah	39	37	254	3	-	49	44	6	3	-	2
Nev.	7	101	563	2	-	157	341	2	3	1	5
PACIFIC	1,610	3,642	2,614	24	8	4,765	6,896	104	160	13	13
Wash.	141	282	2,260	4	4	584	635	24	39	1	-
Oreg.	103	110	-	10	-	91	129	2	9	-	-
Calif.	1,340	3,143	-	7	-	3,907	5,770	44	103	12	10
Alaska	3	29	N	-	-	97	216	2	1	-	-
Hawaii	23	78	342	N	4	86	146	32	8	-	3
Guam	3	-	-	N	-	-	20	-	-	-	-
P.R.	255	638	N	N	U	93	138	36	33	-	-
V.I.	1	14	N	N	U	-	9	-	-	-	-
Amer. Samoa	-	-	-	N	U	-	8	-	-	-	-
C.N.M.I.	-	-	N	N	U	11	5	-	-	-	-

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

*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update February 27, 1996.
†National Electronic Telecommunications System for Surveillance.
§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending March 23, 1996, and March 25, 1995 (12th Week)

Reporting Area	Lyme Disease		Malaria		Meningococcal Disease		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	725	1,030	198	221	835	823	2,339	3,775	2,737	3,113	880	1,484
NEW ENGLAND	36	54	5	11	22	52	46	56	85	66	105	424
Maine	-	1	1	-	7	3	-	2	4	-	-	-
N.H.	-	6	-	1	1	10	1	1	3	1	15	56
Vt.	-	1	1	-	1	5	-	-	-	-	28	57
Mass.	12	9	3	1	13	17	18	18	30	30	23	169
R.I.	19	-	-	2	-	-	-	1	13	9	10	59
Conn.	5	37	-	7	-	17	27	34	35	26	29	83
MID. ATLANTIC	613	818	55	53	66	82	83	239	450	582	140	389
Upstate N.Y.	255	402	13	9	18	29	3	22	55	64	66	181
N.Y. City	129	29	23	25	11	11	28	134	226	315	-	-
N.J.	17	106	16	13	19	25	29	45	115	111	36	64
Pa.	212	281	3	6	18	17	23	38	54	92	38	144
E.N. CENTRAL	7	10	21	27	110	127	415	645	425	374	6	2
Ohio	5	5	4	1	48	32	158	223	68	59	2	1
Ind.	2	4	3	2	11	22	63	59	34	21	1	-
Ill.	-	1	4	20	32	37	119	246	274	196	-	1
Mich.	-	-	7	2	8	21	40	67	39	88	-	-
Wis.	U	U	3	2	11	15	35	50	10	10	3	-
W.N. CENTRAL	26	18	3	7	70	44	112	203	73	101	72	63
Minn.	1	-	-	3	4	6	26	13	14	16	4	5
Iowa	14	-	1	-	16	9	4	15	11	15	38	18
Mo.	2	8	1	3	26	15	79	163	31	46	8	8
N. Dak.	-	-	-	-	2	-	-	-	1	-	6	6
S. Dak.	-	-	-	-	3	-	-	-	6	-	10	15
Nebr.	-	-	-	1	8	6	3	4	-	5	1	-
Kans.	9	10	1	-	11	8	-	8	10	19	5	11
S. ATLANTIC	25	97	32	50	145	143	762	1,004	316	500	456	412
Del.	1	9	2	1	2	1	11	6	-	11	14	20
Md.	17	70	13	17	17	6	124	93	58	98	123	97
D.C.	-	-	2	3	2	1	39	37	16	21	2	2
Va.	-	2	6	9	14	20	109	153	25	29	111	78
W. Va.	2	6	-	-	4	3	1	1	18	22	15	20
N.C.	4	6	5	4	24	23	221	269	40	37	106	90
S.C.	1	4	1	-	18	21	107	166	40	64	8	32
Ga.	-	-	3	6	44	39	74	171	3	77	57	64
Fla.	-	-	-	10	20	29	76	108	116	141	20	9
E.S. CENTRAL	5	7	2	3	63	46	618	873	248	221	16	55
Ky.	-	1	-	-	9	16	39	55	49	40	3	5
Tenn.	-	4	1	1	3	8	188	183	45	87	-	26
Ala.	-	-	1	2	25	13	153	151	91	93	13	23
Miss.	5	2	-	-	26	9	238	484	63	1	-	1
W.S. CENTRAL	1	10	6	2	96	89	224	564	197	280	4	36
Ark.	1	-	-	1	11	8	52	110	20	39	-	20
La.	-	-	-	-	19	13	132	273	-	-	-	9
Okla.	-	9	-	-	6	10	40	33	18	32	4	7
Tex.	-	1	6	1	60	58	-	148	159	209	-	-
MOUNTAIN	-	1	15	14	56	65	31	64	87	105	14	13
Mont.	-	-	-	1	1	2	-	3	-	3	-	6
Idaho	-	-	-	-	6	3	1	-	2	4	-	-
Wyo.	-	-	2	-	3	1	1	-	-	-	8	-
Colo.	-	-	8	8	7	13	12	37	15	5	-	-
N. Mex.	-	-	1	3	12	18	-	1	7	22	1	-
Ariz.	-	-	1	1	18	23	14	11	50	63	3	6
Utah	-	-	2	1	3	2	-	2	-	7	-	-
Nev.	-	1	1	-	6	3	3	10	13	1	2	1
PACIFIC	12	15	59	54	207	175	48	127	856	884	67	90
Wash.	-	-	1	5	21	22	-	4	50	51	-	-
Oreg.	4	1	4	4	37	35	2	4	24	10	-	-
Calif.	7	14	51	41	144	116	46	119	737	764	61	87
Alaska	-	-	-	1	3	-	-	-	15	19	6	3
Hawaii	1	-	3	3	2	2	-	-	30	40	-	-
Guam	-	-	-	-	-	1	-	1	-	4	-	-
P.R.	-	-	-	-	2	10	39	73	20	16	9	17
V.I.	-	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	2	-	-
C.N.M.I.	-	-	-	-	-	-	1	-	-	10	-	-

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

TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 23, 1996, and March 25, 1995 (12th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (viral), by type				Measles (Rubeola)			
			A		B		Indigenous		Imported†	
	Cum. 1996*	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	1996	Cum. 1996	1996	Cum. 1996
UNITED STATES	304	327	5,066	5,656	1,495	1,984	1	41	-	2
NEW ENGLAND	8	16	55	38	29	58	-	6	-	-
Maine	-	1	8	6	2	2	-	-	-	-
N.H.	6	1	3	3	-	5	-	-	-	-
Vt.	-	1	-	2	2	1	-	1	-	-
Mass.	2	4	24	13	4	14	-	4	-	-
R.I.	-	-	2	7	2	7	-	-	-	-
Conn.	-	9	18	7	19	29	-	1	-	-
MID. ATLANTIC	38	34	330	292	223	223	-	1	-	1
Upstate N.Y.	10	10	72	69	65	67	-	-	-	-
N.Y. City	4	5	165	121	135	42	-	1	-	1
N.J.	16	8	66	57	4	78	-	-	-	-
Pa.	8	11	27	45	19	36	-	-	-	-
E.N. CENTRAL	48	62	444	845	168	274	-	-	-	-
Ohio	31	34	233	485	27	22	-	-	-	-
Ind.	2	7	86	42	22	56	-	-	-	-
Ill.	12	18	35	171	13	78	-	-	-	-
Mich.	2	3	71	89	101	98	-	-	-	-
Wis.	1	-	19	58	5	20	-	-	-	-
W.N. CENTRAL	11	14	424	241	122	140	-	-	-	-
Minn.	1	3	12	12	2	5	-	-	-	-
Iowa	5	1	125	10	54	14	-	-	-	-
Mo.	5	8	180	175	48	102	-	-	-	-
N. Dak.	-	-	5	3	-	1	-	-	-	-
S. Dak.	-	-	25	3	-	1	-	-	-	-
Nebr.	-	1	45	16	3	8	-	-	-	-
Kans.	-	1	32	22	15	9	-	-	-	-
S. ATLANTIC	62	79	179	246	260	272	-	2	-	-
Del.	1	-	3	3	1	1	-	1	-	-
Md.	17	26	43	49	72	60	-	1	-	-
D.C.	-	-	6	2	3	8	-	-	-	-
Va.	3	11	31	46	29	23	-	-	-	-
W. Va.	-	2	5	7	8	14	-	-	-	-
N.C.	9	11	26	24	93	82	-	-	-	-
S.C.	2	-	19	6	24	8	-	-	-	-
Ga.	30	15	-	35	-	24	-	-	-	-
Fla.	-	14	46	74	30	52	-	-	-	-
E.S. CENTRAL	6	3	218	319	39	233	-	-	-	-
Ky.	2	1	6	19	16	26	-	-	-	-
Tenn.	-	-	67	243	10	177	-	-	-	-
Ala.	3	2	65	35	13	30	-	-	-	-
Miss.	1	-	80	22	-	-	-	-	-	-
W.S. CENTRAL	9	13	817	500	113	158	-	-	-	-
Ark.	-	1	136	17	13	2	-	-	-	-
La.	-	1	14	15	12	15	-	-	-	-
Okla.	9	9	411	122	21	21	-	-	-	-
Tex.	-	2	256	346	67	120	-	-	-	-
MOUNTAIN	38	34	723	987	203	131	-	3	-	-
Mont.	-	-	17	14	-	4	-	-	-	-
Idaho	1	2	98	120	25	19	-	-	-	-
Wyo.	16	1	6	30	5	2	-	-	-	-
Colo.	4	4	22	135	8	23	-	-	-	-
N. Mex.	7	5	121	211	91	46	-	-	-	-
Ariz.	5	10	228	200	38	17	-	-	-	-
Utah	3	4	191	243	26	13	-	-	-	-
Nev.	2	8	40	34	10	7	-	3	-	-
PACIFIC	84	72	1,876	2,188	338	495	1	29	-	1
Wash.	-	4	117	104	18	33	-	4	-	-
Oreg.	11	8	264	431	20	27	-	-	-	-
Calif.	71	58	1,454	1,602	296	428	-	1	-	-
Alaska	-	-	20	14	2	2	1	24	-	-
Hawaii	2	2	21	37	2	5	-	-	-	1
Guam	-	-	-	1	-	-	U	-	U	-
P.R.	-	3	25	8	143	64	-	-	-	-
V.I.	-	-	-	-	-	1	U	-	U	-
Amer. Samoa	-	-	-	5	-	-	U	-	U	-
C.N.M.I.	10	-	1	8	5	-	U	-	U	-

*Of 69 cases among children aged <5 years, serotype was reported for 18 and of those, 4 were type B.
†For imported measles, cases include only those resulting from importation from other countries.
N: Not notifiable U: Unavailable -: no reported cases

TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 23, 1996, and March 25, 1995 (12th Week)

Reporting Area	Measles (Rubeola), cont'd. Total		Mumps			Pertussis			Rubella		
	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995
UNITED STATES	43	154	8	134	189	51	439	597	3	37	15
NEW ENGLAND	6	3	-	-	3	-	74	83	-	2	2
Maine	-	-	-	-	2	-	2	9	-	-	-
N.H.	-	-	-	-	-	-	13	5	-	-	1
Vt.	1	-	-	-	-	-	6	2	-	-	-
Mass.	4	1	-	-	-	-	50	63	-	-	1
R.I.	-	2	-	-	-	-	-	-	-	-	-
Conn.	1	-	-	-	1	-	3	4	-	2	-
MID. ATLANTIC	2	2	1	18	28	2	53	54	-	3	1
Upstate N.Y.	-	-	1	6	9	2	32	30	-	2	-
N.Y. City	2	-	-	3	2	-	9	9	-	1	1
N.J.	-	2	-	-	4	-	-	6	-	-	-
Pa.	-	-	-	9	13	-	12	9	-	-	-
E.N. CENTRAL	-	-	2	38	26	7	82	65	-	-	-
Ohio	-	-	2	16	12	5	46	29	-	-	-
Ind.	-	-	-	5	4	1	7	7	-	-	-
Ill.	-	-	-	7	-	1	17	-	-	-	-
Mich.	-	-	-	10	10	-	10	24	-	-	-
Wis.	-	-	-	-	-	-	2	5	-	-	-
W.N. CENTRAL	-	1	-	2	12	-	3	27	-	-	-
Minn.	-	-	-	-	-	-	1	-	-	-	-
Iowa	-	-	-	-	3	-	2	1	-	-	-
Mo.	-	1	-	-	7	-	-	7	-	-	-
N. Dak.	-	-	-	2	-	-	-	5	-	-	-
S. Dak.	-	-	-	-	-	-	-	4	-	-	-
Nebr.	-	-	-	-	2	-	-	3	-	-	-
Kans.	-	-	-	-	-	-	-	7	-	-	-
S. ATLANTIC	2	-	1	14	32	9	39	59	-	-	1
Del.	1	-	-	-	-	2	5	3	-	-	-
Md.	1	-	-	7	7	1	21	-	-	-	-
D.C.	-	-	-	-	-	-	-	1	-	-	-
Va.	-	-	1	3	7	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	14	-	-	46	-	-	-
S.C.	-	-	-	3	1	1	3	7	-	-	-
Ga.	-	-	-	1	-	1	2	-	-	-	-
Fla.	-	-	-	-	3	4	8	2	-	-	1
E.S. CENTRAL	-	-	-	5	6	2	10	16	2	2	-
Ky.	-	-	-	-	-	-	5	1	-	-	-
Tenn.	-	-	-	-	-	1	1	2	-	-	-
Ala.	-	-	-	3	2	-	1	13	-	-	-
Miss.	-	-	-	2	4	1	3	-	N	N	N
W.S. CENTRAL	-	2	2	5	12	-	4	15	-	-	1
Ark.	-	2	-	-	3	-	2	-	-	-	-
La.	-	-	2	5	2	-	2	1	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	7	-	-	14	-	-	1
MOUNTAIN	3	54	1	10	9	17	61	176	-	-	2
Mont.	-	-	-	-	-	1	3	3	-	-	-
Idaho	-	-	-	-	1	7	19	49	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	-
Colo.	-	17	-	-	-	2	8	32	-	-	-
N. Mex.	-	27	N	N	N	2	15	7	-	-	-
Ariz.	-	9	-	1	1	-	2	82	-	-	2
Utah	-	-	-	-	1	-	1	2	-	-	-
Nev.	3	1	1	9	6	5	13	1	-	-	-
PACIFIC	30	92	1	42	61	14	113	102	1	30	8
Wash.	4	13	1	4	3	3	26	12	-	1	-
Oreg.	-	1	N	N	N	-	16	2	-	-	1
Calif.	1	77	-	30	51	11	66	86	1	27	7
Alaska	24	-	-	1	6	-	-	-	-	-	-
Hawaii	1	1	-	7	1	-	5	2	-	2	-
Guam	-	-	U	-	1	U	-	-	U	-	-
P.R.	-	3	-	1	1	-	-	4	-	-	-
V.I.	-	-	U	-	1	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	-	-	U	-	-	U	-	-

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

TABLE IV. Deaths in 121 U.S. cities,* week ending March 23, 1996 (12th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	606	438	98	45	13	12	49
Boston, Mass.	151	98	27	19	3	4	18
Bridgeport, Conn.	41	29	6	5	1	-	3
Cambridge, Mass.	28	22	4	2	-	-	6
Fall River, Mass.	20	17	2	1	-	-	-
Hartford, Conn.	62	41	9	5	3	4	3
Lowell, Mass.	26	20	6	-	-	-	2
Lynn, Mass.	11	7	1	2	1	-	1
New Bedford, Mass.	30	25	3	1	1	-	-
New Haven, Conn.	28	24	2	2	-	-	2
Providence, R.I.	63	46	14	1	1	1	2
Somerville, Mass.	4	4	-	-	-	-	1
Springfield, Mass.	50	37	8	3	1	1	1
Waterbury, Conn.	28	19	7	1	1	-	3
Worcester, Mass.	64	49	9	3	1	2	7
MID. ATLANTIC	2,279	1,520	430	239	52	38	97
Albany, N.Y.	62	49	7	5	-	1	5
Allentown, Pa.	23	19	4	-	-	-	1
Buffalo, N.Y.	U	U	U	U	U	U	U
Camden, N.J.	34	18	9	5	-	2	2
Elizabeth, N.J.	16	13	2	1	-	-	-
Erie, Pa.§	44	38	5	1	-	-	2
Jersey City, N.J.	40	28	7	4	1	-	2
New York City, N.Y.	1,324	848	259	161	36	20	37
Newark, N.J.	71	28	21	18	3	1	5
Paterson, N.J.	29	15	8	3	1	2	4
Philadelphia, Pa.	200	134	43	16	4	3	15
Pittsburgh, Pa.§	107	76	24	4	1	2	6
Reading, Pa.	16	14	2	-	-	-	-
Rochester, N.Y.	114	92	12	5	2	3	7
Schenectady, N.Y.	19	13	4	2	-	-	1
Scranton, Pa.§	33	29	3	-	1	-	1
Syracuse, N.Y.	99	74	14	7	2	2	7
Trenton, N.J.	32	19	4	6	1	2	2
Utica, N.Y.	16	13	2	1	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,253	1,569	419	162	44	57	157
Akron, Ohio	58	40	9	6	1	2	-
Canton, Ohio	43	36	4	3	-	-	5
Chicago, Ill.	461	300	95	36	13	15	32
Cincinnati, Ohio	228	152	51	15	4	6	16
Cleveland, Ohio	180	116	39	14	3	8	5
Columbus, Ohio	209	142	41	11	8	7	13
Dayton, Ohio	131	97	25	6	1	2	9
Detroit, Mich.	193	129	35	24	3	2	4
Evansville, Ind.	29	27	2	-	-	-	3
Fort Wayne, Ind.	66	51	10	3	2	-	9
Gary, Ind.	15	12	1	2	-	-	1
Grand Rapids, Mich.	56	44	7	2	3	-	6
Indianapolis, Ind.	166	108	36	13	2	7	12
Madison, Wis.	U	U	U	U	U	U	U
Milwaukee, Wis.	126	95	18	8	-	5	8
Peoria, Ill.	36	25	8	1	2	-	4
Rockford, Ill.	54	38	10	5	-	1	8
South Bend, Ind.	63	47	12	3	-	1	9
Toledo, Ohio	82	64	8	7	2	1	8
Youngstown, Ohio	57	46	8	3	-	-	5
W.N. CENTRAL	861	607	128	72	22	24	53
Des Moines, Iowa	81	62	12	2	1	3	9
Duluth, Minn.	29	23	4	1	-	1	6
Kansas City, Kans.	30	19	5	5	-	1	-
Kansas City, Mo.	119	73	16	13	6	4	3
Lincoln, Nebr.	52	43	6	3	-	-	5
Minneapolis, Minn.	173	129	24	12	4	4	18
Omaha, Nebr.	95	64	14	9	3	5	6
St. Louis, Mo.	136	92	20	16	5	3	-
St. Paul, Minn.	58	42	13	3	-	-	1
Wichita, Kans.	88	60	14	8	3	3	5
S. ATLANTIC	1,448	910	288	172	41	34	81
Atlanta, Ga.	200	110	48	26	7	9	8
Baltimore, Md.	226	134	45	32	6	7	20
Charlotte, N.C.	91	72	11	5	3	-	6
Jacksonville, Fla.	101	63	21	12	3	2	3
Miami, Fla.	105	59	24	15	5	2	-
Norfolk, Va.	71	43	14	8	3	3	4
Richmond, Va.	101	64	25	8	2	2	6
Savannah, Ga.	59	39	12	5	1	2	6
St. Petersburg, Fla.	61	47	9	5	-	-	1
Tampa, Fla.	218	153	40	19	1	4	21
Washington, D.C.	196	107	39	37	10	3	6
Wilmington, Del.	19	19	-	-	-	-	-
E.S. CENTRAL	649	428	135	58	10	16	58
Birmingham, Ala.	139	93	28	12	-	4	4
Chattanooga, Tenn.	68	47	15	4	-	2	8
Knoxville, Tenn.	69	55	11	3	-	-	15
Lexington, Ky.	60	41	13	4	1	1	6
Memphis, Tenn.	U	U	U	U	U	U	U
Mobile, Ala.	103	67	20	11	1	4	13
Montgomery, Ala.	71	50	11	7	2	1	3
Nashville, Tenn.	139	75	37	17	6	4	9
W.S. CENTRAL	1,122	760	206	97	29	30	49
Austin, Tex.	69	47	12	7	3	-	4
Baton Rouge, La.	35	22	7	3	2	1	-
Corpus Christi, Tex.	55	42	4	5	3	1	5
Dallas, Tex.	225	136	53	28	4	4	4
El Paso, Tex.	62	45	8	5	2	2	4
Ft. Worth, Tex.	89	66	13	3	5	2	2
Houston, Tex.	U	U	U	U	U	U	U
Little Rock, Ark.	69	44	15	4	1	5	6
New Orleans, La.	190	121	35	24	6	4	-
San Antonio, Tex.	112	85	19	5	1	2	8
Shreveport, La.	73	55	9	6	1	2	5
Tulsa, Okla.	143	97	31	7	1	7	11
MOUNTAIN	938	625	174	90	20	28	60
Albuquerque, N.M.	124	83	25	11	2	3	3
Colo. Springs, Colo.	53	34	12	5	2	-	3
Denver, Colo.	127	88	17	14	2	6	11
Las Vegas, Nev.	138	95	30	9	3	1	7
Ogden, Utah	24	18	4	2	-	-	6
Phoenix, Ariz.	170	97	36	24	2	10	13
Pueblo, Colo.	29	18	9	1	1	-	2
Salt Lake City, Utah	113	79	13	10	5	6	7
Tucson, Ariz.	160	113	28	14	3	2	8
PACIFIC	2,132	1,481	371	192	45	41	162
Berkeley, Calif.	24	11	6	6	-	1	1
Fresno, Calif.	70	55	8	4	1	2	7
Glendale, Calif.	33	32	1	-	-	-	2
Honolulu, Hawaii	72	53	11	5	1	2	9
Long Beach, Calif.	67	39	16	8	2	1	12
Los Angeles, Calif.	800	548	142	85	15	10	44
Pasadena, Calif.	20	16	-	2	1	1	3
Portland, Oreg.	147	107	20	11	5	3	10
Sacramento, Calif.	168	115	36	8	6	3	13
San Diego, Calif.	124	83	23	12	3	3	16
San Francisco, Calif.	149	92	28	22	2	5	13
San Jose, Calif.	169	124	29	9	3	4	16
Santa Cruz, Calif.	35	27	3	4	-	1	1
Seattle, Wash.	129	91	20	9	5	4	3
Spokane, Wash.	44	29	11	4	-	-	4
Tacoma, Wash.	81	59	17	3	1	1	8
TOTAL	12,288¶	8,338	2,249	1,127	276	280	766

*Mortality data in this table are voluntarily reported from 121 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 these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
¶Total includes unknown ages.
U: Unavailable -: no reported cases

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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 *lists@list.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.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (404) 332-4555.

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