CENTERS FOR DISEASE CONTROL

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MORBIDITY AND MORTALITY WEEKLY REPORT

Current Trends

Chickenpox—United States, 1979

In 1979, 199,081 chickenpox cases were reported to CDC. This represents a 29.2% increase over the 1978 total of 154,089 cases. As of the first 48 weeks of 1980, the number of reported cases (169,118) was 7.7% below that reported for the same period in 1979.

In 1979, states began to submit available age data on chickenpox cases to CDC. Eleven reporting areas provided complete age data for 36,334 cases (Table 1). Sixty-five percent of reported cases occurred in children 5-9 years of age, with 75.3% occurring in children <10 years and 94.5% occurring in children <15 years of age. Children <1 year and adults ≥20 years each accounted for less than 2% of cases. The highest reported estimated incidence rate was in 5- to 9-year-olds. The rates in children <10 and <15 years of age were 465 and 370 cases, respectively, per 100,000 population. The reported rate in individuals ≥15 years of age was only 1 case per 100,000 population.

TABLE 1. Age distribution and incidence rate of chickenpox cases, United States, 1979

Age (years)	Number (Percent) of reported cases*	Estimated reported incidence rate†
<5	3,720 (10.2)	132.2
5-9	23,662 (65.1)	767.2
10-14	6,969 (19.2)	205.8
15-19	1,318 (3.6)	34.1
≥20	665 (1.8)	2.4
Total with known age	36,334 (99.9)	—
Total	199,081 —	91.3

*Excludes data from Connecticut, which reports only cases in those ≥18 years.
†Cases per 100,000 population, calculated by applying the age distribution of those cases of known age to the total reported U.S. cases.

Reported by Perinatal Virology Br, Virology Div, Bur of Laboratories, Immunization Div, Bur of State Services, and Viral Diseases Div, Bur of Epidemiology, CDC.

Editorial note: The age distribution of chickenpox cases reported in 1979 is consistent with previously published data (*1-4*). Since varicella is a very contagious disease with high attack rates resulting in infection of almost every individual by young adulthood (*5*), the annual reported number of cases represents approximately 6%-7% of all the cases that occurred (based on approximately 3 million births a year).

Chickenpox — Continued

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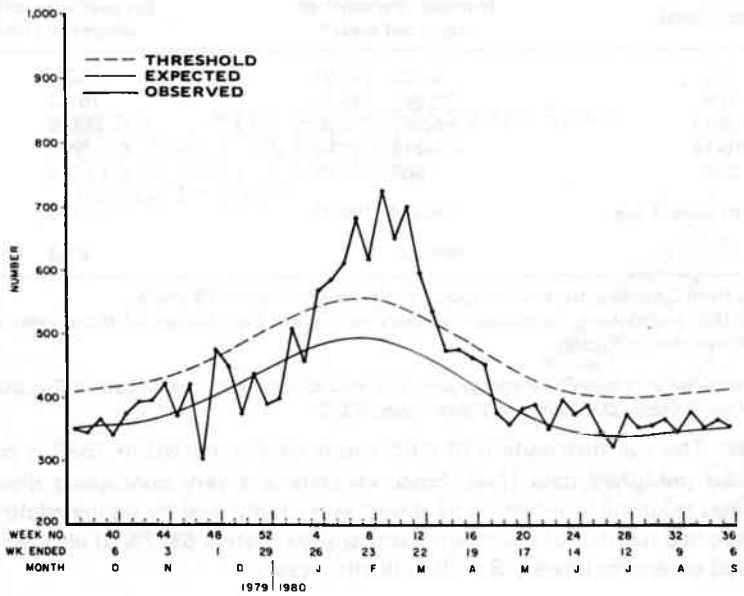
Influenza Mortality Surveillance — United States

During most epidemics of influenza A in the United States, the number of deaths from pneumonia and influenza (P&I) exceeds expected values for several weeks (*1-3*). To obtain a measure of the impact of influenza activity, CDC regularly obtains and analyzes reports of deaths attributed to P&I.

Each week 121 cities in the United States relay mortality data by postcard to CDC's Consolidated Surveillance and Communications Activity. The number of deaths occurring in these cities is reported separately for all causes, for influenza and for pneumonia. A death is attributed to pneumonia if "pneumonia" appears on Part 1(A) of the death certificate as an immediate cause of death or on the lowest line on Part 1 as an underlying cause of death. A death is attributed to influenza if the word "influenza" appears anywhere in Part 1 or Part 2 of the certificate; if other causes of death are also named, influenza takes precedence. The number of deaths in each age group is collected by the date reported to the city, not by the date of occurrence.

FIGURE 1. Observed and expected number of deaths attributed to pneumonia and influenza in 117 U.S. cities, as determined by the regression method (*4*), 1979-80



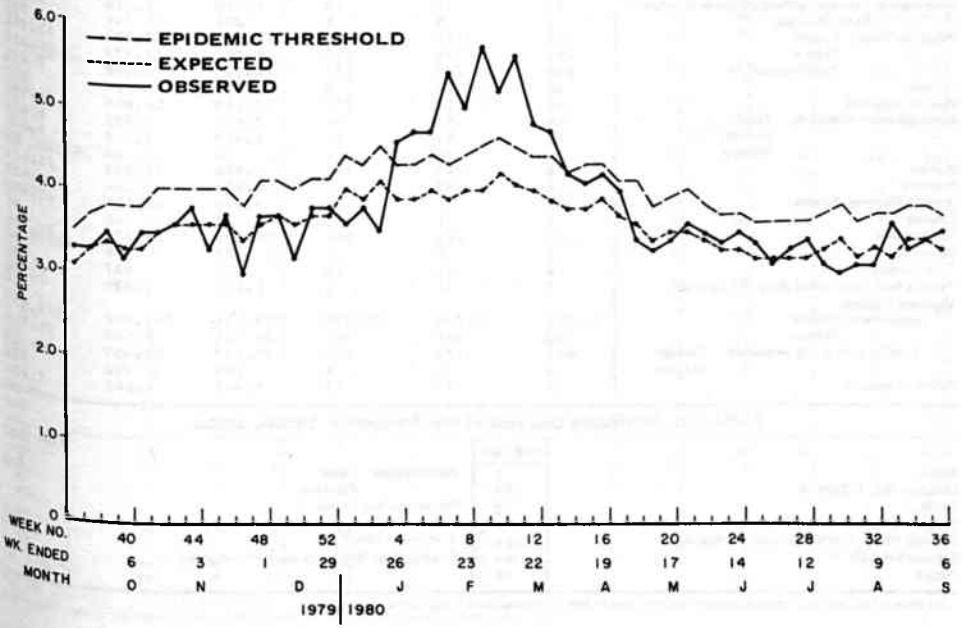
Influenza – Continued

Each year, before the influenza season begins, equations are generated to describe the expected number of P&I deaths—in the absence of influenza epidemics—to monitor mortality attributed to influenza activity. Large increases beyond the expected number of deaths are usually associated with influenza A epidemics. This surveillance method is based on data from 121 urban centers, most of whose populations exceed 100,000 and whose total populations constitute approximately 26% of the U.S. population. These numbers represent only an index of the national mortality attributable to P&I but provide a readily available indicator of any increases associated with influenza.

In past years, CDC has used a regression model to estimate the number of P&I deaths expected to occur in the absence of influenza activity (*4*). This model reflected the epidemic associated with influenza B last year (Figure 1). However, beginning with this influenza season, the expected number will be determined by a new method that utilizes the ratio of P&I deaths to deaths from all causes in the 121 cities—a P&I ratio—in a time series model of forecasting (*5*). This new system has been under evaluation at CDC for 2 years and has proven to be more accurate and more specific than the traditional method, eliminating such problems as variations in reporting due to national holidays. The use of the new method similarly identified last year's influenza epidemic (Figure 2). Detailed discussion of the new method will be published this spring (*6-7*).

CDC's influenza surveillance activities also include systems to monitor morbidity, an especially critical parameter during epidemics associated with influenza viruses that usually have no significant associated mortality. Finally, virus isolation results are collected from state, county, city, and military laboratories that participate in a weekly reporting

FIGURE 2. Observed and expected percentage of deaths attributed to pneumonia and influenza in 121 U.S. cities, as determined by the time series method (*5-7*), 1979-80



Influenza — Continued

system coordinated by the World Health Organization Collaborating Center for Influenza, CDC. These data identify the types of influenza viruses circulating in the country.

Reported by Consolidated Surveillance and Communications Activity, Bur of Epidemiology, Virology Div, Bur of Laboratories, Immunization Div, Bur of State Services, CDC.

References

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TABLE I. Summary — cases of specified notifiable diseases, United States

[Cumulative totals include revised and delayed reports through previous weeks.]

DISEASE	48th WEEK ENDING		MEDIAN 1975-1979	CUMULATIVE, FIRST 48 WEEKS		MEDIAN 1975-1979
	November 29, 1980	December 1, 1979		November 29, 1980	December 1, 1979	
Aseptic meningitis	112	182	91	6,826	7,858	4,371
Brucellosis	–	11	4	164	167	210
Chickenpox	2,271	2,622	2,498	169,118	183,264	166,804
Diphtheria	–	–	–	4	59	80
Encephalitis: Primary (arthropod-borne & unspec.)	17	20	20	1,046	1,016	1,113
Post-infectious	1	9	5	201	231	231
Hepatitis, Viral: Type B	321	325	307	16,687	13,602	13,746
Type A	457	598	598	25,962	27,373	28,215
Type unspecified	239	209	171	10,983	9,600	7,879
Malaria	50	27	8	1,786	724	498
Measles (rubeola)	49	112	237	13,260	13,004	25,859
Meningococcal infections: Total	46	57	44	2,431	2,385	1,639
Civilian	46	57	44	2,419	2,365	1,628
Military	–	–	–	12	20	20
Mumps	78	243	333	7,986	12,833	19,415
Pertussis	28	37	34	1,530	1,264	1,473
Rubella (German measles)	33	91	97	3,579	11,304	15,770
Tetanus	2	1	2	67	66	75
Tuberculosis	422	614	596	25,203	25,271	27,700
Tularemia	3	2	2	202	178	128
Typhoid fever	12	14	10	471	487	380
Typhus fever, tick-borne (Rky. Mt. spotted)	3	11	6	1,117	1,029	1,029
Venereal diseases:						
Gonorrhea: Civilian	15,751	19,839	19,839	929,161	923,022	923,923
Military	240	461	461	24,521	25,510	25,510
Syphilis, primary & secondary: Civilian	491	573	464	25,132	23,034	22,139
Military	6	5	8	287	292	292
Rabies in animals	80	73	53	5,848	4,662	2,850

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1980		CUM. 1980
Antrax	1	Poliomyelitis: Total	8
Botulism N.J. 1, Calif. 2	63	Paralytic	6
Cholera	8	Psittacosis Md. 1, Ala. 1	99
Congenital rubella syndrome	46	Rabies in man	–
Leprosy Maine 1, Idaho 1, Calif. 1, Hawaii 4	204	Trichinosis Md. 1	106
Leptospirosis Ga. 1	69	Typhus fever, flea-borne (endemic, murine)	71
Plague	18		

All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending November 29, 1980, and December 1, 1979 (48th week)

REPORTING AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKEN-POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
						Primary		Post-infectious	B	A	Unspecified		
	1980	1980	1980	1980	CUM. 1980	1980	1979	1980	1980	1980	1980	1980	CUM. 1980
UNITED STATES	112	-	2,271	-	4	17	20	1	321	457	239	50	1,786
NEW ENGLAND	14	-	361	-	-	-	1	-	19	12	15	1	108
Maine	-	-	124	-	-	-	-	-	1	2	-	1	17
N.H.	-	-	37	-	-	-	-	-	-	-	-	-	7
Vt.	-	-	48	-	-	-	1	-	1	-	-	-	1
Mass.	3	-	45	-	-	-	-	-	2	3	13	-	56
R.I.	-	-	43	-	-	-	-	-	4	3	-	-	9
Conn.	11	-	64	-	-	-	-	-	11	4	2	-	18
MID. ATLANTIC	12	-	180	-	1	2	1	-	43	43	24	6	236
Upstate N.Y.	10	-	154	-	-	1	-	-	10	12	8	1	41
N.Y. City	-	-	26	-	1	1	-	-	15	9	3	1	64
N.J.	2	-	NN	-	-	-	-	-	11	17	13	4	61
Pa.	-	-	-	-	-	-	1	-	7	5	-	-	70
E.N. CENTRAL	11	-	818	-	1	2	4	1	44	69	11	1	107
Ohio	8	-	49	-	-	1	3	-	5	8	2	1	19
Ind.	-	-	61	-	-	-	-	-	8	14	3	-	12
Ill.	-	-	249	-	-	-	-	-	9	27	3	-	41
Mich.	3	-	213	-	1	-	1	-	17	18	3	-	23
Wis.	-	-	246	-	-	1	-	1	5	2	-	-	12
W.N. CENTRAL	1	-	462	-	1	1	4	-	8	10	5	1	71
Minn.	-	-	-	-	-	-	-	-	1	4	1	1	27
Iowa	-	-	226	-	-	1	4	-	-	-	1	-	7
Mo.	1	-	-	-	1	-	-	-	3	4	3	-	13
N. Dak.	-	-	11	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	40	-	-	-	-	-	-	1	-	-	4
Nebr.	-	-	9	-	-	-	-	-	2	1	-	-	7
Kans.	-	-	176	-	-	-	-	-	2	-	-	-	13
S. ATLANTIC	24	-	146	-	-	6	2	-	53	40	32	4	188
Del.	-	-	3	-	-	-	-	-	-	2	-	-	-
Md.	6	-	17	-	-	1	-	-	12	2	10	-	32
D.C.	-	-	-	-	-	-	-	-	-	-	-	-	4
Va.	2	-	15	-	-	1	-	-	6	4	6	2	63
W. Va.	-	-	42	-	-	-	-	-	1	2	1	-	4
N.C.	11	-	NN	-	-	4	2	-	13	10	3	-	17
S.C.	-	-	2	-	-	-	-	-	5	-	1	-	10
Ga.	-	-	-	-	-	-	-	-	NA	NA	NA	-	19
Fla.	5	-	67	-	-	-	-	-	16	20	11	2	39
E.S. CENTRAL	3	-	40	-	-	2	1	-	29	19	11	-	13
Ky.	-	-	33	-	-	-	-	-	8	8	5	-	3
Tenn.	-	-	NN	-	-	2	1	-	11	3	2	-	-
Ala.	3	-	2	-	-	-	-	-	6	3	4	-	8
Miss.	-	-	5	-	-	-	-	-	4	5	-	-	2
W.S. CENTRAL	18	-	97	-	-	2	1	-	31	69	82	20	167
Ark.	-	-	-	-	-	-	-	-	1	-	4	-	9
La.	-	-	NN	-	-	-	-	-	5	5	4	5	47
Okla.	-	-	-	-	-	-	-	-	5	1	2	-	12
Tex.	18	-	97	-	-	2	1	-	20	63	72	15	99
MOUNTAIN	11	-	99	-	-	-	1	-	14	67	19	-	89
Mont.	-	-	62	-	-	-	1	-	-	2	1	-	1
Idaho	-	-	-	-	-	-	-	-	1	7	-	-	1
Wyo.	-	-	-	-	-	-	-	-	-	-	-	-	2
Colo.	1	-	32	-	-	-	-	-	5	14	3	-	36
N. Mex.	-	-	-	-	-	-	-	-	-	7	1	-	6
Ariz.	2	-	NN	-	-	-	-	-	4	17	7	-	18
Utah	5	-	5	-	-	-	-	-	-	1	-	-	15
Nev.	3	-	-	-	-	-	-	-	4	19	7	-	10
PACIFIC	18	-	68	-	1	2	5	-	80	128	40	17	807
Wash.	4	-	50	-	1	2	-	-	1	3	1	-	52
Oreg.	1	-	1	-	-	-	-	-	7	11	3	-	45
Calif.	13	-	-	-	-	-	4	-	67	114	34	16	686
Alaska	-	-	12	-	-	-	-	-	2	-	1	-	6
Hawaii	-	-	5	-	-	-	1	-	3	-	1	1	18
Guam	NA	NA	NA	NA	-	NA	-	-	-	NA	NA	NA	3
P.R.	1	-	15	-	-	-	-	-	2	5	7	-	3
V.I.	NA	NA	NA	NA	-	NA	-	-	-	NA	NA	NA	-
Pac. Trust Terr.	NA	NA	NA	NA	-	NA	-	-	-	NA	NA	NA	2

NN: Not notifiable. NA: Not available.
All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending November 29, 1980, and December 1, 1979 (48th week)

REPORTING AREA	MEASLES (RUBEOLA)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1980	CUM. 1980	CUM. 1979	1980	CUM. 1980	CUM. 1979	1980	CUM. 1980	1980	1980	CUM. 1980	CUM. 1980
UNITED STATES	49	13,260	13,004	46	2,431	2,385	78	7,986	28	33	3,579	67
NEW ENGLAND	–	675	291	5	140	141	1	595	–	8	219	3
Maine	–	33	18	–	6	9	–	300	–	1	70	1
N.H.	–	331	33	–	8	13	–	22	–	2	39	–
Vt.	–	226	119	1	15	8	–	12	–	–	3	–
Mass.	–	58	15	1	49	56	–	129	–	5	77	–
R.I.	–	2	102	2	12	9	1	32	–	–	9	1
Conn.	–	25	4	1	50	46	–	100	–	–	21	1
MID. ATLANTIC	22	3,863	1,585	5	426	376	7	897	9	3	574	8
Upstate N.Y.	3	716	666	2	127	127	3	148	5	2	220	3
N.Y. City	1	1,199	814	1	104	84	4	101	4	–	101	2
N.J.	–	849	58	2	91	97	–	122	–	–	101	–
Pa.	18	1,099	47	–	104	68	–	526	–	1	152	3
E.N. CENTRAL	–	2,448	3,404	4	283	274	41	3,015	2	7	852	6
Ohio	–	380	294	1	94	108	12	1,195	–	–	8	2
Ind.	–	93	225	–	43	48	2	143	–	3	362	–
Ill.	–	347	1,516	1	58	25	5	397	–	1	173	1
Mich.	–	250	846	1	71	74	21	925	1	–	129	1
Wis.	–	1,378	523	1	17	19	1	355	1	3	180	2
W.N. CENTRAL	–	1,321	1,826	1	105	77	4	311	–	2	204	4
Minn.	–	1,105	1,218	1	35	17	–	20	–	–	28	1
Iowa	–	–	16	–	13	14	1	55	–	–	9	1
Mo.	–	65	421	–	38	34	–	101	–	–	42	1
N. Dak.	–	1	21	–	2	1	–	4	–	–	5	–
S. Dak.	–	–	2	–	6	4	–	4	–	–	2	–
Nebr.	–	83	73	–	–	–	–	9	–	–	1	–
Kans.	–	67	75	–	11	7	3	118	–	2	117	1
S. ATLANTIC	12	1,981	2,102	11	568	584	4	1,075	3	1	354	12
Del.	–	3	1	–	2	5	–	40	–	–	1	–
Md.	–	83	16	1	52	57	–	343	–	–	71	1
D.C.	–	5	–	–	2	–	–	4	–	–	1	–
Va.	–	339	279	–	58	81	–	74	1	1	57	3
W. Va.	2	19	62	1	21	13	–	122	1	–	27	1
N.C.	–	130	114	1	98	90	2	99	–	–	47	1
S.C.	–	159	182	–	64	64	–	210	–	–	55	3
Ga.	9	835	564	3	108	85	–	11	1	–	–	1
Fla.	1	408	884	5	163	189	2	172	–	–	95	2
E.S. CENTRAL	–	335	236	5	203	167	1	881	3	–	87	6
Ky.	–	57	39	2	63	35	–	756	2	–	43	2
Tenn.	–	172	71	–	54	48	1	32	1	–	39	2
Ala.	–	22	102	3	55	39	–	30	–	–	3	2
Miss.	–	84	24	–	31	45	–	63	–	–	2	–
W.S. CENTRAL	2	986	939	4	259	340	7	295	4	5	151	18
Ark.	–	16	7	–	19	27	–	22	–	–	4	2
La.	1	13	257	2	95	121	–	68	–	–	13	5
Okla.	–	776	22	–	23	37	–	–	3	–	6	1
Tex.	1	181	653	2	122	155	7	205	1	5	128	10
MOUNTAIN	1	504	329	2	103	96	3	223	3	1	161	–
Mont.	–	2	56	–	3	14	–	60	–	–	45	–
Idaho	–	–	18	–	6	10	–	16	–	–	22	–
Wyo.	–	–	36	1	6	1	–	–	–	–	1	–
Colo.	–	24	70	–	25	8	1	63	1	–	12	–
N. Mex.	–	14	38	1	11	5	–	–	–	–	5	–
Ariz.	1	407	80	–	18	36	–	46	–	–	41	–
Utah	–	47	19	–	5	9	2	29	2	1	29	–
Nev.	–	10	12	–	29	13	–	9	–	–	6	–
PACIFIC	12	1,147	2,292	9	344	330	10	694	4	6	977	10
Wash.	–	177	1,152	3	64	61	1	143	1	–	89	–
Oreg.	–	1	66	–	54	26	1	89	–	–	65	–
Calif.	12	957	989	5	215	227	8	429	3	6	806	10
Alaska	–	6	17	1	11	6	–	13	–	–	12	–
Hawaii	–	6	68	–	–	10	–	20	–	–	5	–
Guam	NA	6	12	–	1	1	NA	10	NA	NA	2	–
P.R.	7	168	376	–	11	7	2	152	–	2	28	12
V.I.	NA	6	5	–	1	3	NA	2	NA	NA	–	–
Pac. Trust Terr.	NA	10	10	–	–	1	NA	21	NA	NA	1	–

NA: Not available.
All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending November 29, 1980, and December 1, 1979 (48th week)

REPORTING AREA	TUBERCULOSIS		TULAREMIA	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSF)		VENEREAL DISEASES (Civilian)						RABIES (in Animals)
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1980	CUM. 1980	CUM. 1980	1980	CUM. 1980	1980	CUM. 1980	1980	CUM. 1980	CUM. 1979	1980	CUM. 1980	CUM. 1979	CUM. 1980
UNITED STATES	422	25,203	202	12	471	3	1,117	15,751	929,161	923,022	491	25,132	23,034	5,848
NEW ENGLAND	20	703	6	1	13	–	14	288	23,448	22,673	6	481	453	57
Maine	–	50	–	–	1	–	–	5	1,329	1,588	–	6	10	25
N.H.	2	17	–	–	–	–	–	13	827	845	–	6	19	7
Vt.	–	24	–	–	–	–	–	5	522	595	–	6	2	–
Mass.	16	393	4	1	8	–	7	104	9,874	8,890	6	293	261	14
R.I.	1	67	1	–	1	–	2	41	1,517	1,853	–	31	19	1
Conn.	1	152	1	–	3	–	5	120	9,379	8,902	–	139	142	10
MID. ATLANTIC	40	4,044	3	4	89	–	48	1,914	105,438	101,414	71	3,453	3,502	70
Upstate N.Y.	10	778	1	1	16	–	14	242	18,936	17,760	11	294	258	38
N.Y. City	20	1,457	1	1	39	–	3	950	42,137	40,029	47	2,245	2,381	–
N.J.	9	896	1	2	21	–	19	216	18,998	17,701	7	408	455	13
Pa.	1	913	–	–	13	–	12	506	25,367	25,924	6	506	408	19
E.N. CENTRAL	48	3,595	1	1	50	1	32	1,140	143,151	144,823	8	2,548	2,855	879
Ohio	8	659	–	–	14	1	19	121	37,410	39,763	–	344	564	53
Ind.	11	402	–	–	–	–	2	129	15,302	12,256	1	182	192	70
Ill.	27	1,253	–	–	18	–	6	–	44,647	45,910	–	1,560	1,615	481
Mich.	–	1,062	1	–	11	–	3	670	32,538	33,826	6	370	409	15
Wis.	2	219	–	1	7	–	2	220	13,254	13,068	1	92	75	260
W.N. CENTRAL	19	932	29	–	28	–	54	1,057	45,016	45,771	15	345	292	1,920
Minn.	6	189	1	–	3	–	–	70	7,330	7,543	4	111	82	237
Iowa	1	87	1	–	2	–	3	99	4,690	5,452	8	31	30	442
Mo.	5	422	24	–	19	–	34	633	20,187	19,747	2	156	132	363
N. Dak.	–	48	–	–	1	–	–	17	629	801	–	4	2	225
S. Dak.	7	49	–	–	1	–	2	26	1,284	1,488	1	6	2	413
Nebr.	–	36	1	–	1	–	5	63	3,433	3,282	–	12	7	93
Kans.	–	101	2	–	1	–	10	149	7,463	7,458	–	25	37	147
S. ATLANTIC	76	5,518	12	–	44	1	695	4,159	233,157	223,093	117	6,044	5,465	473
Del.	1	69	–	–	1	–	2	14	3,277	3,643	–	19	27	1
Md.	9	670	3	–	3	–	74	510	24,998	27,544	5	412	351	32
D.C.	–	342	–	–	4	–	–	192	15,994	14,790	5	447	429	–
Va.	–	568	1	–	8	–	93	607	21,528	21,385	7	539	447	26
W. Va.	–	197	–	–	5	–	5	19	3,159	3,007	–	16	50	26
N.C.	21	990	3	–	5	1	316	685	35,683	32,503	8	445	406	20
S.C.	5	472	–	–	3	–	141	199	21,614	20,884	8	357	289	60
Ga.	26	769	5	–	–	–	57	665	45,524	41,851	29	1,718	1,502	237
Fla.	14	1,441	–	–	15	–	7	1,268	61,380	57,486	55	2,091	1,964	71
E.S. CENTRAL	41	2,348	10	–	12	–	113	917	75,576	78,057	62	2,077	1,513	329
Ky.	8	527	–	–	3	–	19	156	10,960	10,566	3	123	151	140
Tenn.	16	767	7	–	1	–	61	551	27,460	28,364	15	870	630	137
Ala.	4	607	1	–	3	–	17	NA	22,544	22,703	1	444	273	52
Miss.	13	447	2	–	5	–	16	210	14,612	16,424	43	640	459	–
W.S. CENTRAL	62	2,848	91	2	75	1	139	1,806	116,964	118,702	70	5,028	4,187	1,319
Ark.	3	305	59	–	8	–	35	144	9,490	9,378	–	203	150	171
La.	35	540	–	–	2	–	3	237	20,808	21,236	1	1,250	1,069	16
Okla.	3	306	21	–	6	–	72	207	11,715	11,785	–	101	81	232
Tex.	21	1,697	11	2	59	1	29	1,218	74,951	76,303	69	3,474	2,887	900
MOUNTAIN	26	720	34	–	26	–	17	592	35,519	37,176	32	633	486	241
Mont.	–	32	9	–	1	–	3	11	1,296	1,845	–	5	9	57
Idaho	–	25	1	–	1	–	2	25	1,558	1,638	–	27	26	2
Wyo.	–	22	4	–	–	–	2	12	1,022	1,057	–	12	8	17
Colo.	8	128	8	–	7	–	5	219	9,717	9,982	3	166	100	54
N. Mex.	1	127	2	–	3	–	4	63	4,340	4,597	6	112	90	45
Ariz.	12	309	1	–	7	–	–	142	9,397	10,255	19	209	147	56
Utah	5	49	6	–	7	–	1	30	1,800	1,902	3	18	5	9
Nev.	–	28	3	–	–	–	–	90	6,389	5,900	1	84	101	1
PACIFIC	90	4,495	16	4	134	–	5	3,878	150,892	151,313	110	4,523	4,281	560
Wash.	13	389	–	–	3	–	–	NA	12,415	13,489	NA	189	206	–
Oreg.	3	169	4	–	9	–	1	171	10,364	9,599	1	104	158	4
Calif.	73	3,786	11	4	120	–	4	3,598	121,425	120,615	107	4,082	3,805	509
Alaska	–	60	1	–	–	–	–	57	3,693	4,658	–	8	25	47
Hawaii	1	91	–	–	2	–	–	52	2,995	2,952	2	140	87	–
Guam	NA	54	–	NA	1	NA	–	NA	99	139	NA	5	–	–
P.R.	–	271	–	–	8	–	–	84	2,553	2,039	17	571	537	52
V.I.	NA	–	–	NA	–	NA	–	NA	108	147	NA	10	9	–
Pac. Trust Terr.	NA	35	–	NA	–	NA	–	NA	379	450	NA	–	1	–

NA: Not available.
All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE IV. Deaths in 121 U.S. cities,* week ending November 29, 1980 (48th week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P&I** TOTAL
	ALL AGES	>65	45-64	25-44	<1	
NEW ENGLAND	655	424	159	27	26	59
Boston, Mass.	198	116	50	7	15	26
Bridgeport, Conn.	43	25	12	3	2	4
Cambridge, Mass.	34	29	4	1	–	1
Fall River, Mass.	30	24	5	–	1	–
Hartford, Conn.	53	30	12	5	1	2
Lowell, Mass.	14	10	3	1	–	–
Lynn, Mass.	10	6	3	1	–	1
New Bedford, Mass.	24	16	8	–	–	4
New Haven, Conn.	54	27	24	1	1	2
Providence, R.I.	56	41	11	1	2	7
Somerville, Mass.	5	4	–	1	–	1
Springfield, Mass.	53	38	9	2	3	2
Waterbury, Conn.	17	12	4	1	–	1
Worcester, Mass.	64	46	14	3	1	8
MID. ATLANTIC	2,509	1,644	575	159	64	99
Albany, N.Y.	65	42	8	7	2	–
Allentown, Pa.	20	15	5	–	–	2
Buffalo, N.Y.	110	68	31	7	1	6
Camden, N.J.	34	23	7	3	1	1
Elizabeth, N.J.	15	13	2	–	–	–
Erie, Pa.†	26	17	4	4	1	1
Jersey City, N.J.	56	31	15	6	3	2
Newark, N.J.	29	15	9	1	2	2
N.Y. City, N.Y.	1,349	873	321	90	25	43
Paterson, N.J.	19	13	1	1	4	–
Philadelphia, Pa.†	342	212	82	21	18	16
Pittsburgh, Pa.†	64	37	22	3	2	2
Reading, Pa.	26	22	2	1	–	8
Rochester, N.Y.	115	88	16	6	1	8
Schenectady, N.Y.	43	34	7	2	–	–
Scranton, Pa.†	26	17	7	1	1	1
Syracuse, N.Y.	92	62	22	5	2	5
Trenton, N.J.	35	28	5	1	1	–
Utica, N.Y.	17	13	4	–	–	1
Yonkers, N.Y.	26	21	5	–	–	1
E.N. CENTRAL	1,830	1,153	458	105	59	54
Akron, Ohio	57	30	19	4	2	–
Canton, Ohio	48	31	13	1	1	1
Chicago, Ill.	471	283	118	37	14	10
Cincinnati, Ohio	84	54	23	3	3	6
Cleveland, Ohio	142	82	48	5	5	2
Columbus, Ohio	139	86	39	7	1	3
Dayton, Ohio	69	43	17	5	1	2
Detroit, Mich.	225	142	55	16	6	7
Evansville, Ind.	22	17	4	–	1	2
Fort Wayne, Ind.	24	19	3	1	1	1
Gary, Ind.	25	7	9	6	2	1
Grand Rapids, Mich.	43	36	2	2	3	4
Indianapolis, Ind.	119	76	25	8	7	1
Madison, Wis.	22	14	6	–	2	5
Milwaukee, Wis.	88	60	20	1	2	–
Peoria, Ill.	35	21	9	–	3	–
Rockford, Ill.	37	21	12	1	2	1
South Bend, Ind.	20	18	2	–	–	1
Toledo, Ohio	97	64	22	7	2	7
Youngstown, Ohio	63	49	12	1	1	–
W.N. CENTRAL	606	378	145	35	25	19
Des Moines, Iowa	29	22	5	–	–	–
Duluth, Minn.	35	22	10	1	1	6
Kansas City, Kans.	29	15	10	1	1	2
Kansas City, Mo.	114	72	27	8	5	4
Lincoln, Nebr.	13	5	5	1	–	–
Minneapolis, Minn.	75	51	18	1	5	2
Omaha, Nebr.	58	37	10	8	1	1
St. Louis, Mo.	128	77	33	8	5	2
St. Paul, Minn.	69	45	13	5	4	1
Wichita, Kans.	56	32	14	2	3	1

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P&I** TOTAL
	ALL AGES	>65	45-64	25-44	<1	
S. ATLANTIC	942	546	252	72	33	41
Atlanta, Ga.	144	78	33	13	12	5
Baltimore, Md.	112	72	27	7	3	3
Charlotte, N.C.	55	26	19	5	4	1
Jacksonville, Fla.	50	29	13	4	1	1
Miami, Fla.	62	37	14	7	–	1
Norfolk, Va.	66	32	23	3	3	6
Richmond, Va.	66	42	15	5	1	5
Savannah, Ga.	35	18	11	3	2	5
St. Petersburg, Fla.	75	58	13	2	1	8
Tampa, Fla.	44	27	14	2	1	2
Washington, D.C.	176	90	59	15	4	4
Wilmington, Del.	57	37	11	6	1	–
E.S. CENTRAL	506	292	146	33	18	22
Birmingham, Ala.	83	41	29	7	–	–
Chattanooga, Tenn.	43	27	13	2	–	1
Knoxville, Tenn.	39	27	12	–	–	2
Louisville, Ky.	47	23	16	2	5	5
Memphis, Tenn.	83	52	20	3	4	5
Mobile, Ala.	87	51	19	9	5	6
Montgomery, Ala.	35	23	7	3	2	1
Nashville, Tenn.	89	48	30	7	2	2
W.S. CENTRAL	798	457	204	55	38	22
Austin, Tex.	51	32	8	7	1	2
Baton Rouge, La.	40	26	7	1	3	5
Corpus Christi, Tex.	43	27	10	–	3	–
Dallas, Tex.	151	76	42	15	10	–
El Paso, Tex.	42	23	16	1	1	1
Fort Worth, Tex.	75	44	15	5	6	3
Houston, Tex.	119	62	30	13	4	–
Little Rock, Ark.	38	21	11	3	1	6
New Orleans, La.	70	44	21	3	–	–
San Antonio, Tex.	93	52	24	6	7	2
Shreveport, La.	23	14	7	1	–	–
Tulsa, Okla.	53	36	13	–	2	3
MOUNTAIN	598	376	128	49	18	31
Albuquerque, N.Mex.††	61	36	14	7	1	6
Colo. Springs, Colo.	31	17	10	2	1	3
Denver, Colo.	108	72	25	7	1	3
Las Vegas, Nev.	72	36	22	7	1	4
Ogden, Utah	24	18	4	–	–	3
Phoenix, Ariz.	156	103	22	16	8	3
Pueblo, Colo.	21	16	3	1	–	1
Salt Lake City, Utah	44	26	10	2	2	3
Tucson, Ariz.	81	52	18	7	4	5
PACIFIC	1,562	1,034	345	83	56	56
Berkeley, Calif.	11	3	4	3	1	–
Fresno, Calif.	76	58	8	4	2	5
Glendale, Calif.	21	17	2	2	–	2
Honolulu, Hawaii	47	29	12	4	–	2
Long Beach, Calif.	106	79	19	5	2	6
Los Angeles, Calif.	409	267	92	23	10	11
Oakland, Calif.	82	55	17	6	4	2
Pasadena, Calif.	24	17	5	1	–	–
Portland, Oreg.	116	70	33	7	4	1
Sacramento, Calif.	60	44	13	1	1	5
San Diego, Calif.	66	46	11	2	3	2
San Francisco, Calif.	159	114	34	7	2	2
San Jose, Calif.	144	88	37	5	6	12
Seattle, Wash.	146	78	37	10	19	2
Spokane, Wash.	66	46	16	2	2	4
Tacoma, Wash.	29	23	5	1	–	–
TOTAL	10,006	6,304	2,412	618	337	403

*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 4 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Data not available this week. Figures are estimates based on average percent of regional totals.

Epidemiologic Notes and Reports

Waterborne Illness -- South Carolina

A retrospective epidemiologic investigation of residents of a South Carolina trailer park, whose water supply showed coliform contamination in July 1980, revealed that an outbreak of gastroenteritis affecting an estimated 50% of the park's residents had occurred during the period when water samples were unsatisfactory.

On July 2, residents of a Richland County trailer park noted low water pressure in their water system and reported this to the South Carolina Department of Health and Environmental Control's Division of Water Supply. A water sample taken on July 30 in response to these complaints showed 21 total coliform/100 ml and 1 fecal coliform/100 ml. Other samples showed high coliform counts throughout the distribution system. Only 1 of the 3 wells was in operating condition, and the management of the trailer park had not responded to earlier requests to upgrade the water system. On July 31, the Water Supply Division issued a "boil water" notice to the residents of the trailer park and provided emergency chlorination of the water.

Although there had been no reports of illness in the residents of the park, the Divisions of Disease Control and Water Supply of the state health department began an investigation to measure the health effects of the contamination. On August 6, a survey of 18 of 104 trailers in the park found 30 persons with gastrointestinal complaints among 60 residents surveyed.

Based on these preliminary findings, a detailed questionnaire was distributed to all of the trailers. Non-respondents were delivered a second questionnaire. A nearby control community was surveyed with the same questionnaire. The trailer park had a 55% response rate; the controls, 47%.

A case was defined as any person with 1) diarrhea and 1 other systemic symptom, or 2) any 2 symptoms of nausea, vomiting, diarrhea, or abdominal cramps in the period May 1-August 7. The attack rate for the trailer park was 53.2%; for the controls, 15.6% ($p<.0005$).

The exact date of onset of illness was known for 47 trailer park residents (Figure 3). Twenty-eight cases (60%) occurred during the 37-day period when coliform contamination was found compared to 19 cases in the remaining 62 days of the survey period ($p<.005$). Water consumption was strongly associated with illness. Fifty-seven (98%) of 58 ill persons drank water, whereas 14 (83%) of 41 well persons did ($p<.008$, Fisher exact test). The amount of water consumed each day also varied significantly between ill and well persons (Table 2). No significant difference in water consumption between the

TABLE 2. Association of water consumption with gastrointestinal illness, South Carolina, 1980

	Average number of glasses/day*					
	0	≤1	2	3	4	Total
Ill persons	1	1	6	18	32	58
Well persons	7	8	6	3	17	41
	8	9	12	21	49	99

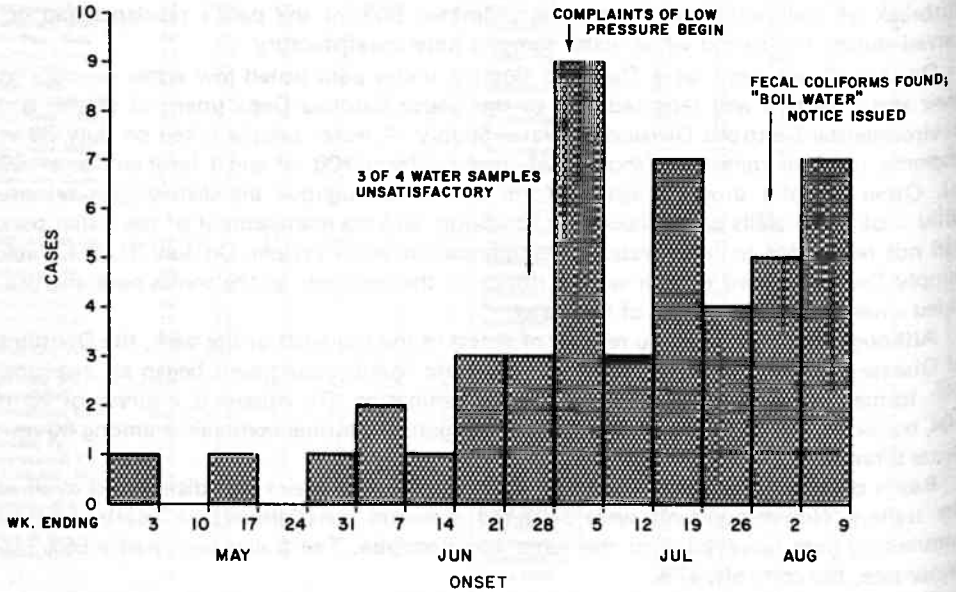
*$X^2=23.0$, $p<.0005$.

Waterborne Illness – Continued

trailer park and control community respondents was demonstrated.

Although no etiologic agent was demonstrated, epidemiologic data showed that a waterborne epidemic of acute gastroenteritis had occurred in July in association with high coliform counts in the water.

FIGURE 3. Waterborne illness, South Carolina, May 1-August 9, 1980



Reported by RL Parker, DVM, MPH, State Epidemiologist, RL Shaw, WC Rowell, South Carolina Dept of Health and Environmental Control; Field Services Div, Bacterial Diseases Div, Bur of Epidemiology, CDC.

Tuberculosis in a School Teacher – Pennsylvania

In January 1979, a 47-year-old school teacher from Philadelphia was diagnosed as having pulmonary tuberculosis. A case investigation revealed that the patient had been on prednisone, 15 mg, every day since 1967 for Crohn disease. She had had a negative multiple-puncture skin test for tuberculosis in May 1976. In mid-October 1978, she developed a persistent productive cough. She denied fever, chills, and weight loss. She was hospitalized in January 1979, at which time a chest film revealed bilateral upper-lobe infiltrates with consolidation. Her Mantoux skin test showed 21 mm of induration, and her sputum smears were positive for acid-fast bacilli.

From September 7 to November 7, 1978, she had worked as an assistant teacher at a junior high school, where she taught 5 separate 1-hour classes. From November 8 until the time of her hospitalization, she worked in an elementary school, where she was in charge of a prekindergarten class of 24 children under 5 years of age for 4-5 hours per day.

After the patient was diagnosed, tuberculin skin tests were given to the school children

Tuberculosis — Continued

(Table 3). Six of the 24 children in the prekindergarten class had positive (≥10 mm) Mantoux skin tests. Two of these 6 children had abnormal chest X rays and were placed on 2 antituberculosis drugs. The other 4 children were placed on izoniazid (INH) preventive therapy. There were 9 positive reactors among the remaining children in the elementary school and in the 5 classes at the junior high school. After an appropriate evaluation, these 9 children were placed on INH preventive therapy. No new infections were found among school employees, and no additional infections were found among students in the teacher's classes, when they were retested after 3 months.

TABLE 3. Results of Mantoux skin tests on school children exposed to a sputum-positive case of pulmonary tuberculosis, Philadelphia, 1979

	Number positive	Number tested	Percent positive
Prekindergarten class	6	24	25.0
Rest of elementary school	5	421	1.2
Five classes, junior high school	4	150	2.7

Reported by J Gallagher, RG Sharrar, MD, P Theodos, MD, Community Health Services, Philadelphia Dept of Public Health; H Hazan, M Christiansen, RN, B Grace, RN, School Health Services, School District of Philadelphia; RD Gens, MD, EJ Witte, VMD, State Epidemiologist, Pennsylvania State Dept of Health; Tuberculosis Control Div, Bur of State Services, CDC.

Editorial Note: This teacher's illness appears to have resulted from a recently acquired infection. Tuberculous infection can occur at any age, and the disease, if it occurs, may be clinically indistinguishable from disease due to recrudescence of remote infection (*1*).

Periodic screening of school employees will not prevent all school outbreaks of tuberculosis because disease may develop between examinations and participation in screening often is not complete. The Philadelphia school system requires an employee examination every 2 years; this teacher had a negative skin test in May 1976, but apparently missed or was late for the test that was due in the spring of 1978.

Steroids may depress tuberculin reactivity and increase the risk of infectious diseases because of interference with monocyte-macrophage mobility and function. Lower dosage and alternate-day administration may minimize these effects (*2,3*). This patient demonstrates that it is possible to have a positive tuberculin reaction despite steroid therapy.

(Continued on page 588)

The Morbidity and Mortality Weekly Report, circulation 91,840, is published by the Centers for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly telegraphs 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 succeeding Friday.

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Tuberculosis — Continued

CDC and the American Thoracic Society recommend that persons who are infected with tuberculosis and are receiving steroids or other immunosuppressive therapy should be considered at increased risk of tuberculosis and offered INH preventive therapy (*4*).

Transmission of tuberculosis depends on the degree to which a diseased person generates infectious aerosols, the intensity and duration of exposure to the ill person, and the susceptibility of the host. Although most patients with tuberculosis are not highly contagious, an occasional patient may be. The period of maximum infectivity is likely to be just before diagnosis, when the patient's cough and other symptoms are usually most severe (*5,6*). The prekindergarten children were exposed to this teacher during the period just before her diagnosis and had considerably more hours of exposure than the junior high school students. Thus, it is not surprising that infection was more common in the prekindergarten school.

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Erratum, Vol. 29, No. 42

p513 In the article, *"Salmonella hadar* — England and Wales," in the first paragraph of the editorial note it is stated that the majority of England's strains of *S. hadar* are dulcitol positive; the sentence should state that most of the strains were dulcitol negative.

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