CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

September 13, 1996 / Vol. 45 / No. 36

MMWR™
MORBIDITY AND MORTALITY WEEKLY REPORT

Measles Outbreak Among School-Aged Children — Juneau, Alaska, 1996

An outbreak of measles among school-aged children occurred in Juneau, Alaska, from February 16 through April 25, 1996. Of 63 confirmed cases*, 47 were serologically confirmed, and virus was cultured from 15; a total of 41 (65%) were among school-aged children (i.e., aged 6–18 years). This report summarizes results of the epidemiologic investigation conducted by the Division of Public Health, Alaska Department of Health and Social Services (ADPH), which found evidence of measles transmission at schools despite high rates of coverage with one dose of measles-containing vaccine (MCV).

The first five cases occurred among four students and a teacher at an elementary school; all had rash onset during February 16–19. The 63 case-patients ranged in age from 8 months to 45 years (median: 11 years): one was aged <1 year; 10 (16%), 1–4 years; 41 (65%), 5–19 years; and 11 (18%), ≥20 years. Two persons with measles were hospitalized, including a child with dehydration and an adult with neutropenia. Measles virus was isolated from nasopharyngeal specimens obtained from 15 patients and from urine specimens from three of these same patients; isolates were genotypically similar to viruses recently isolated from Europe but different from isolates circulating in the United States during 1989–1992 (*1*).

Probable sites of measles acquisition were school (31 [49%]), home (14 [22%]), indoor soccer games (seven [11%]), and other settings (six [10%]); the site was unknown for five (8%). Cases were more likely to have been acquired at school during the first 35 days of the outbreak (19 [59%] of 32) than during the remaining 35 days (12 [39%] of 31).

Cases occurred among 40 students and four faculty members at seven of eight public schools in Juneau; one case occurred in a student at a private school. School-specific incidence rates were highest at the high school annex† (five [4%] of 127), a

*A confirmed case was laboratory confirmed or met the clinical case definition and was epidemiologically linked to a confirmed or probable case. A clinical case was defined as an illness characterized by a generalized rash lasting ≥3 days; a temperature ≥101 F (≥38.3 C); and cough, coryza, or conjunctivitis. A probable case met the clinical case definition, had noncontributory or no laboratory testing, and was not epidemiologically linked to a probable or confirmed case.
†A separate building with a small number of students.

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middle school (15 [2%] of 687), and the elementary school attended by the index patient (seven [1%] of 525). At the beginning of the 1995–96 school year, approximately 99% of 5400 public school children in Juneau had received at least one dose of MCV. The number of children who had received more than one dose of MCV was unknown; however, a second dose of measles-mumps-rubella vaccine (MMR) for school-aged children enrolled in public or private school was not required in Alaska at the time of the outbreak.

Of the 63 case-patients, 33 (52%) had received only one dose of MCV on or after their first birthday, and 30 (48%) had never been vaccinated with MCV. Among the 30 who were not vaccinated, 24 (80%) were eligible to be vaccinated (i.e., aged ≥12 months and born on or after January 1, 1957); of the 24 who were eligible to be vaccinated, all 12 school-aged children had religious exemptions, and two of nine children aged 1–4 years were siblings of these unvaccinated schoolchildren.

Although no source case was identified, this outbreak coincided with a measles outbreak associated with the Seattle-Tacoma (Washington) airport, the major airport gateway to Juneau. The first three case-patients in the Seattle area had onset of measles during February 2–4, 1996; these cases occurred among two airport workers and an airport visitor who, on January 20, were at the Seattle-Tacoma airport concourse of the main airline serving Juneau. Because measles transmission probably occurred in the airport on January 20, a Juneau-bound passenger also may have been exposed and may have become the source case for the Juneau outbreak. Isolates from the Seattle cases were not available for comparison.

Measures to control the outbreak were implemented beginning February 17 and included efforts to vaccinate school-aged children and contacts of persons with suspected cases with at least one dose of MCV; active surveillance for rash illness in doctor's offices, schools, and the one hospital emergency department in Juneau; and weekly fax transmissions of outbreak updates to health-care providers and public health nurses in Juneau and all other areas of southeast Alaska. As a result of this outbreak, ADPH is requiring all Alaska schoolchildren in kindergarten and first grade to receive a second dose of MCV for school entry.

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Editorial Note: In this measles outbreak, the large number of cases among school-aged children was attributed primarily to sustained transmission in schools characterized by high coverage levels with one dose of MCV. Before this outbreak, no measles transmission had been documented in Alaska schools since 1976, and approximately 99% of Juneau schoolchildren had received at least one dose of MCV; however, outbreaks have occurred previously among school-aged children vaccinated with one dose of MCV (*2*). In addition, consistent with outbreaks that occurred in the United States during 1995, viral isolates from cases in Juneau were genotypically similar to viruses recently isolated outside the United States and were not related to

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viruses that circulated during the measles resurgence in the United States during 1989–1992 (*1*). This finding suggests that recent outbreaks have resulted from importation of measles with subsequent transmission in the United States (*1*).

In 1989, as a result of continued measles outbreaks among school-aged children vaccinated with one dose of MCV, the Advisory Committee on Immunization Practices (ACIP) and the American Academy of Pediatrics recommended a routine two-dose measles vaccination schedule. In addition, ACIP recommended that, during outbreaks, a second dose of MCV be administered to children who had received only one dose of MCV before the outbreak (*3*). A measles outbreak (i.e., one case of confirmed measles in a community) should prompt vaccination of potentially susceptible persons. During school outbreaks, revaccination with MMR in affected schools is recommended. Revaccination consists of providing a second dose of MCV to all students, their siblings, and school personnel who were born during or after 1957 and do not have documented receipt of two doses of MCV on or after their first birthday or evidence of measles immunity (*3*). Revaccination also should be strongly considered in unaffected schools within the same community. The extensiveness of revaccination programs may vary with the magnitude of interaction at sporting and other interscholastic events and should strongly be considered when children in more than two schools are affected.

A routine two-dose MCV schedule for school-aged children will protect almost all of the estimated 2%–5% of children who do not respond to the first dose (*4*). The first dose of MCV should be given at age 12–15 months and the second dose at age 4–6 years or 11–12 years (*3*). Efforts to vaccinate the entire school-aged population in the United States with two doses of MCV are necessary to decrease the number and size of future measles outbreaks and to achieve elimination of measles in the United States. The speed at which this occurs locally depends on when two-dose MCV requirements were implemented in each state and the number of cohorts covered by the requirement. Forty-two states, including Alaska, require at least one school-grade cohort to be vaccinated with two doses of MCV. ACIP is revising recommendations for measles prevention that will encourage all states to achieve full coverage with two doses of MCV for all school-aged children in kindergarten through 12th grade by 2001.

Implementation of the two-dose strategy has been important in reducing measles incidence levels to current record low levels. In Finland, measles transmission was successfully eliminated following initiation of a two-dose MMR vaccination program in 1982 (*5*), similar in concept to the U.S. strategy. Countries of the Western Hemisphere, with the technical assistance of the Pan American Health Organization, have reduced measles incidence more than 95% by using a strategy based on periodic mass vaccination campaigns (*6*). These successful efforts to control measles outside the United States are important because long-term success in measles-control efforts in the United States and other countries require strengthened global control of measles.

References

1. CDC. Measles—United States, 1995. MMWR 1996;45:305–7.
2. Gustafson TL, Lievens AW, Brunell PA, Moellenberg RG, Buttery CM, Sehulster LM. Measles outbreak in a fully immunized secondary-school population. N Engl J Med 1987;316:771–4.
3. CDC. Measles prevention: recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1989;38(no. S-9).

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4. Watson JC, Pearson JA, Markowitz LE, et al. An evaluation of measles revaccination among school-entry-aged children. Pediatrics 1996;97:613–8.
5. Peltola H, Heinonen OP, Valle M, et al. The elimination of indigenous measles, mumps, and rubella from Finland by a 12–year, two-dose vaccination program. N Engl J Med 1994;331:1397–402.
6. de Quadros CA, Olive JM, Hersh BS, et al. Measles elimination in the Americas: evolving strategies. JAMA 1996;275:224–9.

Acute Pesticide Poisoning Associated with Use of a Sulfotepp Fumigant in a Greenhouse — Texas, 1995

Pesticide fumigants that eradicate pests but do not damage flowers or foliage can be used to protect market-ready florals. During November 1995, a pesticide applicator worker in Texas became ill during fumigation despite wearing the personal protective equipment (PPE) recommended on the fumigant product label. This report summarizes the results of the case investigation by the Texas Department of Health (TDH) and CDC's National Institute for Occupational Safety and Health (NIOSH) and a survey of growers about pesticide use. The findings indicate that the recommended PPE may be inadequate to protect workers using sulfotepp fumigants from pesticide poisoning.

Case Investigation

On November 30, 1995, the Environmental and Occupational Epidemiology Program at TDH was notified by the Texas Poison Center Network of a 32-year-old man who had visited an emergency department (ED) because of symptoms consistent with acute pesticide poisoning, including headache, nausea, diarrhea, vomiting, cough, slight dizziness, sweating, fatigue, abdominal pain, anxiety, muscle aches, chest tightness, drowsiness, restlessness, shortness of breath, and excessive salivation. The patient was a pesticide applicator employed at a greenhouse and had applied sulfotepp fumigants (Plantfume 103 and Fulex)* the previous night. Sulfotepp, a highly toxic organophosphate pesticide and cholinesterase inhibitor, is used in greenhouses to control aphids, spider mites, thrips, and whiteflies; sulfotepp does not damage delicate flowers or foliage (*1*).

The patient reported onset of symptoms shortly after igniting the sulfotepp fumigant canisters in the first of four interconnected greenhouses where chrysanthemums, poinsettias, and other plants were grown. Despite feeling ill and smelling the chemical, he and three other workers completed fumigating all four greenhouses. He did not seek medical care until the following day. Physical examination at the ED was unremarkable, and he was released without treatment.

The patient was a licensed pesticide applicator and had been employed at the greenhouse for 2 years. Although he had applied other fumigants in the past, this was the first time he had applied sulfotepp and the first time the chemical was used in this greenhouse. During the application, he wore the PPE recommended on the product label, including a laminated full-body suit, rubber boots, nitrile gloves, and a full-face air-purifying respirator equipped with a pesticide prefilter and organic vapor cartridge.

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

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He had undergone a qualitative (smoke) respirator fit test in November, and no leakage was detected. A qualitative fit test conducted after the incident indicated an adequate fit.

On December 3, TDH and NIOSH interviewed the other applicators, inspected the PPE, and observed the next fumigant application at the greenhouse. All three applicators reported wearing the label-recommended equipment, and two of these three workers reported nausea and detecting the odor of the chemical during application on November 30; however, they did not vomit or seek medical care.

During the second application, unopened canisters of Plantfume 103 and Fulex were set out in a grid-like fashion within each greenhouse. In accordance with the label instructions, a total of 80 canisters were set out (one canister per 20,000 cubic feet). The internal air circulation system and the exhaust ventilation system were turned off. The internal air circulation system had not been turned off during the previous application because the applicators misinterpreted the instructions. To avoid the smoke, the workers ignited the canisters as they exited each greenhouse, but each canister rapidly generated smoke. After the final canister was ignited, the workers moved to a shipping area not being treated with the fumigant, removed their PPE, and left the facility. The time necessary to complete the application was approximately 45 minutes and, even though all product label instructions were followed, the index patient again reported some symptoms.

Survey of Growers

During December, TDH conducted a telephone survey of greenhouse operators in Texas to assess the prevalence of greenhouse fumigant use and the occurrence of possibly related adverse health effects among workers. TDH contacted 413 Texas companies listed under Standard Industrial Classification (SIC) code 5193 (nursery stock for florists and the same SIC code as the greenhouse) and identified 53 companies with greenhouses in which plants were grown. All 53 companies participated in the survey. Of these, 43 (81%) reported ever using fumigants, and 30 (70%) of the 43 reported using sulfotepp. Of the 43 companies using any type of fumigant, 33 (77%) reported that workers used respirators during fumigant application, including five that used respirators with an independent supply of compressed air. Three (7%) companies reported that at least one worker had become ill during the application of fumigants, none of which contained sulfotepp; none of the workers sought medical care for their illness. At two of these three companies, workers wore all label-recommended PPE during the fumigant application; at the third company, workers did not use PPE during the application.

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Editorial Note: Although pesticide use in the United States has doubled since the 1960s (*2*), the health effects of pesticide use on agricultural workers has not been well documented. In Texas, where occupationally related acute pesticide poisoning is a reportable condition, 247 cases were reported during 1986–1994. However, during 1989–1990, only 20% of cases were reported (TDH, unpublished data, 1991).

The findings of the TDH investigation indicate that the acute illness among workers in this report most likely was associated with exposure to the sulfotepp fumigant and

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underscore the importance of reporting pesticide poisonings. Exposure occurred even though the workers followed the pesticide label instructions and properly used all recommended PPE during the second application. Because there was no evidence of oral or dermal contact with the chemical and workers smelled the chemical, inhalation was the most likely route of exposure. Other factors potentially associated with exposure may have included the technique employed in igniting the canisters and operation of the internal air-circulation system during the first application, which may have increased dispersion of the fumigant throughout the greenhouse.

The sulfotepp label instructions state that applicators and other handlers must use "a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (approval prefix TC-23C) or a canister approved for pesticides (approval prefix TC-14G)" (*3,4*). In general, such filters do not provide adequate protection against the high ambient chemical concentration and small particle size characteristic of fumigants. In addition, a single type of filter may not be appropriate for all types and forms of pesticides and, in July 1995, NIOSH discontinued certifying cartridges specifically for use with pesticides.[†] The survey findings in this report indicated that many greenhouses use fumigants, most workers use only a respirator, and other greenhouse workers had become ill during fumigant applications, despite the use of label-recommended PPE.

Neither the product distributor nor the formulators of Plantfume 103 and Fulex had received reports of illness related to these products; however, neither maintained surveillance for potentially related problems or illnesses. During 1985–1992, the U.S. Environmental Protection Agency (EPA) received 23 reports of illness in persons occupationally exposed to sulfotepp (EPA, unpublished data, 1996); 70% of these persons were referred to health-care facilities, and 7% were hospitalized.

As a result of this investigation, TDH and NIOSH recommended to EPA that sulfotepp fumigant labels be amended to indicate the appropriate respiratory protection. Label instructions for other pesticide fumigants also may need to be reviewed for appropriateness. In addition, advertising material and labels for pesticide prefilters, cartridges, and canisters should clearly state they are not for use with fumigants. Professional associations and licensing and regulatory agencies should provide applicators with educational materials regarding the safe use of pesticide fumigants, including appropriate PPE, efficient fumigant application procedures, and less toxic pest-control options. Employers should implement comprehensive PPE programs, including selection of appropriate respirators by qualified staff using NIOSH-recommended procedures (*5*).

References

1. Plant Products Corporation. Plantfume 103—plantfume tedion dithio and nicotine smoke generators [Supplemental product information]. Vero Beach, Florida: Plant Products Corporation.
2. Ridgway RL, Tinney JC, MacGregor JT, Starler NJ. Pesticide use in agriculture. Environ Hlth Perspect 1978;27:103–12.
3. Plant Products Corporation. Supplemental labeling for Plantfume 103 smoke generator. Vero Beach, Florida: Plant Products Corporation.
4. Fuller System, Inc. Supplemental labeling for Fulex dithio insecticidal smoke fumigant. Woburn, Massachusetts: Fuller System, Inc.
5. NIOSH. NIOSH guide to industrial respiratory protection. Cincinnati: US Department of Health and Human Services, Public Health Service, CDC, 1987; DHHS publication no. (NIOSH)87-116.

[†]42 CFR 84.

Foodborne Outbreak of Diarrheal Illness Associated with *Cryptosporidium parvum* — Minnesota, 1995

On September 29, 1995, the Minnesota Department of Health (MDH) received reports of acute gastroenteritis among an estimated 50 attendees of a social event in Blue Earth County on September 16. This report summarizes the epidemiologic and laboratory investigations of the outbreak, which indicate the probable cause for this foodborne outbreak was *Cryptosporidium parvum*.

Of the 26 persons who attended the function and who completed telephone interviews with MDH, 15 (58%) reported onset of diarrhea (three or more stools during a 24-hour period) within 14 days after attending the event (range: 1–9 days; median: 6 days). Symptoms included watery diarrhea (100%), abdominal cramps (93%), and chills (79%). The median length of illness was 4 days (range: ½ day–14 days). Three persons who sought medical care received outpatient treatment for acute gastroenteritis. Stool specimens obtained from two of these persons were negative for bacterial pathogens and for ova and parasites but were not tested for *C. parvum.* There were no other reports of cryptosporidiosis in the community at the time of this outbreak.

To identify risk factors for illness, MDH conducted a case-control study using the 15 ill and 11 well attendees. In addition, MDH collected stools from three ill persons, and these were cultured for *Salmonella*, *Shigella*, *Campylobacter*, and *Escherichia coli* O157:H7; examined for ova and parasites; and tested for *C. parvum* using acid-fast staining and direct-fluorescent antibody (DFA) methods.

Based on the case-control study, only consumption of chicken salad was associated with increased risk for illness (15 of 15 cases versus two of 11 controls; odds ratio= undefined). Water consumption at the event was not associated with illness.

The chicken salad was prepared by the hostess on September 15 and was refrigerated until served. The ingredients were cooked chopped chicken, pasta, peeled and chopped hard-boiled eggs, chopped celery, and chopped grapes in a seasoned mayonnaise dressing. The hostess operated a licensed day-care home (DCH) and prepared the salad while attendees were in her home. She denied having recent diarrheal illness and refused to submit a stool specimen. In addition, she denied knowledge of diarrheal illnesses among children in her DCH during the week before preparation of the salad. She reported changing diapers on September 15 before preparing the salad and reported routinely following handwashing practices.

Stool specimens from two of the persons whose illnesses met the case definition were obtained by MDH 7 days after resolution of their symptoms; one sample was positive for oocysts and *Cryptosporidium* sporozoites on acid-fast staining, but the DFA test was negative. The presence of oocysts containing sporozoites was confirmed by acid-fast tests at two other reference laboratories. Stool specimens obtained from a third person—the spouse of a case-patient—who did not attend the event but had onset of diarrhea 8 days after onset of diarrhea in his spouse was positive for *C. parvum* by acid-fast staining and DFA. All stools obtained by MDH were negative for bacteria and for parasites. No chicken salad was available for testing.

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Cryptosporidium parvum — *Continued*

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Editorial Note: Known modes of transmission of *C. parvum* include consumption of contaminated surface or ground water (*1,2*), exposure to contaminated recreational water (*3*), animal-to-person contact (*2*), and person-to-person contact (*2*). Because outbreaks of cryptosporidiosis and asymptomatic carriage of *Cryptosporidium* have been documented in child-care settings (*4*), the food preparer in this outbreak may have contaminated the implicated salad after contact with an asymptomatically infected child in the DCH. The salad required extensive handling in preparation, was moist, and was served cold—conditions conducive to initial contamination and preservation of infectious oocysts.

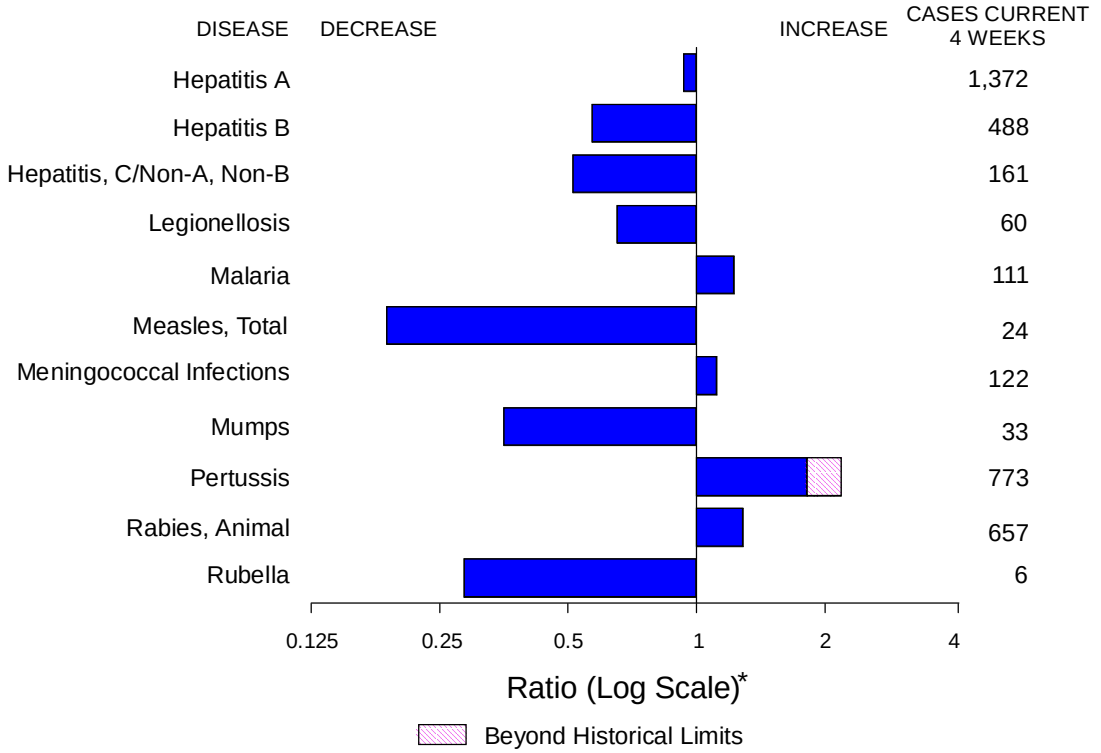
The outbreak of gastroenteritis described in this report was associated with eating chicken salad at a social function. Despite the small number of stools submitted for testing by ill persons who attended the event, the symptoms, incubation period, and the presence of *C. parvum* in the stool of an ill attendee all indicate that this was a foodborne outbreak of cryptosporidiosis.

Although foodborne transmission of *C. parvum* has been suspected previously, evidence supporting this mode has been limited to one report of a point source outbreak associated with raw apple cider (*5*) and reports of sporadic cases attributed to contaminated foods (*6*). The reported low infectious dose of *C. parvum* (ID_{50}=132 organisms) suggests that transmission in food is possible (*7*). Cryptosporidiosis should be considered in the differential diagnosis of suspected foodborne gastroenteritis.

References

1. Mac Kenzie WR, Hoxie NJ, Proctor ME, et al. A massive outbreak in Milwaukee of *Cryptosporidium* infection transmitted through the public water supply. N Engl J Med 1994; 331:161–7.
2. Current WL, Garcia LS. Cryptosporidiosis. Clin Microbiol Rev 1991;4:325–58.
3. McAnulty JM, Fleming DW, Gonzalez AH. A community-wide outbreak of cryptosporidiosis associated with swimming at a wave pool. JAMA 1994;272:1597–600.
4. Cordell RL, Addiss DG. Cryptosporidiosis in child care settings: a review of the literature and recommendations for prevention and control. Pediatr Infect Dis J 1994;13:310–7.
5. Millard PS, Gensheimer KF, Addiss DG, et al. An outbreak of cryptosporidiosis from fresh-pressed apple cider. JAMA 1994;272:1592–6.
6. Smith JL. *Cryptosporidium* and *Giardia* as agents of foodborne disease. Journal of Food Protection 1993;56:451–61.
7. DuPont HL, Chappell CL, Sterling CR, Okhuysen PC, Rose JB, Jakubowski W. The infectivity of *Cryptosporidium parvum* in healthy volunteers. N Engl J Med 1995;332:855–9.

FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending September 7, 1996, 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 — cases of selected notifiable diseases, United States, cumulative, week ending September 7, 1996 (36th Week)

	Cum. 1996		Cum. 1996
Anthrax	-	HIV infection, pediatric*§	195
Brucellosis	58	Plague	1
Cholera	2	Poliomyelitis, paralytic¶	-
Congenital rubella syndrome	1	Psittacosis	27
Cryptosporidiosis*	1,279	Rabies, human	1
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	468
Encephalitis: California*	35	Streptococcal toxic-shock syndrome*	13
eastern equine*	2	Syphilis, congenital**	225
St. Louis*	-	Tetanus	19
western equine*	-	Toxic-shock syndrome	97
Hansen Disease	71	Trichinosis	15
Hantavirus pulmonary syndrome*†	11	Typhoid fever	232

-: no reported cases
*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§ Updated monthly to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention (NCHSTP), last update August 27, 1996.
¶ Three suspected cases of polio with onset in 1996 has been reported to date.
**Updated quarterly from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending September 7, 1996, and September 9, 1995 (36th 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	45,416	47,222	245,757	1,598	852	194,627	269,203	2,294	2,722	561	821
NEW ENGLAND	1,849	2,383	11,721	236	50	4,938	5,132	80	87	31	20
Maine	31	75	610	18	-	34	64	-	-	2	5
N.H.	58	70	397	27	26	80	77	7	12	1	1
Vt.	14	21	U	16	14	41	43	28	9	3	-
Mass.	873	999	4,621	117	10	1,511	1,806	39	62	16	11
R.I.	123	179	1,354	10	-	357	348	6	4	9	3
Conn.	750	1,039	4,739	48	-	2,915	2,794	-	-	N	N
MID. ATLANTIC	12,627	12,731	30,341	144	34	22,233	30,762	190	315	130	135
Upstate N.Y.	1,672	1,609	N	100	12	4,150	6,657	154	156	49	36
N.Y. City	7,052	6,551	15,097	8	-	7,762	12,169	1	1	5	4
N.J.	2,402	2,970	3,103	36	5	3,344	3,163	-	127	9	20
Pa.	1,501	1,601	12,141	N	17	6,977	8,773	35	31	67	75
E.N. CENTRAL	3,616	3,632	42,870	389	276	29,097	53,866	310	220	149	244
Ohio	810	779	13,341	102	57	9,782	16,786	24	8	65	115
Ind.	462	379	6,692	51	34	4,330	6,448	7	2	31	56
Ill.	1,579	1,514	16,939	171	84	12,163	13,471	50	66	9	22
Mich.	570	713	U	65	53	U	12,539	229	144	31	23
Wis.	195	247	5,898	N	48	2,822	4,622	-	-	13	28
W.N. CENTRAL	1,060	1,077	19,547	341	196	8,589	13,822	87	63	31	54
Minn.	189	242	2,702	132	115	U	1,890	1	2	3	2
Iowa	69	55	2,705	84	55	680	983	39	12	8	17
Mo.	541	474	8,579	47	-	5,731	7,979	29	17	6	13
N. Dak.	10	4	2	10	12	-	21	-	5	-	3
S. Dak.	9	11	704	13	-	101	140	-	1	2	1
Nebr.	74	80	1,779	27	3	668	823	5	14	9	11
Kans.	168	211	3,076	28	11	1,409	1,986	13	12	3	7
S. ATLANTIC	11,216	12,139	37,413	85	50	66,608	74,369	178	169	97	137
Del.	215	219	1,148	-	1	1,007	1,502	1	-	9	2
Md.	1,324	1,621	4,607	N	7	9,656	8,750	1	7	18	24
D.C.	799	739	N	-	-	3,099	3,121	-	-	8	4
Va.	795	961	7,521	N	21	6,410	7,647	10	10	13	18
W. Va.	83	75	1	N	2	350	470	9	41	1	3
N.C.	603	712	-	23	12	12,727	16,430	34	43	7	29
S.C.	586	673	-	7	7	7,747	8,333	21	16	4	28
Ga.	1,651	1,638	7,947	22	-	13,144	13,915	U	15	3	14
Fla.	5,160	5,501	16,189	23	-	12,468	14,201	102	37	34	15
E.S. CENTRAL	1,563	1,544	20,452	40	37	21,764	28,157	420	740	36	48
Ky.	272	196	4,548	7	4	2,860	3,260	20	23	3	9
Tenn.	580	636	9,042	19	30	7,869	9,582	320	715	18	23
Ala.	431	410	5,779	9	3	9,246	11,637	4	2	3	6
Miss.	280	302	U	5	-	1,789	3,678	76	U	12	10
W.S. CENTRAL	4,562	4,141	30,403	38	10	22,547	37,517	320	207	17	15
Ark.	186	186	-	11	3	2,451	3,607	7	5	1	5
La.	1,046	707	4,962	5	4	5,336	7,863	142	130	1	2
Okla.	189	194	5,327	8	1	3,385	3,758	69	33	5	3
Tex.	3,141	3,054	20,114	14	2	11,375	22,289	102	39	10	5
MOUNTAIN	1,325	1,466	11,203	123	63	5,021	6,461	410	327	29	87
Mont.	23	16	-	13	-	24	51	12	11	1	4
Idaho	29	37	1,073	26	6	78	107	92	43	-	2
Wyo.	3	10	402	-	2	24	39	132	131	3	8
Colo.	362	493	-	50	30	1,077	1,975	39	50	7	33
N. Mex.	118	123	2,633	7	-	564	716	54	37	1	4
Ariz.	370	390	4,541	N	17	2,524	2,502	51	30	13	7
Utah	127	98	1,035	17	-	199	163	21	10	2	12
Nev.	293	299	1,519	10	8	531	908	9	15	2	17
PACIFIC	7,597	8,109	41,807	202	136	13,830	19,117	299	594	41	81
Wash.	508	662	6,455	64	42	1,411	1,830	41	152	5	18
Oreg.	339	298	U	56	35	398	533	6	33	-	-
Calif.	6,594	6,914	30,042	79	50	11,484	15,873	106	381	32	58
Alaska	23	53	776	3	2	282	465	2	1	1	-
Hawaii	133	182	872	N	7	255	416	144	27	3	5
Guam	4	-	168	N	-	31	79	1	5	2	1
P.R.	1,524	1,828	N	13	U	210	416	77	168	-	-
V.I.	17	27	N	N	U	-	-	-	-	-	-
Amer. Samoa	-	-	-	N	U	-	18	-	-	-	-
C.N.M.I.	1	-	N	N	U	11	41	-	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 HIV, STD, and TB Prevention, last update August 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 September 7, 1996, and September 9, 1995 (36th 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	7,628	7,552	933	860	2,306	2,187	7,420	11,386	12,980	14,091	4,166	5,458
NEW ENGLAND	2,470	1,479	37	35	97	101	115	257	282	340	496	1,107
Maine	22	16	6	4	12	7	-	2	4	11	67	21
N.H.	27	19	1	1	3	18	1	1	9	9	46	114
Vt.	15	8	2	1	3	6	-	-	1	2	114	135
Mass.	186	86	12	10	37	35	54	43	144	190	80	335
R.I.	333	240	6	4	10	4	1	3	24	33	33	237
Conn.	1,887	1,110	10	15	32	31	59	208	100	95	156	265
MID. ATLANTIC	4,379	4,962	228	226	201	280	290	589	2,265	2,992	536	1,428
Upstate N.Y.	2,561	2,507	55	45	62	76	49	63	286	326	291	847
N.Y. City	189	333	113	118	30	38	94	255	1,113	1,711	-	-
N.J.	516	1,322	46	46	53	70	77	120	489	514	98	257
Pa.	1,113	800	14	17	56	96	70	151	377	441	147	324
E.N. CENTRAL	52	329	95	120	316	313	913	1,959	1,410	1,320	69	77
Ohio	35	21	9	9	121	89	333	626	204	182	11	9
Ind.	15	13	12	15	48	46	146	227	120	124	5	12
Ill.	2	15	35	63	82	83	312	761	761	694	18	12
Mich.	-	5	28	13	33	56	U	197	251	264	23	32
Wis.	U	275	11	20	32	39	122	148	74	56	12	12
W.N. CENTRAL	109	72	36	18	190	134	269	546	332	422	382	261
Minn.	39	5	17	3	25	22	51	29	78	101	19	13
Iowa	18	9	2	2	39	25	13	34	44	48	178	94
Mo.	22	37	8	6	78	50	174	463	142	162	16	25
N. Dak.	-	-	1	1	3	1	-	-	6	3	51	23
S. Dak.	-	-	-	1	9	5	-	-	15	15	91	72
Nebr.	2	4	3	3	16	12	12	11	13	17	3	5
Kans.	28	17	5	2	20	19	19	9	34	76	24	29
S. ATLANTIC	414	490	203	165	479	361	2,596	2,861	2,403	2,490	1,917	1,461
Del.	50	37	3	1	2	6	26	10	20	40	52	74
Md.	232	324	55	44	49	31	442	318	207	281	445	296
D.C.	3	2	7	15	10	4	104	77	93	70	9	11
Va.	32	38	32	35	43	47	300	446	178	167	401	286
W. Va.	11	21	3	2	11	8	1	8	44	54	74	85
N.C.	58	44	19	14	60	62	715	796	329	299	482	346
S.C.	4	12	9	1	45	47	276	412	244	222	69	99
Ga.	1	9	16	23	118	72	465	536	449	448	214	194
Fla.	23	3	59	30	141	84	267	258	839	909	171	70
E.S. CENTRAL	48	50	23	18	132	143	1,660	2,330	1,211	980	149	205
Ky.	9	12	3	2	21	36	97	128	163	202	33	22
Tenn.	17	20	11	7	16	53	584	607	297	319	54	68
Ala.	6	7	3	6	55	29	393	460	586	283	59	108
Miss.	16	11	6	3	40	25	586	1,135	165	176	3	7
W.S. CENTRAL	84	81	22	33	269	261	1,116	2,252	1,510	1,916	266	526
Ark.	21	6	-	2	29	26	121	344	126	146	15	33
La.	1	4	4	3	47	39	381	715	59	181	13	24
Okla.	13	34	-	1	25	28	137	139	129	146	21	28
Tex.	49	37	18	27	168	168	477	1,054	1,196	1,443	U	441
MOUNTAIN	6	7	41	43	130	160	107	160	403	429	105	112
Mont.	-	-	6	3	4	2	-	4	14	10	18	34
Idaho	-	-	-	1	19	7	4	-	6	9	-	1
Wyo.	2	3	3	-	3	7	2	-	5	1	23	22
Colo.	-	-	18	18	28	40	23	87	54	38	30	-
N. Mex.	1	1	2	4	21	30	1	5	54	60	4	5
Ariz.	-	-	6	7	33	47	64	32	171	209	24	34
Utah	2	1	4	5	12	13	2	4	39	19	3	10
Nev.	1	2	2	5	10	14	11	28	60	83	3	6
PACIFIC	66	82	248	202	492	434	354	432	3,164	3,202	246	281
Wash.	12	8	16	16	76	72	5	11	163	186	4	7
Oreg.	11	13	15	13	86	79	10	18	72	81	-	1
Calif.	42	61	207	162	321	273	338	402	2,772	2,760	234	266
Alaska	-	-	3	1	6	6	-	1	43	48	8	7
Hawaii	1	-	7	10	3	4	1	-	114	127	-	-
Guam	-	-	-	1	1	2	3	8	35	83	-	-
P.R.	-	-	-	1	5	18	97	192	63	120	32	35
V.I.	-	-	-	2	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	3	-	-
C.N.M.I.	-	-	-	1	-	-	1	5	-	29	-	-

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

TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending September 7, 1996, and September 9, 1995 (36th 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	797	809	18,149	19,523	6,411	6,818	6	388	-	34
NEW ENGLAND	22	32	247	189	139	165	-	10	-	4
Maine	-	3	13	20	2	7	-	-	-	-
N.H.	8	8	11	8	10	17	-	-	-	-
Vt.	1	2	6	4	10	4	-	1	-	1
Mass.	11	10	129	78	43	60	-	8	-	3
R.I.	2	3	13	24	9	8	-	-	-	-
Conn.	-	6	75	55	65	69	-	1	-	-
MID. ATLANTIC	129	114	1,068	1,202	935	965	-	20	-	5
Upstate N.Y.	40	31	284	281	238	262	-	-	-	-
N.Y. City	25	27	399	591	425	306	-	9	-	3
N.J.	39	13	231	171	171	250	-	-	-	-
Pa.	25	43	154	159	101	147	-	11	-	2
E.N. CENTRAL	122	142	1,547	2,295	683	781	-	5	-	4
Ohio	74	73	571	1,285	91	82	-	2	-	-
Ind.	7	18	228	124	114	149	U	-	U	-
Ill.	29	33	336	474	170	205	-	2	-	1
Mich.	7	16	299	261	262	291	-	-	-	3
Wis.	5	2	113	151	46	54	-	1	-	-
W.N. CENTRAL	38	55	1,585	1,359	302	456	3	21	-	2
Minn.	23	28	90	126	40	36	2	16	-	2
Iowa	5	3	260	63	66	34	-	-	-	-
Mo.	6	17	747	983	145	324	1	4	-	-
N. Dak.	-	-	75	22	2	4	-	-	-	-
S. Dak.	1	1	41	37	3	2	-	-	-	-
Nebr.	1	3	151	37	21	23	U	-	U	-
Kans.	2	3	221	91	25	33	-	1	-	-
S. ATLANTIC	184	161	872	771	1,029	884	-	6	-	8
Del.	2	-	11	8	6	6	-	1	-	-
Md.	47	55	145	152	216	179	-	2	-	2
D.C.	5	-	22	18	28	15	-	-	-	-
Va.	6	21	117	138	98	81	-	-	-	2
W. Va.	6	6	13	17	18	40	-	-	-	-
N.C.	22	25	101	80	253	203	U	3	U	1
S.C.	4	1	42	35	61	37	-	-	-	-
Ga.	73	48	87	51	8	62	-	-	-	2
Fla.	19	5	334	272	341	261	-	-	-	1
E.S. CENTRAL	21	8	990	1,231	570	612	1	1	-	-
Ky.	4	2	22	35	38	54	-	-	-	-
Tenn.	8	-	667	1,019	332	481	1	1	-	-
Ala.	8	5	139	63	46	77	-	-	-	-
Miss.	1	1	162	114	154	-	-	-	-	-
W.S. CENTRAL	31	49	3,741	2,488	829	865	1	26	-	2
Ark.	-	5	351	350	54	41	-	-	-	-
La.	3	1	109	82	84	148	-	-	-	-
Okla.	25	20	1,619	672	59	118	-	-	-	-
Tex.	3	23	1,662	1,384	632	558	1	26	-	2
MOUNTAIN	78	90	2,912	2,857	746	582	-	152	-	5
Mont.	-	-	82	76	7	19	-	-	-	-
Idaho	1	2	154	239	70	70	-	1	-	-
Wyo.	35	5	26	85	33	17	-	1	-	-
Colo.	11	13	321	358	97	85	-	4	-	3
N. Mex.	9	12	282	594	254	218	-	16	-	-
Ariz.	9	22	1,216	818	185	87	-	8	-	-
Utah	7	9	665	526	69	48	-	117	-	2
Nev.	6	27	166	161	31	38	-	5	-	-
PACIFIC	172	158	5,187	7,131	1,178	1,508	1	147	-	4
Wash.	2	8	335	584	65	133	-	45	-	-
Oreg.	22	22	594	1,851	50	90	-	4	-	-
Calif.	144	123	4,173	4,539	1,045	1,263	-	33	-	2
Alaska	2	1	32	31	10	10	U	63	U	-
Hawaii	2	4	53	126	8	12	1	2	-	2
Guam	-	-	2	6	-	4	U	-	U	-
P.R.	1	3	80	74	261	445	U	6	U	-
V.I.	-	-	-	6	-	13	U	-	U	-
Amer. Samoa	-	-	-	5	-	-	U	-	U	-
C.N.M.I.	10	11	1	22	5	16	U	-	U	-

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

*Of 187 cases among children aged <5 years, serotype was reported for 42 and of those, 12 were type b.

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

TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending September 7, 1996, and September 9, 1995 (36th 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	422	266	10	447	601	257	3,157	2,735	2	193	105
NEW ENGLAND	14	8	-	1	11	17	655	378	-	25	44
Maine	-	-	-	-	4	-	19	21	-	-	-
N.H.	-	-	-	-	1	2	66	28	-	-	1
Vt.	2	-	-	-	-	3	41	56	-	2	-
Mass.	11	2	-	1	2	-	485	258	-	20	7
R.I.	-	5	-	-	1	12	25	2	-	-	-
Conn.	1	1	-	-	3	-	19	13	-	3	36
MID. ATLANTIC	25	12	1	60	91	14	242	224	-	8	12
Upstate N.Y.	-	1	-	19	23	9	129	105	-	4	3
N.Y. City	12	5	-	14	13	-	22	35	-	2	7
N.J.	-	6	-	2	14	-	5	16	-	2	2
Pa.	13	-	1	25	41	5	86	68	-	-	-
E.N. CENTRAL	9	14	-	81	103	5	317	332	-	3	3
Ohio	2	1	-	35	32	-	159	95	-	-	-
Ind.	-	-	U	6	7	U	31	21	U	-	-
Ill.	3	2	-	19	30	5	96	65	-	1	-
Mich.	3	5	-	20	34	-	26	55	-	2	3
Wis.	1	6	-	1	-	-	5	96	-	-	-
W.N. CENTRAL	23	2	2	12	36	35	208	139	-	1	-
Minn.	18	-	2	5	2	29	157	42	-	-	-
Iowa	-	-	-	1	9	-	9	7	-	1	-
Mo.	4	1	-	3	20	5	27	45	-	-	-
N. Dak.	-	-	-	2	1	-	1	8	-	-	-
S. Dak.	-	-	-	-	-	1	4	10	-	-	-
Nebr.	-	-	U	-	4	U	6	8	U	-	-
Kans.	1	1	-	1	-	-	4	19	-	-	-
S. ATLANTIC	14	11	-	76	88	13	376	235	-	91	9
Del.	1	-	-	-	-	-	11	9	-	-	-
Md.	4	1	-	21	27	5	132	31	-	-	1
D.C.	-	-	-	-	-	-	-	4	-	1	-
Va.	2	-	-	12	17	4	43	15	-	2	-
W. Va.	-	-	-	-	-	-	2	-	-	-	-
N.C.	4	-	U	17	16	U	75	84	U	77	1
S.C.	-	-	-	5	9	1	26	20	-	1	-
Ga.	2	2	-	2	6	-	17	18	-	-	-
Fla.	1	8	-	19	13	3	70	54	-	10	7
E.S. CENTRAL	1	-	-	19	7	4	67	255	-	2	1
Ky.	-	-	-	-	-	-	26	17	-	-	-
Tenn.	1	-	-	1	-	-	17	203	-	-	1
Ala.	-	-	-	3	4	4	16	34	-	2	-
Miss.	-	-	-	15	3	-	8	1	N	N	N
W.S. CENTRAL	28	23	3	23	39	5	77	213	1	3	7
Ark.	-	2	-	1	6	3	7	29	-	-	-
La.	-	18	-	12	8	-	7	12	-	1	-
Okla.	-	-	-	-	-	-	8	20	-	-	-
Tex.	28	3	3	10	25	2	55	152	1	2	7
MOUNTAIN	157	68	-	22	26	24	294	459	-	6	4
Mont.	-	-	-	-	1	-	17	3	-	-	-
Idaho	1	-	-	-	2	4	98	87	-	2	-
Wyo.	1	-	-	-	-	1	5	1	-	-	-
Colo.	7	26	-	2	1	9	77	68	-	2	-
N. Mex.	16	31	N	N	N	3	42	78	-	-	-
Ariz.	8	10	-	1	2	7	22	153	-	1	3
Utah	119	-	-	2	11	-	11	18	-	-	1
Nev.	5	1	-	17	9	-	22	51	-	1	-
PACIFIC	151	128	4	153	200	140	921	500	1	54	25
Wash.	45	19	-	18	10	110	413	121	-	2	1
Oreg.	4	1	-	-	-	-	29	37	-	1	-
Calif.	35	106	2	111	171	30	458	300	1	48	19
Alaska	63	-	U	2	12	U	2	-	U	-	-
Hawaii	4	2	2	22	7	-	19	42	-	3	5
Guam	-	-	U	5	3	U	1	2	U	-	1
P.R.	6	3	U	1	2	U	1	1	U	-	-
V.I.	-	-	U	-	3	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 September 7, 1996 (36th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	549	391	80	44	20	14	32
Boston, Mass.	152	106	21	12	8	5	10
Bridgeport, Conn.	38	28	4	4	2	-	4
Cambridge, Mass.	24	17	7	-	-	-	2
Fall River, Mass.	29	26	1	2	-	-	-
Hartford, Conn.	38	23	4	4	4	3	1
Lowell, Mass.	21	20	-	1	-	-	1
Lynn, Mass.	13	8	3	1	1	-	1
New Bedford, Mass.	24	17	2	5	-	-	-
New Haven, Conn.	31	21	4	1	2	3	1
Providence, R.I.	48	37	6	4	1	-	2
Somerville, Mass.	5	1	3	1	-	-	-
Springfield, Mass.	36	23	9	1	2	1	3
Waterbury, Conn.	36	24	7	5	-	-	3
Worcester, Mass.	54	40	9	3	-	2	4
MID. ATLANTIC	2,138	1,416	439	202	43	37	97
Albany, N.Y.	43	25	9	3	-	6	1
Allentown, Pa.	35	30	3	2	-	-	-
Buffalo, N.Y.	90	65	20	3	1	1	2
Camden, N.J.	27	19	4	2	2	-	2
Elizabeth, N.J.	16	14	1	1	-	-	-
Erie, Pa.§	32	28	2	1	1	-	1
Jersey City, N.J.	58	31	11	13	-	3	2
New York City, N.Y.	1,118	743	230	113	17	15	47
Newark, N.J.	76	22	33	15	4	2	6
Paterson, N.J.	14	9	2	2	1	-	-
Philadelphia, Pa.	300	172	77	30	13	7	14
Pittsburgh, Pa.§	46	38	6	1	1	-	3
Reading, Pa.	7	5	1	-	1	-	-
Rochester, N.Y.	127	98	21	7	-	1	10
Schenectady, N.Y.	21	16	4	1	-	-	-
Scranton, Pa.§	24	18	4	2	-	-	2
Syracuse, N.Y.	65	51	7	3	2	2	4
Trenton, N.J.	19	14	2	3	-	-	2
Utica, N.Y.	20	18	2	-	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,702	1,085	337	176	56	47	100
Akron, Ohio	34	24	7	-	1	2	-
Canton, Ohio	30	25	5	-	-	-	2
Chicago, Ill.	473	257	114	66	22	13	29
Cincinnati, Ohio	33	17	10	2	2	2	3
Cleveland, Ohio	128	82	32	11	1	2	3
Columbus, Ohio	116	81	21	8	4	2	7
Dayton, Ohio	91	55	20	11	2	3	5
Detroit, Mich.	132	76	24	24	6	2	8
Evansville, Ind.	45	32	9	3	-	1	1
Fort Wayne, Ind.	44	33	8	3	-	-	2
Gary, Ind.	U	U	U	U	U	U	U
Grand Rapids, Mich.	53	41	3	5	2	2	3
Indianapolis, Ind.	164	100	28	24	8	4	9
Madison, Wis.	50	36	8	4	1	1	4
Milwaukee, Wis.	102	68	22	5	1	6	8
Peoria, Ill.	33	29	1	1	-	2	1
Rockford, Ill.	43	33	4	2	2	2	5
South Bend, Ind.	38	28	7	1	2	-	4
Toledo, Ohio	93	68	14	6	2	3	6
Youngstown, Ohio	U	U	U	U	U	U	U
W.N. CENTRAL	545	362	88	40	25	15	13
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	21	14	4	-	2	1	1
Kansas City, Kans.	33	17	6	5	4	1	1
Kansas City, Mo.	98	63	10	6	3	1	2
Lincoln, Nebr.	46	36	6	2	1	1	1
Minneapolis, Minn.	137	88	29	13	6	1	5
Omaha, Nebr.	U	U	U	U	U	U	U
St. Louis, Mo.	88	63	13	2	2	8	-
St. Paul, Minn.	36	28	6	-	2	-	3
Wichita, Kans.	86	53	14	12	5	2	-

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
S. ATLANTIC	951	586	200	120	31	13	54
Atlanta, Ga.	116	53	31	23	7	2	3
Baltimore, Md.	126	73	23	23	6	1	12
Charlotte, N.C.	83	51	20	9	1	2	9
Jacksonville, Fla.	84	52	19	10	3	-	1
Miami, Fla.	98	63	20	10	4	1	-
Norfolk, Va.	48	32	10	4	1	1	5
Richmond, Va.	U	U	U	U	U	U	U
Savannah, Ga.	56	43	7	3	1	1	4
St. Petersburg, Fla.	38	32	1	3	2	-	1
Tampa, Fla.	124	91	23	5	2	3	14
Washington, D.C.	153	81	42	24	4	2	2
Wilmington, Del.	25	15	4	6	-	-	3
E.S. CENTRAL	615	405	133	45	17	14	27
Birmingham, Ala.	83	49	17	10	3	4	4
Chattanooga, Tenn.	58	45	7	4	1	1	6
Knoxville, Tenn.	50	37	10	3	-	-	-
Lexington, Ky.	57	38	11	4	-	3	5
Memphis, Tenn.	166	108	41	11	5	1	7
Mobile, Ala.	52	30	16	2	3	1	1
Montgomery, Ala.	56	40	7	5	3	1	2
Nashville, Tenn.	93	58	24	6	2	3	2
W.S. CENTRAL	1,105	713	213	105	45	29	71
Austin, Tex.	59	37	11	7	4	-	5
Baton Rouge, La.	37	29	7	1	-	-	-
Corpus Christi, Tex.	22	15	7	-	-	-	1
Dallas, Tex.	143	82	32	19	7	3	3
El Paso, Tex.	64	44	9	5	1	5	7
Ft. Worth, Tex.	84	64	13	3	3	1	7
Houston, Tex.	267	169	57	26	9	6	29
Little Rock, Ark.	43	29	7	2	2	3	3
New Orleans, La.	98	47	22	15	10	4	-
San Antonio, Tex.	168	114	28	20	3	3	7
Shreveport, La.	35	24	3	3	3	2	4
Tulsa, Okla.	85	59	17	4	3	2	5
MOUNTAIN	699	452	142	66	23	16	40
Albuquerque, N.M.	83	60	13	7	3	-	3
Colo. Springs, Colo.	50	33	8	5	3	1	2
Denver, Colo.	83	50	21	9	1	2	14
Las Vegas, Nev.	115	75	24	9	5	2	3
Ogden, Utah	27	22	2	1	2	-	4
Phoenix, Ariz.	126	59	32	18	8	9	3
Pueblo, Colo.	22	13	7	2	-	-	1
Salt Lake City, Utah	76	50	17	7	-	2	1
Tucson, Ariz.	117	90	18	8	1	-	9
PACIFIC	1,591	1,098	276	137	43	37	107
Berkeley, Calif.	17	12	4	1	-	-	2
Fresno, Calif.	63	45	8	6	2	2	3
Glendale, Calif.	14	7	2	2	2	1	1
Honolulu, Hawaii	79	63	9	6	1	-	9
Long Beach, Calif.	71	46	13	10	1	1	10
Los Angeles, Calif.	424	296	73	35	11	9	13
Pasadena, Calif.	24	19	2	1	1	1	2
Portland, Oreg.	104	72	15	9	4	4	5
Sacramento, Calif.	145	83	31	18	6	7	14
San Diego, Calif.	127	87	25	11	4	-	13
San Francisco, Calif.	117	79	28	10	-	-	14
San Jose, Calif.	130	96	21	6	2	5	10
Santa Cruz, Calif.	33	28	3	2	-	-	2
Seattle, Wash.	114	75	16	12	6	5	-
Spokane, Wash.	48	33	13	1	-	1	4
Tacoma, Wash.	81	57	13	7	3	1	5
TOTAL	9,895¶	6,508	1,908	935	303	222	541

U: Unavailable -: no reported cases

*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.

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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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