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MORBIDITY AND MORTALITY WEEKLY REPORT

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Epidemiologic Notes and Reports

Chromobacteriosis — Florida

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On July 20, 1980, a 49-year-old man was seen by a local physician because of right upper-quadrant pain, malaise, night sweats, and a 5- to 10-lb. weight loss. An interview with the patient revealed that though he was previously in good health and did not have a history of gallbladder disease, tuberculosis, or hepatitis, he had been involved in an accident 6 weeks previously in which he had nearly drowned.

On hospital admission, the patient had a temperature of 99.6 F (37.5 C); his blood pressure was 130/80mm Hg. The heart and lungs were normal. An admission chest X ray was normal. The abdomen was diffusely tender without rebound. The patient underwent an intravenous cholangiogram and had a barium enema; both were negative.

His temperature subsequently rose to 105.3 F (40.7 C), and he developed a fine, generalized maculopapular rash that affected all skin surfaces except his face, hands, and feet. A repeat abdominal examination showed generalized abdominal rigidity with rebound tenderness in the right upper quadrant. A complete blood count showed 3,300 white blood cells/mm³, with 46% neutrophils and 36% bands. A Gram stain of the skin lesions revealed gram-negative rods. He was started on chloramphenicol, ticarcillin, and gentamicin. Because of the likelihood of an intraabdominal abscess, an exploratory laparotomy was performed; it did not reveal any remarkable findings. All cultures of the skin and blood grew *Chromobacterium violaceum*. The patient subsequently developed bilateral pneumonia, but cultures of the sputum obtained after institution of antibiotics were negative. Within a few days of therapy, the patient improved gradually, but his liver function tests deteriorated. A liver scan revealed multiple abscesses. Antibiotic therapy was continued for 24 days. A repeat liver scan and chest X ray showed complete resolution of the multiple abscesses and the pneumonia, respectively. Upon discharge, however, the patient continued to take oral doxycycline for 2 more weeks.

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Editorial Note: Systemic infection caused by *C. violaceum*, an aerobic gram-negative bacillus, is extremely rare. Cases have been reported only from tropical and subtropical climates, particularly from Southeast Asia. One near-fatal and 2 fatal infections were reported in American soldiers serving in Vietnam (1). Nine cases have been reported from the United States, all from the Southeast, 7 in Florida alone (Table 1). In addition, 6 other isolates from blood specimens have been received at CDC. These also were submitted from hospitals located in southeastern states.

Chromobacteriosis - ContinuedTABLE 1. Reported cases of *Chromobacterium violaceum* infection, United States, 1938-1980

Year of onset	Age	Sex	State of exposure	Possible predisposing factors	Clinical features	Outcome	Reference
1938	6	M	Florida	Played in muddy water	Skin ulcers; sepsis	Died	2
1939	15	F	Florida	Unknown	Sepsis; lymphadenitis	Died	3
1941	21	M	Louisiana	Minor trauma to foot	Sepsis; pneumonia; liver abscess	Died	4
1968	6	M	Louisiana	Played in ditch	Pneumonia; liver abscess	Died	5
1968	25	M	Florida	Minor knee trauma at beach	Sepsis; multiple abscesses	Died	6
1971	9	F	Florida (South Carolina?)	Foot puncture	Liver/lung abscesses	Died	7
1974	17	F	Florida	Breast surgery	Sepsis; breast abscess	Survived	8
1974	15	M	Florida	Went bare-foot often	Sepsis; liver/lung abscesses	Died	9
1980	49	M	Florida	Near drowning (fresh water)	Sepsis; pneumonia; liver abscesses	Survived	Present case

C. violaceum has been isolated from soil and water samples in the southeastern United States. The organism is thought to enter patients primarily through minor trauma to the skin, although ingestion of untreated water has also been suggested. The subsequent clinical illness is severe and frequently fatal. The combination of sepsis and multiple liver abscesses in a patient residing in the Southeast should alert the physician to the possibility of infection caused by *C. violaceum*.

Optimal treatment should include surgical drainage of large abscesses, when necessary, in combination with appropriate antibiotic therapy. All isolates, to date, have been uniformly susceptible to chloramphenicol and resistant to the penicillins and cephalothin.

References

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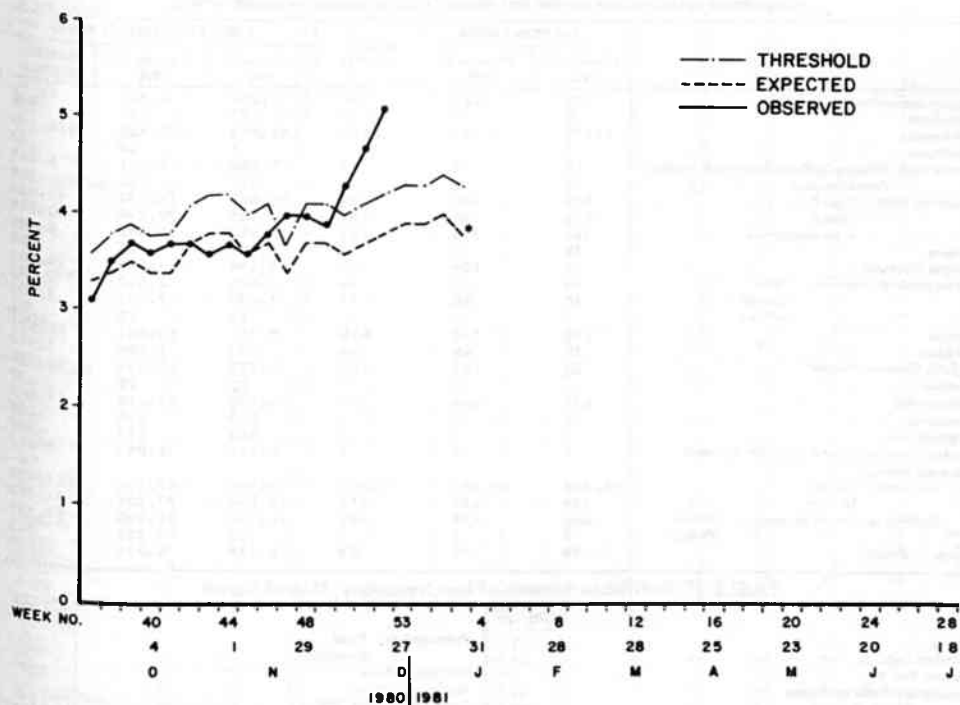
Chromobacteriosis — Continued

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9. MMWR 1974;23:387.

Current Trends**Influenza — United States**

Since November 1980, influenza strains similar to A/Bangkok/79 (H3N2) have been isolated in 16 states and the District of Columbia. In addition to earlier reports (1,2), the virus has been isolated in Georgia, Illinois, Michigan, Oregon, Tennessee, and Wisconsin from patients in localized outbreaks or from sporadic cases. Also, reported mortality due to pneumonia and influenza has exceeded the epidemic threshold for 3 consecutive weeks (Figure 1). An increase for 2 consecutive weeks—when occurring in conjunction with other measures of influenza activity—is generally considered evidence of an influenza epidemic (3).

FIGURE 1. Observed and expected ratio of deaths attributed to pneumonia and influenza in 121 United States cities, 1980-1981.



*Forecasts are made at 4-week intervals.

Influenza — Continued

Since October, weekly telephone surveillance reports have been received from approximately 95% of states and territories. As of December 13, New York reported widespread outbreaks, while 9 other states (Alaska, Arizona, California, New Jersey, New Mexico, North Carolina, North Dakota, Texas, and Wyoming) reported regional outbreaks. Nearly all other states have reported sporadic activity. Since mid-November, most local outbreaks have involved individuals in schools and nursing homes.

Influenza A (H1N1) virus, previously reported from several European countries this winter (4), was isolated during December from 2 hospitalized children in Washington, D.C. Isolates of influenza A (H3N2) virus from other Washington children ill with respiratory disease were obtained at the same time.

Reported by the Virology Laboratory, Children's Hospital, Washington, D.C.; participating State Epidemiologists; Immunization Div, Bur of State Services, Virology Div, Bur of Laboratories, CDC.

References

1. MMWR 1980;29:530.
2. MMWR 1980;29:599.
3. MMWR 1980;29:578-80.
4. MMWR 1980;29:611.

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

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

DISEASE	51st WEEK ENDING		MEDIAN 1975-1979	CUMULATIVE, FIRST 51 WEEKS		
	December 20, 1980	December 22, 1979		December 20, 1980	December 22, 1979	MEDIAN 1975-1979
Aseptic meningitis	110	121	66	7,251	8,341	4,592
Brucellosis	6	9	6	173	195	220
Chickenpox	4,375	3,336	3,513	181,048	192,900	178,700
Diphtheria	1	-	-	5	60	82
Encephalitis: Primary (arthropod-borne & unsp.)	18	20	15	1,100	1,081	1,163
Post-infectious	2	1	1	212	240	240
Hepatitis, Viral: Type B	449	366	289	18,009	14,732	14,635
Type A	573	588	586	27,765	29,290	30,130
Type unspecified	244	256	183	11,692	10,345	8,526
Malaria	26	19	12	1,898	807	524
Measles (rubeola)	16	134	304	13,398	13,449	26,663
Meningococcal infections: Total	70	60	34	2,616	2,542	1,742
Civilian	70	60	33	2,603	2,522	1,731
Military	-	-	-	13	20	21
Mumps	139	292	410	8,361	13,681	20,621
Pertussis	26	44	34	1,595	1,496	1,543
Rubella (German measles)	33	129	129	3,778	11,633	16,096
Tetanus	-	1	1	72	75	77
Tuberculosis	638	606	582	26,980	27,210	29,483
Tularemia	7	2	3	220	190	137
Typhoid fever	9	7	6	487	513	392
Typhus fever, tick-borne (Rky. Mt. spotted)	7	5	5	1,131	1,053	1,042
Venereal diseases:						
Gonorrhea: Civilian	19,282	15,859	16,880	990,651	983,104	983,104
Military	323	424	424	26,073	27,207	27,207
Syphilis, primary & secondary: Civilian	600	455	455	26,948	24,590	23,381
Military	9	2	6	314	313	313
Rabies in animals	79	69	29	6,158	4,875	2,936

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1980		CUM. 1980
Anthrax	1	Poliomyelitis: Total	8
Botulism Calif. 3	69	Paralytic	6
Cholera Fla. 1	9	Psittacosis Pa. 1	103
Congenital rubella syndrome	46	Rabies in man	-
Leprosy N.C. 1, Calif. 7	220	Trichinosis N.J. 1, Md. 2	112
Leptospirosis Ala. 1	74	Typhus fever, flea-borne (endemic, murine)	73
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 December 20, 1980, and December 22, 1979 (51st week)

REPORTING AREA	ASEPTIC MENIN- GITIS	BRU- CEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
				1980	CUM. 1980	Primary	Post-in- fectious	B	A	Unspecified	1980	CUM. 1980	
													1980
UNITED STATES	110	6	4,375	1	5	18	20	2	449	573	244	26	1,898
NEW ENGLAND	7	-	466	-	-	-	-	-	22	16	20	-	113
Maine	-	-	117	-	-	-	-	-	3	1	-	-	17
N.H.	-	-	-	-	-	-	-	-	-	-	-	-	7
Vt.	1	-	108	-	-	-	-	-	1	-	-	-	1
Mass.	3	-	118	-	-	-	-	-	2	2	15	-	59
R.I.	-	-	41	-	-	-	-	-	3	3	-	-	10
Conn.	3	-	82	-	-	-	-	-	13	10	5	-	19
MID. ATLANTIC	15	1	205	-	1	4	1	-	80	55	26	2	240
Upstate N.Y.	9	-	117	-	-	2	-	-	23	11	9	-	42
N.Y. City	-	-	48	-	1	-	-	-	15	5	6	-	65
N.J.	4	1	NN	-	-	-	-	-	25	25	9	-	61
Pa.	2	-	40	-	-	2	1	-	19	14	2	2	72
E.N. CENTRAL	14	-	1,944	-	1	5	2	-	59	99	38	1	115
Ohio	5	-	110	-	-	3	-	-	6	11	10	-	19
Ind.	-	-	237	-	-	-	-	-	6	17	9	-	12
Ill.	1	-	348	-	-	2	-	-	18	33	9	1	48
Mich.	5	-	789	-	1	-	2	-	21	23	9	-	24
Wis.	3	-	460	-	-	-	-	-	8	15	1	-	12
W.N. CENTRAL	4	4	699	-	1	-	2	-	24	30	11	-	75
Minn.	-	-	-	-	-	-	-	-	2	5	1	-	30
Iowa	1	3	229	-	-	-	2	-	6	6	2	-	7
Mo.	-	-	3	-	1	-	-	-	4	7	7	-	15
N. Dak.	-	-	6	-	-	-	-	-	-	-	-	-	4
S. Dak.	-	-	139	-	-	-	-	-	-	-	-	-	4
Nebr.	-	1	55	-	-	-	-	-	6	5	1	-	7
Kans.	3	-	267	-	-	-	-	-	6	7	-	-	12
S. ATLANTIC	11	-	404	-	-	-	-	1	67	57	23	3	198
Del.	-	-	5	-	-	-	-	-	2	1	-	-	-
Md.	2	-	10	-	-	-	-	-	7	2	2	-	32
D.C.	-	-	-	-	-	-	-	-	1	3	-	-	4
Va.	-	-	18	-	-	-	-	-	13	6	5	1	65
W. Va.	-	-	178	-	-	-	-	-	2	3	2	-	4
N.C.	1	-	NN	-	-	-	-	-	9	2	8	1	18
S.C.	-	-	1	-	-	-	-	-	9	2	1	-	11
Ga.	-	-	11	-	-	-	-	-	9	10	-	-	19
Fla.	8	-	181	-	-	-	-	1	15	28	5	1	45
E.S. CENTRAL	9	-	98	-	-	1	9	-	17	35	2	-	14
Ky.	4	-	84	-	-	-	-	-	2	12	1	-	3
Tenn.	2	-	NN	-	-	-	2	-	8	12	1	-	-
Ala.	2	-	7	-	-	-	-	-	6	-	-	-	8
Miss.	1	-	7	-	-	1	7	-	1	11	-	-	3
W.S. CENTRAL	9	-	119	1	1	5	4	-	32	78	46	2	183
Ark.	1	-	1	-	-	-	-	-	2	3	3	-	9
La.	1	-	NN	-	-	-	-	-	11	18	2	1	51
Okl.	1	-	-	-	-	-	1	-	7	7	1	-	12
Tex.	6	-	118	1	1	5	3	-	12	50	40	1	111
MOUNTAIN	2	-	123	-	-	1	-	1	26	52	17	-	92
Mont.	1	-	58	-	-	-	-	-	-	-	-	-	1
Idaho	-	-	-	-	-	-	-	-	-	3	-	-	1
Wyo.	-	-	-	-	-	-	-	-	-	-	-	-	2
Colo.	-	-	45	-	-	1	-	-	6	16	-	-	36
N. Mex.	-	-	-	-	-	-	-	-	1	13	2	-	6
Ariz.	-	-	1	-	-	-	-	-	5	6	10	-	18
Utah	-	-	NN	-	-	-	-	1	-	4	3	-	16
Nev.	1	-	2	-	-	-	-	-	14	10	3	-	12
PACIFIC	39	1	317	-	1	2	2	-	122	151	61	18	868
Wash.	-	-	284	-	1	-	-	-	3	17	6	2	54
Oreg.	3	-	1	-	-	-	-	-	13	17	1	-	48
Calif.	35	1	-	-	-	2	1	-	104	113	53	16	735
Alaska	-	-	25	-	-	-	-	-	1	-	1	-	6
Hawaii	1	-	7	-	-	-	1	-	1	4	-	-	25
Guam	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	3
P.R.	2	-	13	-	-	-	-	-	3	12	13	-	5
V.I.	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	2
Pac. Trust Terr.	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	2

NA: 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 December 20, 1980, and December 22, 1979 (51st 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	16	13,398	13,449	70	2,616	2,542	139	8,361	26	33	3,778	72
NEW ENGLAND	-	677	291	6	157	150	4	611	-	1	270	3
Maine	-	33	18	-	6	9	2	308	-	-	119	1
N.H.	-	331	33	-	8	15	1	26	-	-	39	-
Vt.	-	227	119	2	17	8	-	12	-	-	3	-
Mass.	-	59	15	2	55	60	-	131	-	1	78	-
R.I.	-	2	102	-	12	10	1	34	-	-	9	1
Conn.	-	25	4	2	59	48	-	100	-	-	22	1
MID. ATLANTIC	4	3,905	1,634	15	468	410	12	934	8	3	584	8
Upstate N.Y.	3	729	675	7	140	142	9	168	7	1	223	3
N.Y. City	1	1,207	853	2	111	90	3	109	-	2	103	2
N.J.	-	850	58	2	96	104	-	128	-	-	106	-
Pa.	-	1,119	48	4	121	74	-	529	1	-	152	3
E.N. CENTRAL	-	2,454	3,596	6	302	301	70	3,189	13	9	879	7
Ohio	-	380	314	4	102	123	18	1,253	3	-	8	2
Ind.	-	94	227	-	45	51	9	156	4	7	381	-
Ill.	-	353	1,631	-	62	28	12	419	4	-	177	2
Mich.	-	250	868	1	74	79	28	997	1	-	129	1
Wis.	-	1,377	556	1	19	20	3	364	1	2	184	2
W.N. CENTRAL	-	1,342	1,838	1	119	83	3	328	-	-	206	4
Minn.	-	1,106	1,218	1	46	19	-	20	-	-	28	1
Iowa	-	20	16	-	14	14	1	62	-	-	9	1
Mo.	-	65	429	-	39	37	-	101	-	-	42	1
N. Dak.	-	1	21	-	3	1	-	4	-	-	5	-
S. Dak.	-	-	2	-	6	4	-	4	-	-	2	-
Nebr.	-	83	77	-	-	-	-	9	-	-	1	-
Kans.	-	67	75	-	11	8	2	128	-	-	119	1
S. ATLANTIC	5	1,994	2,172	15	612	607	20	1,127	-	2	364	12
Del.	-	4	1	-	2	5	1	42	-	-	1	-
Md.	-	84	16	1	53	59	5	358	-	-	72	1
D.C.	-	5	-	-	2	-	-	5	-	-	1	-
Va.	-	339	288	4	68	85	8	96	-	-	62	3
W. Va.	-	15	65	3	27	16	1	127	-	-	26	1
N.C.	-	130	114	5	104	95	-	100	-	-	48	1
S.C.	-	159	183	-	65	66	-	211	-	-	55	3
Ga.	3	847	581	-	116	86	3	16	-	-	-	1
Fla.	2	411	924	2	175	195	2	182	-	2	99	2
E.S. CENTRAL	1	350	285	4	214	174	10	896	-	2	90	8
Ky.	-	57	60	2	66	35	5	764	-	2	45	2
Tenn.	-	172	72	1	59	52	-	34	-	-	40	2
Ala.	-	22	129	1	58	40	4	34	-	-	3	4
Miss.	1	99	24	-	31	47	1	64	-	-	2	-
W.S. CENTRAL	3	996	951	11	279	370	5	304	3	1	155	19
Ark.	-	16	7	2	22	28	3	25	-	-	4	2
La.	-	15	259	4	99	139	-	68	1	-	13	5
Okla.	-	776	22	3	29	40	-	-	-	-	7	1
Tex.	3	189	663	2	129	163	2	211	2	1	131	11
MOUNTAIN	1	506	339	7	112	99	2	226	-	2	170	-
Mont.	-	2	56	-	4	15	-	60	-	-	45	-
Idaho	-	-	18	-	6	10	-	16	-	-	22	-
Wyo.	-	-	36	-	6	1	-	-	-	-	1	-
Colo.	-	24	72	2	27	8	2	66	-	-	12	-
N. Mex.	-	14	38	-	11	6	-	-	-	-	5	-
Ariz.	1	409	80	3	22	37	-	46	-	-	45	-
Utah	-	47	19	2	7	9	-	29	-	-	31	-
Nev.	-	10	20	-	29	13	-	9	-	2	9	-
PACIFIC	2	1,174	2,343	5	353	348	13	746	2	13	1,060	11
Wash.	-	178	1,160	-	64	65	3	153	1	5	99	-
Oreg.	-	1	66	1	55	30	2	94	-	-	65	-
Calif.	2	982	1,032	4	223	237	7	464	1	8	879	11
Alaska	-	6	17	-	11	6	1	14	-	-	12	-
Hawaii	-	7	68	-	-	10	-	21	-	-	5	-
Guam	NA	6	13	-	1	1	NA	11	NA	NA	2	-
P.R.	13	190	386	-	11	7	4	160	-	-	27	12
V.I.	NA	6	6	-	3	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
December 20, 1980, and December 22, 1979 (51st week)

REPORTING AREA	TUBERCULOSIS		TULA- REMIA	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	638	26,980	220	9	487	7	1,131	19,282	990,651	983,104	600	26,948	24,590	6,158	
NEW ENGLAND	22	753	6	-	13	-	14	543	25,226	24,324	11	516	513	60	
Maine	4	56	-	-	1	-	-	20	1,396	1,713	-	6	10	28	
N.H.	-	17	-	-	-	-	-	6	865	909	-	6	21	7	
Vt.	1	24	-	-	-	-	-	4	537	636	-	6	3	-	
Mass.	10	418	4	-	8	-	7	230	10,659	9,607	7	317	276	14	
R.I.	4	76	1	-	1	-	2	31	1,609	1,915	1	33	19	1	
Conn.	3	162	1	-	3	-	5	250	10,161	9,544	3	148	184	10	
MID. ATLANTIC	55	4,256	3	4	94	1	49	2,477	112,361	108,391	103	3,728	3,763	70	
Upstate N.Y.	13	853	1	-	16	-	14	556	20,242	19,107	4	320	290	38	
N.Y. City	12	1,451	1	-	40	-	3	800	44,687	42,660	77	2,425	2,557	-	
N.J.	13	980	1	4	25	-	19	469	20,380	19,073	11	432	481	13	
Pa.	17	972	-	-	13	1	13	652	27,052	27,551	11	551	435	19	
E.N. CENTRAL	119	3,884	3	-	51	-	29	3,207	153,991	154,374	60	2,725	3,029	637	
Ohio	13	716	1	-	15	-	16	877	41,144	42,010	21	380	609	55	
Ind.	8	422	-	-	-	-	2	318	15,944	13,182	1	189	203	72	
Ill.	63	1,354	-	-	18	-	6	948	48,344	49,077	34	1,660	1,696	518	
Mich.	28	1,147	2	-	11	-	3	690	34,490	36,141	2	397	443	15	
Wis.	7	245	-	-	7	-	2	374	14,079	13,964	2	99	78	277	
W.N. CENTRAL	42	1,003	32	1	30	-	54	1,067	47,905	48,776	6	366	306	2,042	
Minn.	20	221	1	-	4	-	-	190	7,847	8,094	3	125	87	245	
Iowa	1	90	1	-	2	-	3	84	5,000	5,780	-	31	30	491	
Mo.	13	439	25	1	20	-	34	500	21,400	20,925	-	158	140	372	
N. Dak.	1	54	-	-	1	-	-	7	665	857	-	4	2	241	
S. Dak.	-	49	1	-	1	-	2	17	1,340	1,582	-	6	2	446	
Nebr.	2	42	3	-	1	-	5	77	3,682	3,513	-	12	7	94	
Kans.	5	108	1	-	1	-	10	192	7,971	8,025	3	30	38	153	
S. ATLANTIC	102	5,838	17	-	46	4	704	4,593	247,983	237,395	139	6,446	5,805	502	
Dcl.	1	70	-	-	1	-	2	31	3,560	3,898	-	21	30	2	
Md.	11	701	6	-	3	-	75	130	26,517	29,127	5	441	389	32	
D.C.	5	361	-	-	4	-	-	284	16,849	15,831	15	481	449	-	
Va.	17	585	1	-	9	1	94	496	22,922	22,729	14	583	480	31	
W. Va.	5	212	-	-	5	1	6	77	3,375	3,230	1	18	52	26	
N.C.	10	1,030	3	-	5	2	319	705	37,651	34,656	14	484	428	20	
S.C.	-	522	-	-	3	-	141	433	23,076	22,170	11	387	311	62	
Ga.	12	814	7	-	-	-	60	890	48,459	44,914	37	1,831	1,601	250	
Fa.	41	1,543	-	-	16	-	7	1,547	65,574	60,804	42	2,200	2,065	79	
E.S. CENTRAL	54	2,504	10	-	12	1	117	1,544	80,242	83,619	40	2,203	1,659	341	
Ky.	12	558	-	-	3	-	21	171	11,617	11,224	3	129	159	146	
Tenn.	15	809	7	-	1	-	61	788	29,222	30,308	16	922	681	142	
Ala.	19	657	1	-	3	1	18	248	24,037	24,550	8	480	299	53	
Miss.	8	480	2	-	5	-	17	337	15,366	17,537	13	672	520	-	
W.S. CENTRAL	52	3,058	99	-	77	1	142	2,482	124,779	124,911	172	5,513	4,441	1,381	
Ark.	9	335	66	-	8	1	36	213	9,990	10,194	3	220	165	184	
La.	13	569	-	-	2	-	3	491	22,119	22,657	23	1,359	1,138	18	
Okl.	6	334	22	-	6	-	74	210	12,378	12,525	2	106	87	241	
Tex.	24	1,820	11	-	61	-	29	1,568	80,292	79,535	144	3,828	3,051	939	
MOUNTAIN	27	783	34	-	26	-	17	652	37,755	39,562	10	656	510	242	
Mont.	-	32	9	-	1	-	3	26	1,443	2,001	-	3	9	57	
Idaho	1	30	1	-	1	-	2	15	1,664	1,760	-	28	26	2	
Wyo.	-	22	4	-	-	-	2	16	1,073	1,111	-	12	9	17	
Colo.	5	146	8	-	7	-	5	188	10,302	10,539	7	183	110	54	
N. Mex.	5	138	2	-	3	-	4	81	4,574	4,827	-	115	94	45	
Ariz.	-	322	1	-	7	-	-	276	9,909	11,060	-	209	147	57	
Utah	-	49	6	-	7	-	1	32	9,912	1,986	-	19	5	9	
Nev.	16	44	3	-	-	-	-	38	6,878	6,278	3	87	110	1	
PACIFIC	165	4,901	16	4	138	-	5	2,717	160,409	161,752	59	4,795	4,564	583	
Wash.	14	612	-	-	3	-	-	NA	13,284	14,271	NA	216	239	-	
Oreg.	15	200	4	-	9	-	1	183	11,046	10,267	3	109	165	4	
Calif.	135	4,127	11	4	124	-	4	2,378	128,962	129,225	56	4,321	4,042	531	
Alaska	-	64	1	-	-	-	-	83	3,933	4,879	-	9	25	48	
Hawaii	1	98	-	-	2	-	-	73	3,184	3,110	-	143	93	-	
Guam	NA	56	-	NA	1	NA	-	NA	105	115	NA	5	-	-	
P.R.	2	293	-	-	8	-	-	40	2,698	2,117	2	601	581	53	
V.I.	NA	-	-	NA	-	NA	-	NA	109	161	NA	10	12	-	
Pac. Trust Terr.	NA	35	-	NA	-	NA	-	NA	379	480	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
December 20, 1980 (51st week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL	REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL
	ALL AGES	>65	45-64	25-44	<1			ALL AGES	>65	45-64	25-44	<1	
NEW ENGLAND	746	510	168	40	12	62	S. ATLANTIC	1,408	848	353	91	69	70
Boston, Mass.	232	151	56	14	3	29	Atlanta, Ga.	168	93	34	12	22	9
Bridgeport, Conn.	43	27	11	4	1	4	Baltimore, Md.	203	129	53	7	6	3
Cambridge, Mass.	27	19	8	-	-	2	Charlotte, N.C.	72	31	27	9	3	11
Fall River, Mass.	29	21	7	1	-	2	Jacksonville, Fla.	115	87	18	7	1	7
Hartford, Conn.	65	39	15	5	2	3	Miami, Fla.	186	108	47	13	10	2
Lowell, Mass.	33	25	6	1	1	2	Norfolk, Va.	64	40	19	3	1	5
Lynn, Mass.	19	13	5	1	-	1	Richmond, Va.	82	47	24	3	6	3
New Bedford, Mass.	27	21	5	1	-	2	Savannah, Ga.	49	25	12	3	7	3
New Haven, Conn.	49	37	5	5	-	2	St. Petersburg, Fla.	83	71	9	2	1	7
Providence, R.I.	64	45	15	2	1	3	Tampa, Fla.	56	36	13	3	2	8
Somerville, Mass.	9	5	4	-	-	6	Washington, D.C.	257	136	74	27	8	6
Springfield, Mass.	57	37	15	2	2	6	Wilmington, Del.	73	45	23	2	2	
Waterbury, Conn.	19	16	3	-	-	8							
Worcester, Mass.	73	54	13	4	2	8							
MID. ATLANTIC	3,039	2,074	659	181	65	176	E.S. CENTRAL	721	439	178	43	36	27
Albany, N.Y.	54	36	12	2	3	-	Birmingham, Ala.	133	81	31	5	12	2
Allentown, Pa.	24	19	5	-	-	1	Chattanooga, Tenn.	55	38	15	-	1	-
Buffalo, N.Y.	148	97	38	7	3	6	Knoxville, Tenn.	31	19	11	-	1	8
Camden, N.J.	40	26	7	4	2	-	Louisville, Ky.	80	49	18	7	3	6
Elizabeth, N.J.	29	21	8	-	-	2	Memphis, Tenn.	142	93	34	7	5	2
Erie, Pa.	43	36	7	-	-	4	Mobile, Ala.	89	53	21	5	5	1
Jersey City, N.J.	43	27	12	1	2	3	Montgomery, Ala.	58	30	17	7	3	1
Newark, N.J.	40	17	14	2	4	1	Nashville, Tenn.	133	76	31	12	6	3
N.Y. City, N.Y.	1,796	1,231	379	116	37	104							
Paterson, N.J.	30	23	3	2	2	2	W.S. CENTRAL	1,368	763	368	130	38	47
Philadelphia, Pa.	292	183	69	26	4	21	Austin, Tex.	45	23	12	5	2	1
Pittsburgh, Pa.	77	48	21	4	1	4	Baton Rouge, La.	58	31	14	7	3	3
Reading, Pa.	37	30	6	1	-	4	Corpus Christi, Tex.	52	36	10	3	1	1
Rochester, N.Y.	130	94	23	7	4	8	Dallas, Tex.	206	103	72	14	3	2
Schenectady, N.Y.	33	24	8	-	1	2	El Paso, Tex.	54	35	14	2	-	9
Scranton, Pa.	29	25	3	1	-	3	Fort Worth, Tex.	92	47	28	11	1	2
Syracuse, N.Y.	92	62	22	4	2	2	Houston, Tex.	357	180	95	47	10	8
Trenton, N.J.	26	19	6	-	-	2	Little Rock, Ark.	75	45	19	6	4	2
Utica, N.Y.	29	19	8	2	-	3	Los Angeles, La.	130	68	37	12	6	-
Yonkers, N.Y.	47	37	8	2	-	6	San Antonio, Tex.	162	103	37	14	6	10
							Shreveport, La.	69	49	12	5	2	5
							Tulsa, Okla.	68	43	18	4	-	4
E.N. CENTRAL	2,467	1,538	609	146	92	68	MOUNTAIN	705	446	140	49	21	43
Akron, Ohio	65	46	14	1	2	-	Albuquerque, N. Mex.	70	20	10	15	4	5
Canton, Ohio	38	26	8	1	1	-	Colorado Springs, Colo.	34	26	7	1	-	3
Chicago, Ill.	602	363	138	44	31	8	Denver, Colo.	121	75	25	10	3	3
Cincinnati, Ohio	167	106	47	1	9	12	Las Vegas, Nev.	85	47	19	6	5	9
Cleveland, Ohio	162	90	40	15	8	3	Ogden, Utah	20	12	7	1	-	2
Columbus, Ohio	176	100	54	9	5	4	Phoenix, Ariz.	189	130	36	9	6	2
Dayton, Ohio	107	62	33	9	1	2	Pueblo, Colo.	16	12	3	1	-	1
Detroit, Mich.	268	171	67	16	10	4	Salt Lake City, Utah	48	33	9	2	1	1
Evansville, Ind.	47	34	10	2	1	3	Tucson, Ariz.	122	91	24	4	2	17
Fort Wayne, Ind.	54	34	14	2	1	5							
Gary, Ind.	16	7	2	3	2	-							
Grand Rapids, Mich.	55	39	8	4	2	1	PACIFIC	1,999	1,314	454	125	57	92
Indianapolis, Ind.	184	114	45	10	6	6	Berkeley, Calif. ††	20	15	4	1	-	1
Madison, Wis.	35	19	9	3	2	4	Fresno, Calif.	79	56	14	4	3	8
Milwaukee, Wis.	169	115	40	6	6	1	Glendale, Calif.	25	20	5	-	-	2
Peoria, Ill.	38	28	8	-	1	-	Honolulu, Hawaii	59	40	11	4	2	6
Rockford, Ill.	55	45	8	2	-	6	Long Beach, Calif.	132	93	34	2	1	15
South Bend, Ind.	50	33	16	1	-	2	Los Angeles, Calif.	566	369	130	35	16	8
Toledo, Ohio	100	47	31	16	3	5	Oakland, Calif.	80	43	22	8	3	3
Youngstown, Ohio	79	59	17	1	1	2	Pasadena, Calif. ††	35	26	6	1	1	-
							Portland, Ore.	129	84	28	7	6	12
W.N. CENTRAL	747	498	152	46	18	28	Sacramento, Calif.	84	61	16	2	4	1
Des Moines, Iowa	64	41	14	6	1	-	San Diego, Calif.	157	89	45	12	6	3
Duluth, Minn.	19	14	2	-	2	-	San Francisco, Calif.	176	110	43	18	5	16
Kansas City, Kans.	40	25	11	2	-	2	San Jose, Calif.	190	129	37	12	5	3
Kansas City, Mo.	125	83	22	11	4	5	Seattle, Wash.	164	108	39	9	7	6
Lincoln, Nebr.	33	25	5	2	-	1	Spokane, Wash.	46	29	10	6	1	3
Minneapolis, Minn.	106	64	23	7	4	2	Tacoma, Wash.	57	42	10	4	1	
Omaha, Nebr.	79	57	16	2	1	-							
St. Louis, Mo.	158	107	31	9	2	10							
St. Paul, Minn.	72	46	18	4	3	1	TOTAL	13,200	8,430	3,081	851	408	613
Wichita, Kans.	51	36	10	3	1	7							

*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.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending December 27, 1980, and December 29, 1979 (52nd week)

REPORTING AREA	ASEPTIC MENINGITIS		BRI-CELLOSIS	CHICKEN-POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
	1980	1980	1980	1980	CUM. 1980	Primary		Post-infectious	B	A	Unspecified	1980	CUM. 1980	
						1980	1979							
UNITED STATES	80	3	3,186	-	5	-	13	23	1	252	358	134	16	1,916
NEW ENGLAND	2	-	333	-	-	-	-	2	-	16	6	10	1	114
Maine	-	-	2	-	-	-	-	-	-	1	-	-	-	17
N.H.	1	-	12	-	-	-	-	-	-	-	-	-	-	7
Vt.	-	-	15	-	-	-	-	-	-	1	1	-	-	1
Mass.	-	-	127	-	-	-	-	1	-	1	-	10	1	60
R.I.	1	-	31	-	-	-	-	-	-	1	2	-	-	10
Conn.	-	-	146	-	-	-	-	1	-	12	3	-	-	19
MID. ATLANTIC	13	-	108	-	1	-	2	11	-	20	10	2	1	241
Upstate N.Y.	6	-	50	-	-	-	-	1	-	10	6	1	-	42
N.Y. City	4	-	17	-	1	-	-	-	-	10	4	1	-	65
N.J.	1	-	NN	-	-	-	-	-	-	NA	NA	NA	1	62
Pa.	2	-	41	-	-	-	2	10	-	-	-	-	-	72
E.N. CENTRAL	4	-	1,705	-	1	-	1	2	-	30	43	19	-	117
Ohio	-	-	24	-	-	-	-	-	-	4	7	4	-	19
Ind.	-	-	202	-	-	-	-	-	-	1	2	6	-	12
Ill.	-	-	447	-	-	-	-	-	-	20	19	2	-	48
Mich.	4	-	722	-	1	-	1	2	-	3	9	6	-	24
Wis.	-	-	310	-	-	-	-	-	-	2	6	1	-	14
W.N. CENTRAL	6	1	486	-	1	-	-	1	-	26	41	10	1	76
Minn.	-	-	-	-	-	-	-	-	-	4	6	-	-	30
Iowa	1	-	243	-	-	-	-	1	-	3	16	2	-	7
N. Dak.	3	1	20	-	1	-	-	-	-	9	11	6	1	16
S. Dak.	-	-	13	-	-	-	-	-	-	-	-	-	-	-
Nebr.	1	-	5	-	-	-	-	-	-	7	5	-	-	4
Kans.	1	-	169	-	-	-	-	-	-	3	3	2	-	12
S. ATLANTIC	15	-	247	-	-	-	1	-	1	54	40	24	1	199
Del.	-	-	4	-	-	-	-	-	-	-	-	1	-	-
Md.	2	-	48	-	-	-	-	-	-	11	1	-	-	32
D.C.	-	-	-	-	-	-	-	-	-	1	-	-	-	4
Va.	1	-	9	-	-	-	-	-	-	5	2	2	-	65
W. Va.	-	-	92	-	-	-	-	-	-	-	-	-	-	4
N.C.	2	-	NN	-	-	-	-	-	-	2	5	2	-	18
S.C.	-	-	-	-	-	-	-	-	-	3	-	-	-	11
Ga.	-	-	40	-	-	-	-	-	-	12	8	-	-	19
Fla.	10	-	54	-	-	1	-	1	-	20	24	13	1	46
E.S. CENTRAL	14	-	15	-	-	1	-	-	-	20	23	13	-	14
Ky.	-	-	9	-	-	-	-	-	-	4	6	2	-	3
Tenn.	1	-	NN	-	-	1	-	-	-	11	11	1	-	-
Ala.	13	-	6	-	-	-	-	-	-	4	4	4	-	8
Miss.	-	-	-	-	-	-	-	-	-	1	2	6	-	3
W.S. CENTRAL	3	2	32	-	1	-	-	3	-	9	59	8	2	185
Ark.	-	-	-	-	-	-	-	-	-	3	1	-	-	9
La.	-	-	NN	-	-	-	-	3	-	-	-	-	-	51
Okla.	-	-	-	-	-	-	-	-	-	-	7	2	-	12
Tex.	3	2	32	-	1	-	-	-	-	6	51	6	2	113
MOUNTAIN	2	-	39	-	-	-	3	-	-	15	59	20	-	92
Mont.	-	-	2	-	-	-	-	-	-	-	-	-	-	1
Idaho	-	-	-	-	-	-	-	-	-	-	9	-	-	1
Wyo.	-	-	-	-	-	-	-	-	-	-	1	1	-	2
Colo.	-	-	35	-	-	-	2	-	-	5	13	3	-	36
N. Mex.	-	-	-	-	-	-	-	-	-	2	8	1	-	6
Ariz.	1	-	NN	-	-	1	-	-	-	4	11	3	-	18
Utah	-	-	1	-	-	-	-	-	-	3	17	8	-	16
Nev.	1	-	1	-	-	-	-	-	-	1	-	4	-	12
PACIFIC	21	-	221	-	1	-	5	4	-	62	77	28	10	878
Wash.	1	-	190	-	1	-	1	-	-	8	15	4	-	54
Oreg.	1	-	1	-	-	1	1	-	-	7	7	4	-	48
Calif.	16	-	-	-	-	2	3	-	-	45	53	20	10	745
Alaska	-	-	28	-	-	1	-	-	-	2	2	-	-	6
Hawaii	3	-	2	-	-	-	-	-	-	-	-	-	-	25
Guam	NA	NA	NA	NA	-	NA	-	-	-	NA	NA	NA	NA	3
P.R.	NA	NA	NA	NA	-	NA	-	-	-	NA	NA	NA	NA	5
V.I.	NA	NA	NA	NA	-	NA	-	-	-	NA	NA	NA	NA	2
Pac. Trust Terr.	NA	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
December 27, 1980, and December 29, 1979 (52nd week)

REPORTING AREA	MEASLES (RUBEOLA)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1980	CUM. 1979	CUM. 1979	1980	CUM. 1980	CUM. 1979	1980	CUM. 1980	1980	1980	CUM. 1980	CUM. 1980
UNITED STATES	13	13,406	13,600	44	2,662	2,622	61	8,438	17	22	3,803	74
NEW ENGLAND	1	679	292	-	157	156	2	613	1	3	273	3
Maine	-	33	18	-	6	9	-	308	-	-	119	1
N.H.	-	332	33	-	8	15	-	26	-	2	41	-
Vt.	-	227	120	-	17	8	-	12	-	-	3	-
Mass.	-	59	15	-	55	60	2	133	-	-	78	-
R.I.	-	2	102	-	12	10	-	34	-	-	9	1
Conn.	1	26	4	-	59	54	-	100	1	1	23	1
MID. ATLANTIC	8	3,915	1,644	6	476	423	4	938	3	1	587	8
Upstate N.Y.	5	734	679	-	140	145	2	170	1	-	223	3
N.Y. City	3	1,210	859	3	114	91	2	111	-	1	104	2
N.J.	-	852	58	1	99	104	-	128	2	-	108	-
Pa.	-	1,119	48	2	123	83	-	529	-	-	152	3
E.N. CENTRAL	-	2,454	3,654	5	307	310	32	3,236	5	4	883	7
Ohio	-	380	347	2	104	131	5	1,273	-	-	8	2
Ind.	-	94	229	-	45	51	2	158	1	3	384	-
Ill.	-	353	1,644	-	62	29	7	426	-	-	177	2
Mich.	-	250	869	3	77	79	11	1,008	1	-	129	1
Wis.	-	1,377	565	-	19	20	7	371	3	1	185	2
W.N. CENTRAL	-	1,341	1,845	7	126	85	3	331	-	-	207	4
Minn.	-	1,106	1,218	2	48	19	-	20	-	-	28	1
Iowa	-	20	16	2	16	15	-	62	-	-	9	1
Mo.	-	65	436	2	41	38	2	103	-	-	42	1
N. Dak.	-	-	21	-	3	1	-	4	-	-	6	-
S. Dak.	-	-	2	-	6	4	-	4	-	-	2	-
Nebr.	-	83	77	-	-	-	-	9	-	-	1	-
Kans.	-	67	75	1	12	8	1	129	-	-	119	1
S. ATLANTIC	1	1,995	2,192	8	620	626	9	1,136	3	1	365	12
Del.	-	4	1	1	3	5	-	42	-	-	1	-
Md.	-	84	16	-	53	60	4	362	-	-	72	1
D.C.	-	5	-	-	2	-	-	5	-	-	1	-
Va.	-	339	288	-	68	87	1	87	-	1	63	3
W. Va.	-	15	65	2	29	18	-	127	-	-	26	1
N.C.	-	130	115	-	104	95	-	100	-	-	48	1
S.C.	-	159	183	-	65	69	-	211	-	-	55	3
Ga.	-	847	587	1	117	91	1	17	3	-	1	1
Fla.	1	412	937	4	179	201	3	185	-	-	99	2
E.S. CENTRAL	-	350	286	-	214	176	2	898	2	1	91	9
Ky.	-	57	60	-	66	35	-	764	1	1	46	2
Tenn.	-	172	72	-	59	52	-	34	1	-	40	3
Ala.	-	22	129	-	58	41	2	36	-	-	3	4
Miss.	-	99	25	-	31	48	-	64	-	-	2	-
W.S. CENTRAL	1	997	984	2	281	389	-	304	-	1	156	19
Ark.	-	15	7	-	22	29	-	25	-	-	4	2
La.	-	15	265	-	99	155	-	68	-	-	13	5
Okl.	-	776	42	1	30	42	-	-	-	-	7	1
Tex.	1	190	670	1	130	163	-	211	-	1	132	11
MOUNTAIN	-	499	361	2	114	102	2	229	-	-	170	1
Mont.	-	2	56	-	4	16	-	61	-	-	45	-
Idaho	-	-	18	-	6	10	-	16	-	-	22	-
Wyo.	-	-	36	-	6	1	-	-	-	-	1	-
Colo.	-	24	72	1	28	10	2	68	-	-	12	-
N. Mex.	-	14	38	-	11	6	-	-	-	-	5	-
Ariz.	-	402	80	-	22	37	-	46	-	-	45	1
Utah	-	47	21	1	8	9	-	29	-	-	31	-
Nev.	-	10	20	-	29	13	-	9	-	-	9	-
PACIFIC	2	1,176	2,362	14	367	355	7	753	3	11	1,071	11
Wash.	-	178	1,170	2	66	66	2	155	3	-	99	-
Oreg.	-	1	66	3	58	33	-	94	-	-	65	-
Calif.	2	984	1,038	6	229	239	4	468	-	11	890	11
Alaska	-	6	17	3	14	6	1	15	-	-	12	-
Hawaii	-	7	71	-	-	11	-	21	-	-	5	-
Guam	NA	6	13	-	1	1	NA	11	NA	NA	2	-
P.R.	NA	194	392	-	11	7	NA	164	NA	NA	27	12
V.I.	NA	6	6	-	5	3	NA	2	NA	NA	-	-
Pac. Trust Terr.	NA	10	10	-	-	2	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
December 27, 1980, and December 29, 1979 (52nd week)

REPORTING AREA	TUBERCULOSIS		TULA- REMIA		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	497	27,425	223	4	492	2	1,132	9,445	1,000,188	100,1673	292	27,237	25,114	6,218	
NEW ENGLAND	11	764	6	-	13	-	14	394	25,620	24,627	4	520	520	60	
Maine	-	56	-	-	1	-	-	30	1,426	1,730	-	6	10	28	
N.H.	-	17	-	-	-	-	-	13	878	926	-	6	21	7	
Vt.	1	25	-	-	-	-	-	4	541	649	-	6	3	-	
Mass.	5	423	4	-	8	-	7	141	10,799	9,748	3	320	276	14	
R.I.	-	76	1	-	1	-	2	15	1,624	1,966	-	33	20	1	
Conn.	5	167	1	-	3	-	5	191	10,352	9,608	1	149	190	10	
MID. ATLANTIC	59	4,315	3	-	94	-	49	1,418	113,779	111,028	68	3,796	3,836	70	
Upstate N.Y.	5	858	1	-	16	-	14	159	20,533	20,533	10	330	305	38	
N.Y. City	-	1,451	1	-	40	-	3	800	45,487	43,396	46	2,471	2,593	-	
N.J.	40	1,020	1	-	25	-	19	132	20,512	19,268	6	438	484	13	
Pa.	14	986	-	-	13	-	13	327	27,379	27,831	6	557	454	19	
E.N. CENTRAL	18	3,880	3	-	51	-	28	1,354	155,345	156,496	11	2,736	3,065	945	
Ohio	18	734	1	-	15	-	15	333	41,477	42,281	-	380	609	56	
Ind.	-	422	-	-	-	-	2	237	16,181	13,279	4	193	204	75	
Ill.	NA	1,356	-	-	18	-	6	NA	48,344	50,198	NA	1,660	1,724	522	
Mich.	NA	1,125	2	-	11	-	3	669	35,149	36,697	4	401	449	15	
Wis.	-	245	-	-	7	-	2	115	14,194	14,041	3	102	79	277	
W.N. CENTRAL	30	1,033	34	1	32	-	54	573	48,478	49,715	9	375	308	2,063	
Minn.	16	237	1	-	4	-	-	128	7,975	8,205	4	129	87	254	
Iowa	-	90	1	-	2	-	3	65	5,065	5,863	2	33	30	496	
Mo.	11	450	26	1	21	-	34	271	21,671	21,335	3	161	142	375	
N. Dak.	-	54	-	-	1	-	-	8	673	869	-	4	2	243	
S. Dak.	-	49	1	-	1	-	2	8	1,348	1,594	-	6	2	446	
Nebr.	2	44	4	-	2	-	5	7	3,689	3,593	-	12	7	94	
Kans.	1	109	1	-	1	-	10	86	8,057	8,256	-	30	38	155	
S. ATLANTIC	93	5,930	17	-	46	-	704	2,985	250,968	240,691	113	6,559	5,885	506	
Del.	2	72	-	-	1	-	2	39	3,599	3,930	-	21	30	2	
Md.	9	710	6	-	3	-	75	374	26,891	29,636	3	444	400	32	
D.C.	NA	361	-	-	4	-	-	187	17,036	16,155	8	489	450	-	
Va.	21	606	1	-	9	-	94	349	23,271	23,016	5	588	492	35	
W. Va.	4	216	-	-	5	-	6	27	3,402	3,272	-	18	53	26	
N.C.	15	1,044	3	-	5	-	319	286	37,937	34,972	9	493	429	20	
S.C.	-	522	-	-	3	-	141	101	23,177	22,384	7	394	319	62	
Ge.	24	838	7	-	-	-	60	762	49,221	45,899	20	1,851	1,614	250	
Fla.	18	1,561	-	-	16	-	7	860	66,434	61,427	61	2,261	2,098	79	
E.S. CENTRAL	10	2,514	11	-	12	-	117	691	80,933	85,390	7	2,210	1,668	347	
Ky.	2	560	-	-	3	-	21	78	11,695	11,387	-	129	161	150	
Tenn.	8	817	8	-	1	-	61	450	29,672	30,854	-	922	684	144	
Ala.	NA	657	1	-	3	-	18	NA	24,037	25,348	NA	480	303	53	
Miss.	-	480	2	-	5	-	17	163	15,529	17,801	7	679	520	-	
W.S. CENTRAL	27	3,085	99	2	79	2	144	357	125,136	128,713	30	5,540	4,582	1,399	
Ark.	4	339	66	-	8	-	36	NA	9,990	10,384	NA	217	165	188	
La.	2	571	-	-	2	-	3	170	22,289	23,746	30	1,389	1,176	18	
Okla.	5	339	22	-	6	2	76	187	12,565	12,755	-	106	87	242	
Tex.	16	1,836	11	2	63	-	29	NA	80,292	81,828	NA	3,828	3,154	951	
MOUNTAIN	28	807	34	-	26	-	17	541	38,117	40,200	6	662	529	242	
Mont.	-	32	9	-	1	-	3	8	1,460	2,016	-	3	9	57	
Idaho	2	32	1	-	1	-	2	65	1,729	1,783	-	28	26	2	
Wy.	-	22	4	-	-	-	2	4	1,077	1,130	-	12	9	17	
Colo.	6	148	8	-	7	-	5	123	10,425	10,787	-	183	114	54	
N. Mex.	2	140	2	-	3	-	4	46	4,620	4,864	4	119	95	45	
Ariz.	16	338	1	-	7	-	-	198	10,107	11,308	-	209	160	57	
Utah	1	50	6	-	7	-	1	28	1,940	2,013	1	20	5	9	
Nev.	1	45	3	-	-	-	-	69	6,759	6,299	1	88	111	1	
PACIFIC	211	5,097	16	1	139	-	5	1,132	161,812	164,813	44	4,839	4,721	586	
Wash.	24	421	-	-	3	-	-	NA	13,555	14,607	NA	216	250	-	
Oreg.	2	202	4	-	3	-	1	52	11,098	10,342	2	111	168	4	
Calif.	185	4,312	11	-	124	-	4	537	129,899	131,722	40	4,361	4,185	534	
Alaska	-	64	1	1	1	-	-	95	4,028	4,986	2	11	25	48	
Hawaii	-	98	-	-	2	-	-	48	3,232	3,156	-	140	93	-	
Guam	NA	56	-	NA	1	NA	-	NA	105	124	NA	5	-	-	
P.R.	NA	293	-	NA	8	NA	-	NA	2,698	2,197	NA	601	599	53	
V.I.	NA	-	-	NA	-	NA	-	NA	124	161	NA	11	12	-	
Pac. Trust Terr.	NA	35	-	NA	-	NA	-	NA	379	490	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
December 27, 1980 (52nd week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL	REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL
	ALL AGES	>65	45-64	25-44	<1			ALL AGES	>65	45-64	25-44	<1	
NEW ENGLAND	783	530	182	34	18	65	S. ATLANTIC	942	597	203	77	24	34
Boston, Mass.	226	148	56	8	6	22	Atlanta, Ga.	109	65	25	13	3	3
Bridgeport, Conn.	39	24	13	1	1	3	Baltimore, Md.	290	188	59	29	3	—
Cambridge, Mass.	46	35	11	—	—	5	Charlotte, N.C.	30	23	4	2	—	—
Fall River, Mass.	28	22	6	—	—	—	Jacksonville, Fla.	75	39	23	4	4	—
Hartford, Conn.	40	26	9	3	—	2	Miami, Fla.	68	42	17	6	—	—
Lowell, Mass.	34	25	4	3	—	6	Norfolk, Va.	25	16	3	3	1	6
Lynn, Mass.	25	18	5	1	—	—	Richmond, Va.	63	34	18	3	6	6
New Bedford, Mass.	26	21	4	1	—	3	Savannah, Ga.	29	22	5	1	—	1
New Haven, Conn.	59	34	17	3	4	8	St. Petersburg, Fla.	62	57	3	—	1	—
Providence, R.I.	60	40	15	3	1	4	Tampa, Fla.	36	23	7	4	1	3
Somerville, Mass.	16	8	5	2	1	1	Washington, D.C.	118	63	31	10	5	3
Springfield, Mass.	73	49	12	5	5	5	Wilmington, Del.	37	25	8	2	—	—
Waterbury, Conn.	34	29	5	—	—	3							
Worcester, Mass.	77	51	20	4	—	3							
							E.S. CENTRAL	574	356	154	36	13	37
MID. ATLANTIC	2,676	1,838	575	170	38	146	Birmingham, Ala.	83	38	31	6	—	6
Albany, N.Y.	47	26	16	2	2	2	Chattanooga, Tenn.	32	19	10	3	—	1
Allentown, Pa.	24	18	6	—	—	—	Knoxville, Tenn.††	36	27	8	2	—	9
Buffalo, N.Y.	148	95	40	9	1	9	Louisville, Ky.	55	37	14	4	—	5
Camden, N.J.	35	22	9	4	—	—	Memphis, Tenn.	230	142	63	12	5	17
Elizabeth, N.J.	36	27	5	3	—	2	Mobile, Ala.	43	28	10	2	—	3
Erie, Pa.†	41	34	3	2	1	4	Montgomery, Ala.	26	20	4	2	—	—
Jersey City, N.J.	74	55	13	2	3	5	Nashville, Tenn.	69	45	14	5	2	5
Newark, N.J.	71	45	14	8	—	6							
N.Y. City, N.Y.	1,581	1,087	340	106	18	80	W.S. CENTRAL	896	505	221	74	43	35
Paterson, N.J.	29	19	5	4	1	1	Austin, Tex.	48	30	10	4	1	—
Philadelphia, Pa.†	154	100	31	12	7	14	Baton Rouge, La.	27	22	2	2	—	—
Pittsburgh, Pa.†	65	36	22	3	—	—	Corpus Christi, Tex.	52	31	9	8	2	3
Reading, Pa.	34	31	2	1	—	3	Dallas, Tex.	162	87	41	17	7	5
Rochester, N.Y.	96	69	18	4	2	4	El Paso, Tex.	41	25	11	2	2	4
Schenectady, N.Y.	27	20	5	—	2	2	Fort Worth, Tex.	48	23	13	5	4	6
Scranton, Pa.†	22	18	4	—	—	2	Houston, Tex.	250	132	73	24	3	2
Syracuse, N.Y.	90	63	19	5	—	3	Little Rock, Ark.	26	17	5	1	2	2
Trenton, N.J.	38	25	12	1	—	1	New Orleans, La.	83	40	19	4	16	—
Utica, N.Y.	22	15	5	1	1	1	San Antonio, Tex.	105	67	23	6	2	—
Yonkers, N.Y.	42	33	6	3	—	7	Shreveport, La.	17	9	6	1	—	4
							Tulsa, Okla.	37	22	9	—	—	—
E.N. CENTRAL	1,912	1,209	452	127	60	64	MOUNTAIN	642	391	150	46	12	42
Akron, Ohio	90	55	24	5	5	—	Albuquerque, N. Mex.	51	15	12	10	1	5
Canton, Ohio	57	36	15	4	—	2	Colo. Springs, Colo.	37	21	13	3	—	6
Chicago, Ill.	500	309	122	34	20	10	Denver, Colo.	115	76	26	7	1	3
Cincinnati, Ohio	116	75	29	5	3	16	Las Vegas, Nev.	69	36	22	7	2	2
Cleveland, Ohio	139	84	36	8	5	2	Ogden, Utah	16	9	4	—	3	9
Columbus, Ohio	87	57	21	5	3	5	Phoenix, Ariz.	175	119	42	9	2	3
Dayton, Ohio	77	64	10	2	1	2	Pueblo, Colo.	13	9	4	—	—	1
Detroit, Mich.	135	71	37	19	6	3	Salt Lake City, Utah	65	38	7	5	1	8
Evansville, Ind.	42	27	8	2	1	2	Tucson, Ariz.	101	68	20	5	2	—
Fort Wayne, Ind.	46	30	12	2	—	5							
Gary, Ind.	16	7	7	1	1	1	PACIFIC	1,702	1,166	342	102	44	89
Grand Rapids, Mich.	44	29	8	2	2	1	Berkeley, Calif.	28	18	6	3	—	6
Indianapolis, Ind.	136	86	32	10	4	1	Fresno, Calif.	56	39	9	3	2	2
Madison, Wis.	40	26	8	3	2	4	Glendale, Calif.	39	31	5	2	—	4
Milwaukee, Wis.	128	90	29	4	1	1	Honolulu, Hawaii	49	30	14	2	2	6
Peoria, Ill.	22	15	6	—	—	3	Long Beach, Calif.	121	86	24	9	1	16
Rockford, Ill.	36	26	7	1	2	2	Los Angeles, Calif.	447	307	81	36	11	10
South Bend, Ind.	35	29	3	2	—	2	Oakland, Calif.	99	69	16	7	5	7
Toledo, Ohio	86	43	22	15	3	2	Pasadena, Calif.	35	25	9	1	—	—
Youngstown, Ohio	80	50	16	3	1	—	Portland, Oreg.	129	89	26	5	4	2
							Sacramento, Calif.	76	48	19	4	3	2
W.N. CENTRAL	629	430	135	28	30	36	San Diego, Calif.	149	94	37	8	4	5
Des Moines, Iowa	26	19	4	1	2	2	San Francisco, Calif.††	145	100	29	8	3	20
Duluth, Minn.	34	25	6	2	1	—	San Jose, Calif.	158	111	29	10	3	—
Kansas City, Kans.	29	20	8	1	—	1	Seattle, Wash.	83	56	22	1	3	5
Kansas City, Mo.	121	77	29	5	10	10	Spokane, Wash.	52	38	10	1	3	1
Lincoln, Nebr.	13	12	1	—	—	—	Tacoma, Wash.	36	25	6	2	—	—
Minneapolis, Minn.	77	49	16	5	6	9							
Omaha, Nebr.	75	55	15	2	2	1							
St. Louis, Mo.	136	88	34	5	6	4							
St. Paul, Minn.	55	43	10	1	1	3							
Wichita, Kans.	63	42	12	6	2	6	TOTAL	10,756	7,022	2,414	694	282	548

*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

Measles — Florida

In the period March 20-April 16, 1980, an outbreak of measles was reported in an elementary school in Volusia County, Florida. All cases had a generalized maculopapular rash of ≥ 3 days' duration, temperature ≥ 101 F (39.3 C), and at least 1 of the following: cough, coryza, or conjunctivitis.

The Florida State Department of Health and Rehabilitation Services began an epidemiologic investigation on April 7 following reports of 14 cases in children that attended the same school. Surveillance for cases included 1) calling local pediatricians and hospital emergency-room staff; 2) publicizing the outbreak through the media, and 3) distributing questionnaires concerning rash illnesses to the families of school children. Questionnaires were completed for 80% of the 1,146 students enrolled in the school. All of the children with rash illnesses at that school were interviewed to verify the illness as measles. Two cases were confirmed serologically by measles hemagglutination-inhibition antibody testing.

A total of 39 cases of measles were identified in the school. The sources of initial reporting of cases were 1) private physicians, 69%; 2) school questionnaires, 10%; 3) the

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

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

DISEASE	52nd WEEK ENDING		MEDIAN 1975-1979	CUMULATIVE, FIRST 52 WEEKS		
	December 27, 1980	December 29, 1979		December 27, 1980	December 29, 1979	MEDIAN 1975-1979
Aseptic meningitis	80	164	99	7,341	8,505	4,691
Brucellosis	3	11	6	176	206	222
Chickenpox	3,186	3,565	3,550	184,308	196,465	182,250
Diphtheria	—	—	2	5	60	86
Encephalitis: Primary (arthropod-borne & unspec.)	13	23	25	1,107	1,104	1,185
Post-infectious	1	6	6	213	246	246
Hepatitis, Viral: Type B	252	586	375	18,292	15,318	15,091
Type A	358	882	806	28,155	30,172	30,874
Type unspecified	134	321	183	11,828	10,666	8,795
Malaria	16	42	13	1,916	849	531
Measles (rubeola)	13	151	252	13,406	13,600	26,915
Meningococcal infections: Total	44	80	77	2,662	2,622	1,819
Civilian	44	80	73	2,648	2,602	1,804
Military	—	—	1	14	20	21
Mumps	61	239	376	8,438	13,920	20,964
Portusis	17	74	32	1,612	1,570	1,570
Rubella (German measles)	22	47	138	3,803	11,680	16,210
Tetanus	2	1	4	74	76	84
Tuberculosis	487	848	800	27,425	28,058	30,329
Tularemia	3	6	6	223	196	144
Typhoid fever	4	4	9	492	517	405
Typhus fever, tick-borne (Rky. Mt. spotted)	2	24	13	1,132	1,077	1,050
Veneral diseases:						
Gonorrhea: Civilian	9,445	18,569	16,944	1,000,188	1001,673	1001,673
Military	222	568	308	26,295	27,775	27,775
Syphilis, primary & secondary: Civilian	292	524	343	27,237	25,114	23,724
Military	3	6	4	317	319	319
Rabies in animals	59	103	46	6,218	4,978	2,971

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1980	CUM. 1980
Anthrax	1	8
Botulism	69	6
Cholera	9	103
Congenital rubella syndrome Fla. 1	47	—
Leprosy III. 2	222	124
Leptospirosis	74	73
Plague	18	
Poliomyelitis: Total		
Paralytic		
Psittacosis		
Rabies in man		
Trichinosis Conn. 1, Pa. 1, Mo. 1		
Typhus fever, flea-borne (endemic, murine)		

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

Measles — Continued

health department clinic, 10%; 4) parents, 5%; 5) hospitals, 3%; and 6) the school "sick room" log, 3%. The index case in the school, whose source of illness could not be determined, occurred in a 10-year-old fourth-grade student. He had onset of fever, cough, coryza, and conjunctivitis on March 17; his rash began on March 20 (Figure 2). Cases continued to occur until April 16, although most (92%) occurred in the period March 28-April 7.

Substantial transmission probably took place on March 17 at a school concert, when the first and fourth grades were seated together for a half-hour period. Transmission may also have occurred at lunch since both grades lunched together.

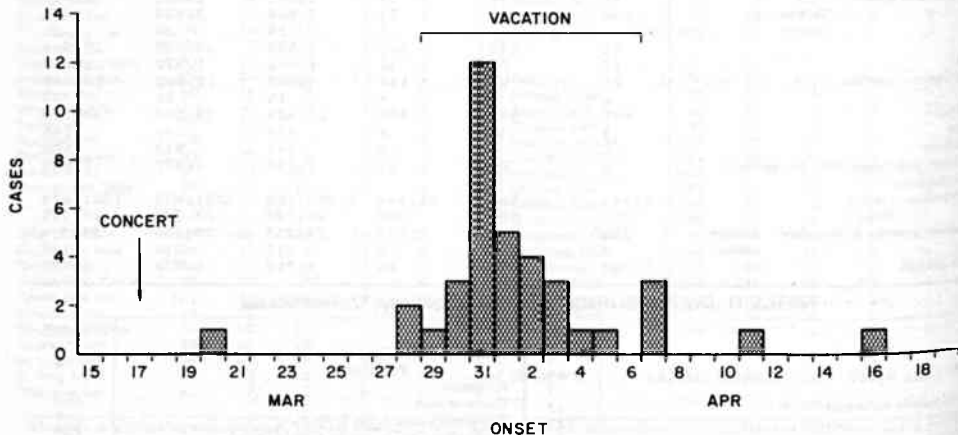
An evaluation of measles vaccine effectiveness by month of age at the time of vaccination was conducted for the first- and fourth-grade students because attack rates were highest in these classes (7.8% and 7.4%, respectively). School immunization records were reviewed to determine the precise month of vaccination for both ill and well children. The highest attack rates occurred in persons vaccinated before 12 months of age, followed by persons vaccinated at 12 months. There were no statistically significant differences between measles attack rates by the month of age at which persons were vaccinated (Table 2).

Reported by HU King, MD, CM Pope, RN, S Shelton, RN, L Swartz, Volusia County Health Dept; Immunization Program, and RA Gunn, MD, State Epidemiologist, Florida State Dept of Health and Rehabilitative Services; Field Services Div, Bur of Epidemiology, and Immunization Div, Bur of State Services, CDC.

Editorial Note: This outbreak illustrates the importance of intensive case ascertainment. If physicians alone had been contacted, approximately 30% of the cases would not have been reported.

Although the difference in attack rates for those vaccinated against measles at 12 months of age versus those vaccinated at an older age was not statistically significant, a similar increased relative risk of measles in those vaccinated at 12 months of age has been observed in at least 4 other outbreaks (1-4). In none of these outbreaks were the

FIGURE 2. Measles cases, by date of rash onset,* Volusia County, Florida, March 15-April 19, 1980.



*Unknown for 1 patient.

Measles - Continued

TABLE 2. Comparative efficacy of measles vaccine, by age at vaccination, Florida, 1980

Age at vaccination (months)	Number of vaccine failures	Number of vaccine successes	Attack rate (%)	Relative risk*	P value
< 12	5	32	13.5	2.17	NS†
12	10	89	10.1	1.63	NS
13-14	2	43	4.4	0.17	NS
≥ 15	9	137	6.2	1.00	

*Relative to the risk for persons vaccinated at ≥ 15 months of age.

†Not significant.

differences statistically significant. One of the reasons for not observing a statistical difference in this investigation or in the other 4 outbreaks investigated may be the small size of the populations studied. In the Florida investigation, if the attack rate in persons vaccinated at ≥ 15 months of age were held constant and the attack rate in persons vaccinated at 12 months varied, the smallest statistically significant relative risk would be 2.4. Even though there were no significant differences in these 5 outbreaks, the fact that all these studies of clinical vaccine efficacy show the same trends implies that vaccination at 12 months of age has a slightly lower efficacy than vaccination at an older age. As further evidence, another study noted a stepwise decrease in relative risks by month of age of vaccination from 12 months to ≥ 15 months (5), and 2 other investigations of outbreaks have shown either a statistically significant or borderline significant increased risk in persons vaccinated at 12 months of age compared to an older age (6,7). Thus, all of these data are consistent with the Immunization Practices Advisory Committee (ACIP) recommendation that the optimal age for measles vaccination is 15 months. The data also show that the differences in vaccine efficacy between persons vaccinated at 12 months of age versus older ages are small, supporting the ACIP recommendation that persons vaccinated at 12 months need not be routinely revaccinated.

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(Continued on page 628)

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The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Send reports to: Attn: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

Send mailing list additions, deletions, and address changes to: Attn: Distribution Services, Management Analysis and Services Office, 1-SB-419, Centers for Disease Control, Atlanta, Georgia 30333. Or call 404-329-3219. When requesting changes be sure to give your former address, including zip code and mailing list code number, or send an old address label.

Measles — Continued

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Errata, Vol. 29

No. 39 p471. In the article, "Measles Vaccine Efficacy — United States," in the equation $PCV = \frac{PPV - (PPV \times VE)}{1 - (PPV \times VE)}$, percentage values of PPV and VE must be converted to decimal fraction equivalents (e.g., 47% becomes 0.47) before computation in order to produce correct results. The resultant value of PCV will be a decimal fraction and will require conversion to percentage by multiplying by 100%. Thus, the corrected equation will read:

$$PCV = \frac{PPV - (PPV \times VE)}{1 - (PPV \times VE)} \times 100\%$$

No. 44 p530. In the article "Influenza—United States, Worldwide," the first name in the credits was misspelled. It should read LA Drew, MD.

No. 46 p554. In the article "Contaminated Povidone-Iodine Solution—Northeastern United States," the following names of contributors from New York City were inadvertently omitted: M Malowany, MD, J Kittick, and M Good.

No. 49 p597. In the article "Legionellosis—Italy," first complete paragraph, fifth line, delete the phrase "and sinks." In the credits 2 names were misspelled. The first name in the third line should read Prof. F. Bergamini; the last name in the fourth line should read Dr. A. Gavazzoni.

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