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MORBIDITY AND MORTALITY WEEKLY REPORT

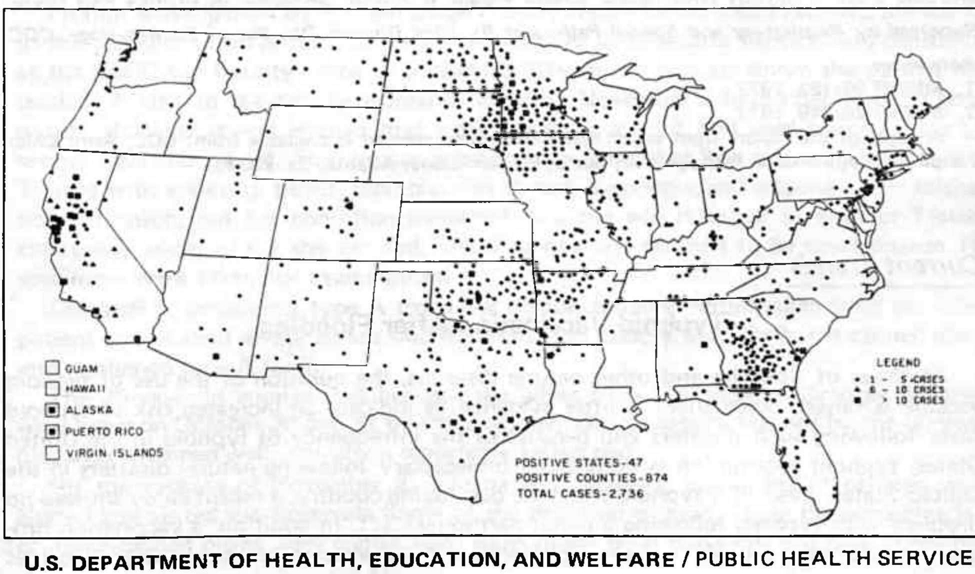
Surveillance Summary

Rabies — United States, 1977

A total of 3,182 laboratory-confirmed cases of rabies were reported in the United States and areas under U.S. jurisdiction (Guam, Puerto Rico, and Virgin Islands) in 1977—36 more cases than for 1976 but approximately 7% below the annual average for the preceding 5 years. Forty-seven states and Puerto Rico reported infected animals; only the District of Columbia, Hawaii, Rhode Island, Vermont, Guam, and the Virgin Islands reported no rabies cases. States reporting over 100 cases were California (434), Texas (389), Minnesota (342), Oklahoma (243), Georgia (210), South Dakota (139), Iowa (134), North Dakota (122), and Arkansas (118). Sixteen states reported more cases of rabies in 1977 than in 1976, and 32 states and Puerto Rico reported less. Ninety-seven percent of the reported cases occurred in 7 kinds of animals: skunks, 51%; bats, 20%; raccoons, 9%; cattle, 6%; foxes, 4%; dogs, 4%; and cats, 3%. One case of human rabies was reported. A laboratory technician who worked in the rabies laboratory of the New York Department of Health is surviving with sequelae 1 year after infection (*1,2*).

Of the total 3,182 rabies cases reported, 2,736 occurred in wild animals (approximately 86% of the total cases) (Figure 1), and 445 occurred in domestic animals (14%). The major wildlife hosts were skunks (59.6%), bats (23.3%), raccoons (10.3%), foxes (4.5%), and mongooses (1.4%).

FIGURE 1. Counties reporting wild animal rabies, 1977



Rabies — Continued

Skunks: For the 17th consecutive year, infected skunks were the animals most frequently reported. States that reported over 100 cases in skunks were Minnesota (260), Texas (257), California (247), Oklahoma (188), and South Dakota (105).

Bats: Forty-three states reported a total of 637 cases of rabies in bats in 1977, 100 fewer cases than in the previous year but 17% higher than the annual average for the preceding 5-year period. In 12 states the only rabies cases in wildlife that were reported occurred in bats; these states were Colorado, Connecticut, Delaware, Idaho, Maryland, Massachusetts, Mississippi, Nevada, New Hampshire, New Jersey, North Carolina, and Oregon. For the eighth consecututve year California reported the largest number of cases (166), followed by Colorado (56), and Texas (51). Cases of rabies in bats continued to be more widely distributed than those in any other animal host.

Racoons: Thirteen states reported that 281 cases of rabies had occurred in raccoons, 4 more cases than were reported in the previous year and 97 more than the annual average for the preceding 5 years. This is the highest number of cases ever reported for a year. Georgia (175) and Florida (69) reported 87% of the total cases. Except for an outbreak of 17 cases that occurred in South Carolina, which may have resulted from infected raccoons from Georgia and/or Florida crossing state boundaries, the other cases were scattered and did not appear to be geographically or temporally associated.

Foxes: Eighteen states reported 122 fox rabies cases in 1977, 65 fewer than in 1976 and the lowest total of such cases reported in any year on record. Only 2 states reported foxes as the animals most frequently infected: Alaska and Maine. The states reporting the most cases were Alaska (34), Maine (24), and New York (19).

Other: Various other wildlife species also were reported as positive for rabies in 1977. Thirty-eight cases of mongoose rabies were reported by Puerto Rico, where rabies is enzootic in this species. Other cases occurred in wolves (3), weasels (2), opossums (2), an otter, a mink, a ringtail, and a woodchuck.

Domestic animals: Thirty states and Puerto Rico reported that 445 cases had occurred in domestic animals in 1977, 25 more cases than in 1976 and 31% below the average annual total for the preceding 5 years. Cases occurred in 186 cattle, 120 dogs, 108 cats, 18 horses and mules, 10 sheep and goats, and 3 swine. Generally, cases in domestic animals were reported from areas where rabies is highly endemic in skunks and foxes.

Reported by Respiratory and Special Pathogens Br, Viral Diseases Div, Bur of Epidemiology, CDC.

References

1. MMWR 26:183, 1977
2. MMWR 26:249, 1977

▲ A copy of the report from which these data were derived is available from: CDC, Attn: Chief, Respiratory and Special Pathogens Br, Bur of Epidemiology, Atlanta, Ga. 30333.

Current Trends

Typhoid Vaccination After Flooding

At times of flooding and other natural disasters, the question of the use of typhoid vaccine is raised. Since there is little evidence to indicate an increased risk of typhoid fever following such disasters and because of the infrequency of typhoid in the United States, typhoid vaccination is considered unnecessary following natural disasters in the United States. Even in a typhoid-endemic, developing country, a recent study showed no problem with typhoid following a major earthquake (*1*). In addition, a vaccination program would not provide universal protection, risks vaccine reaction, often provides

Typhoid Vaccination — Continued

protection after the time of greatest risk, and is an unnecessary expenditure of often scarce emergency health resources.

Of much greater practical importance in disease prevention during natural disasters is boiling water or taking other appropriate measures to insure a safe drinking water supply. Such measures provide immediate protection against typhoid and other waterborne diseases.

Reported by Enteric Diseases Br, Bacterial Diseases Div, Bur of Epidemiology, CDC.

Reference

1. Spencer HC, Campbell CC, Romero A: Disease surveillance and decision-making after the 1976 Guatemala earthquake. Lancet 2:181-184, 1977

Epidemiologic Notes and Reports

Botulism — California

On November 2, 1978, a San Diego County neurologist reported possible botulism in a 48-year-old housewife of Hispanic descent. The patient had become ill on October 31 with symptoms of nausea, vomiting, diarrhea, increasing general weakness, and lassitude. On November 1, she had been taken to an outpatient medical clinic, where gastroenteritis was diagnosed, and medication was prescribed. She was then sent home. Throughout the day, she continued to have diarrhea; she became weaker and developed ptosis and sore throat. At 1 AM on November 2, she visited an emergency room, complaining of weakness and blurred vision. Myasthenia was suspected; a tensilon test, however, was negative. She was released later that morning to the care of a private physician. He admitted her to a hospital intensive care unit because of severe, progressive, proximal muscle weakness and respiratory difficulty. A consulting neurologist at the hospital suspected botulism. At noon, she underwent nasotracheal intubation and was placed on a mechanical respirator. Botulinal antitoxin was administered about 8 hours later. The next day, she had a tracheostomy.

Prompt investigation by the San Diego County Health Department revealed the source of the problem to be olives that were home-canned in Ensenada, Mexico, and consumed at the San Diego County home of a disabled 80-year-old woman whom the patient had tended. A visit to the elderly woman's home on November 2 found her to be in good health. However it was learned that a third woman, age 79, had been staying there for several days and was ill. This woman was taken on November 2 to an emergency room in Tijuana with vomiting, ptosis, diplopia, sore throat, dysphagia, and weakness. She refused hospitalization, but her condition worsened, and she was returned to another Tijuana emergency room where she expired. The diagnosis was thought to be heart disease. No specimens were taken for examination.

Clostridium botulinum type A toxin was demonstrated in serum taken from the index patient and studied at the state's Microbial Diseases Laboratory. The home-canned olives also contained type A toxin.

The 79-year-old woman had brought the olives from Ensenada on October 26; they were eaten on October 30 and 31 by the 2 women who became ill but not by the 80-year-old, who remained well. The olives reportedly tasted bad.

On the evening of November 2, Tijuana and Ensenada public health officials were alerted and visited the Ensenada home of the deceased woman. There the remaining jars of home-canned olives were confiscated; some olives from these jars had been consumed

Botulism — Continued

without incident and were reputedly tasty. They had been processed by being soaked in lye for 12-16 hours, than soaked in several changes of water for 8 days, and finally covered with vinegar-salt brine in separate gallon containers. The only difference noted between the olives still in Ensenada and those in San Diego County was the lack of brine covering the San Diego olives.

As of December 11, the 48-year-old patient remains in stable condition in a community hospital. She no longer needs respiratory assistance.

Reported by D Casillas, MD, R Moncado, MD, PK Raffer, MD, Chula Vista; DG Ramras, MD, RB Redmond, RS, MS, G Renger, BS, RS, WA Townsend, MD, DrPH, San Diego County Health Dept; Dr. A.G. Vera, Mexicali General Hospital; Dr. R. Casteneda, Tijuana Public Health Dept; Dr. T. Cota, Ensenada Public Health Dept: T Midura, PhD, SB Werner, MD, California Dept of Health Services, in the California Morbidity Weekly Report, No. 46, November 24, 1978.

Editorial Note: Although the California-Baja California (Mexico) Binational Health Council has been active for 36 years, in the past 2 years it has intensified its efforts to update its communications network among health officials in both countries. The Council now has very active subcommittees in the areas of emergency medicine, zoonosis, venereal disease, drug dependency, maternal and child health, environmental health, nursing, and epidemiology. The immediate use of this communications network and prompt investigation by public health officials north and south of the border may have prevented further cases of botulism in this outbreak.

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

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

DISEASE	49th WEEK ENDING		MEDIAN 1973-1977**	CUMULATIVE, FIRST 49 WEEKS		
	December 9, 1978	December 10, 1977*		December 9, 1978	December 10, 1977*	MEDIAN 1973-1977**
Aseptic meningitis	103	75	63	5,831	4,446	3,939
Brucellosis	5	3	4	153	213	213
Chickenpox	3,684	2,961	2,834	140,261	177,189	155,815
Diphtheria	–	–	2	72	80	180
Encephalitis: Primary (arthropod-borne & unspec.)	24	23	23	992	1,100	1,347
Post-infectious	3	2	3	189	198	254
Hepatitis, Viral: Type B	260	393	268	13,879	15,459	11,111
Type A	586	706	706	27,368	28,921	32,706
Type unspecified	241	223		8,602	8,368	
Malaria	8	10	8	674	508	396
Measles (rubeola)	272	170	233	26,177	54,398	26,042
Meningococcal infections: Total	51	32	32	2,208	1,671	1,343
Civilian	51	32	31	2,185	1,660	1,315
Military	–	–	–	23	11	26
Mumps	314	402	926	15,622	19,817	53,244
Pertussis	36	69	---	1,922	1,863	---
Rubella (German measles)	127	115	123	17,477	19,744	15,883
Tetanus	–	1	2	76	77	85
Tuberculosis	543	555	598	27,442	28,255	29,340
Tularemia	2	1	2	134	152	133
Typhoid fever	7	7	7	487	371	385
Typhus fever, tick-borne (Rky. Mt. spotted)	5	2	2	999	1,111	802
Venereal diseases:						
Gonorrhea: Civilian	21,421	19,430	19,453	956,230	943,353	943,353
Military	643	662	662	24,289	25,325	27,313
Syphilis, primary & secondary: Civilian	453	386	397	20,425	19,266	22,536
Military	6	3	4	286	292	324
Rabies in animals	51	35	46	2,976	2,885	2,783

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1978		CUM. 1978
Anthrax	5	Poliomyelitis: Total	4
Botulism	71	Paralytic	2
Cholera	12	Psittacosis (Iowa 1, Ark. 1, Wash. 1, Oreg. 3)	106
Congenital rubella syndrome	25	Rabies in man †	1
Leprosy (Tex. 1, Calif. 3)	150	Trichinosis	48
Leptospirosis	59	Typhus fever, flea-borne (endemic, murine)	38
Plague	8		

*Delayed reports received for calendar year 1977 are used to update last year's weekly and cumulative totals.

**Medians for gonorrhea and syphilis are based on data for 1975-1977.

†The following delayed report will be added to next week's cumulative total: Rabies in man: Oreg. +1

TABLE III. Cases of specified notifiable diseases, United States, weeks ending December 9, 1978, and December 10, 1977 (49th week)

REPORTING AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
						Primary		Post-infectious	B	A	Unspecified		
	1978	1978	1978	1978	CUM. 1978	1978	1977*	1978	1978	1978	1978	1978	CUM. 1978
UNITED STATES	103	5	3,684	–	72	24	23	3	260	586	241	8	674
NEW ENGLAND	1	–	572	–	–	1	2	–	10	20	6	1	30
Maine †	1	–	153	–	–	–	–	–	–	4	–	1	2
N.H. †	–	–	–	–	–	–	–	–	–	1	–	–	4
Vt. †	–	–	36	–	–	–	–	–	–	1	–	–	–
Mass.	–	–	167	–	–	–	–	–	2	4	4	–	7
R.I.	–	–	150	–	–	–	–	–	–	4	–	–	5
Conn.	–	–	66	–	–	1	2	–	8	6	2	–	12
MID. ATLANTIC	18	–	387	–	1	3	2	–	26	24	23	2	145
Upstate N.Y.	7	–	199	–	–	3	–	–	6	15	10	2	21
N.Y. City	3	–	30	–	1	–	–	–	6	5	6	–	65
N.J. †	–	–	NN	–	–	–	–	–	14	4	7	–	28
Pa.	8	–	158	–	–	–	2	–	NA	NA	NA	–	31
E.N. CENTRAL	8	–	1,145	–	–	3	11	–	36	94	11	–	49
Ohio	–	–	101	–	–	2	6	–	7	27	–	–	8
Ind. †	–	–	–	–	–	–	–	–	2	8	5	–	4
Ill.	1	–	15	–	–	–	1	–	14	24	2	–	14
Mich.	6	–	692	–	–	1	2	–	12	30	3	–	21
Wis. †	1	–	337	–	–	–	2	–	1	5	1	–	2
W.N. CENTRAL	7	1	683	–	2	3	1	–	18	66	7	–	26
Minn.	–	–	1	–	–	–	–	–	9	19	–	–	4
Iowa †	–	–	255	–	–	3	1	–	2	1	–	–	–
Mo.	4	–	137	–	1	–	–	–	3	36	–	–	10
N. Dak. †	–	–	15	–	–	–	–	–	–	–	–	–	–
S. Dak.	–	–	26	–	–	–	–	–	–	–	–	–	1
Nebr. †	3	1	41	–	1	–	–	–	–	7	–	–	5
Kans.	–	–	208	–	–	–	–	–	4	3	7	–	6
S. ATLANTIC	9	1	315	–	–	3	–	1	77	89	40	–	116
Del.	–	–	4	–	–	–	–	–	–	–	–	–	1
Md.	–	–	70	–	–	1	–	–	14	14	15	–	25
D.C.	–	–	–	–	–	–	–	–	–	3	–	–	6
Va. †	2	–	36	–	–	–	–	1	9	7	8	–	22
W. Va. †	–	–	157	–	–	–	–	–	1	6	–	–	1
N.C.	3	–	NN	–	–	2	–	–	5	5	8	–	10
S.C.	2	–	7	–	–	–	–	–	1	2	2	–	4
Ga. †	–	–	–	–	–	–	–	–	8	19	–	–	12
Fla.	2	1	41	–	–	–	–	–	39	33	7	–	35
E.S. CENTRAL	2	1	6	–	–	5	1	1	10	19	4	–	6
Ky.	NA	NA	NA	NA	–	NA	–	–	NA	NA	NA	NA	2
Tenn.	–	1	NN	–	–	–	–	–	6	11	4	–	1
Ala.	–	–	4	–	–	2	–	–	3	2	–	–	1
Miss.	2	–	2	–	–	3	1	1	1	6	–	–	2
W.S. CENTRAL	14	2	155	–	1	1	3	–	24	83	81	–	32
Ark.	2	–	1	–	1	–	–	–	5	–	15	–	1
La.	1	–	NN	–	–	–	–	–	5	16	2	–	3
Okla. †	–	2	–	–	–	–	–	–	2	3	8	–	1
Tex.	11	–	154	–	–	1	3	–	12	64	56	–	27
MOUNTAIN	6	–	87	–	4	–	–	–	6	45	28	–	9
Mont.	–	–	24	–	–	–	–	–	–	1	–	–	–
Idaho	–	–	–	–	–	–	–	–	–	3	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–	–	–	–	–
Colo.	3	–	41	–	2	–	–	–	2	10	4	–	5
N. Mex.	–	–	–	–	–	–	–	–	–	8	–	–	1
Ariz.	–	–	NN	–	1	–	–	–	1	18	22	–	2
Utah	3	–	21	–	–	–	–	–	2	2	–	–	–
Nev.	–	–	1	–	1	–	–	–	1	3	2	–	1
PACIFIC	38	–	334	–	64	5	3	1	53	146	41	5	261
Wash.	5	–	213	–	60	2	–	–	6	46	8	–	8
Oreg.	3	–	1	–	–	1	2	–	2	11	7	–	9
Calif. †	29	–	–	–	1	2	1	1	45	83	23	4	217
Alaska	–	–	116	–	3	–	–	–	–	–	1	–	4
Hawaii	1	–	4	–	–	–	–	–	–	6	2	1	23
Guam	NA	NA	NA	NA	–	NA	–	–	NA	NA	NA	NA	–
P.R. †	–	–	7	–	–	–	–	–	1	3	6	–	4
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	1
Pac. Trust Terr.	–	–	8	–	–	–	–	–	–	–	6	–	–

NN: Not notifiable. NA: Not available.

*Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

†The following delayed reports will be reflected in next week's cumulative totals: Asep. meng.: N.J. +1, Ind. +4, Iowa +16; Bruc.: P.R. –1; Chickenpox: Maine +1, Nebr. +12, W.Va. +15, Calif. +27; Enceph.: Ind. +3; Hep. B.: Vt +3, Wis. –1, N. Dak. +1, Ga. +4, Okla. +1; Hep. A.: N.H. +2, N. Dak. +5, Va. –1, Ga. +11, Okla. +1; Hep. unsp.: N. Dak. +1, Va. –2, Okla. –1.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending December 9, 1978, and December 10, 1977 (49th week)

REPORTING AREA	MEASLES (RUBEOLA)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1978	CUM. 1978	CUM. 1977*	1978	CUM. 1978	CUM. 1977*	1978	CUM. 1978	1978	1978	CUM. 1978	CUM. 1978
UNITED STATES	272	26,177	54,398	51	2,208	1,671	314	15,622	36	127	17,477	76
NEW ENGLAND	4	2,053	2,517	6	127	73	23	870	–	10	794	3
Maine	–	1,319	173	–	10	4	20	567	–	–	155	–
N.H.	–	84	511	1	10	4	–	17	–	–	107	–
Vt.	1	53	294	–	2	7	–	6	–	5	32	2
Mass.	3	261	641	1	44	23	1	96	–	5	254	–
R.I.	–	8	64	–	20	2	–	53	–	–	42	–
Conn.	–	328	834	4	41	33	2	131	–	–	204	1
MID. ATLANTIC	7	2,254	8,529	8	369	228	25	746	3	18	3,091	5
Upstate N.Y.	2	1,425	3,863	3	118	51	10	242	2	11	558	2
N.Y. City	3	394	800	1	82	63	2	163	–	1	147	–
N.J.	–	74	205	2	74	55	10	166	1	–	1,620	–
Pa.	2	361	3,661	2	95	59	3	175	–	6	766	3
E.N. CENTRAL	80	11,389	11,793	4	237	189	162	6,426	[illegible]	60	8,725	4
Ohio	–	494	1,861	2	75	69	63	1,296	1	–	1,382	1
Ind.†	–	217	4,368	1	41	15	–	351	–	–	627	1
Ill.	35	1,271	1,882	–	30	40	32	2,011	10	20	1,814	1
Mich.	35	7,893	1,210	1	76	49	32	1,555	5	35	3,316	1
Wis.	10	1,514	2,472	–	15	16	35	1,213	2	5	1,586	–
W.N. CENTRAL	36	515	9,535	1	78	70	14	2,030	–	10	703	9
Minn.	–	40	2,634	–	23	19	–	22	–	–	130	2
Iowa†	4	62	4,318	–	5	10	–	171	–	1	64	–
Mo.	31	103	1,048	1	32	26	2	1,176	–	4	115	2
N. Dak.	–	211	29	–	3	1	–	17	–	–	82	–
S. Dak.	–	–	75	–	3	6	1	8	–	–	112	1
Nebr.	–	5	214	–	–	2	–	26	–	–	34	–
Kans.	1	94	1,217	–	12	6	11	610	–	5	166	4
S. ATLANTIC	33	5,472	4,712	14	555	376	26	968	7	7	1,076	17
Del.	–	7	22	–	19	23	1	57	–	–	38	–
Md.	–	51	372	–	38	27	2	82	–	–	7	2
D.C.	–	2	14	–	2	1	–	2	–	–	1	–
Va.†	–	2,836	2,751	3	69	36	5	190	–	1	248	1
W. Va.	1	1,066	272	–	17	10	2	187	1	1	337	–
N.C.	–	122	65	1	103	77	–	79	–	1	199	3
S.C.	–	199	161	4	41	38	1	18	2	1	30	4
Ga.†	–	36	769	–	62	51	1	71	3	1	28	–
Fla.	32	1,153	286	6	204	113	14	282	1	2	188	7
E.S. CENTRAL	–	1,433	2,059	5	180	167	3	1,241	–	1	539	5
Ky.	NA	122	1,191	–	31	32	NA	261	NA	NA	148	2
Tenn.	–	963	739	4	49	45	1	459	–	–	208	–
Ala.	–	101	79	1	50	55	–	431	–	1	25	–
Miss.	–	247	50	–	50	35	2	90	–	–	158	3
W.S. CENTRAL	25	1,298	2,205	4	305	314	32	1,946	3	3	967	15
Ark.	–	16	35	–	23	20	2	620	–	–	58	1
La.	–	351	82	1	123	138	–	65	–	2	488	2
Okla.	–	19	67	1	20	15	–	4	–	–	17	3
Tex.	25	912	2,021	2	139	141	30	1,257	3	1	404	9
MOUNTAIN	1	265	2,557	1	52	43	12	460	1	2	225	4
Mont.	1	106	1,163	1	6	7	1	148	–	–	18	–
Idaho	–	1	163	–	5	7	–	22	–	1	3	1
Wyo.	–	–	19	–	–	2	–	2	–	–	–	–
Colo.	–	37	512	–	3	1	–	109	1	–	49	1
N. Mex.	–	–	257	–	11	11	–	20	–	–	3	–
Ariz.	–	57	327	–	15	10	1	22	–	1	101	–
Utah	–	44	23	–	6	4	10	129	–	–	38	2
Nev.	–	20	93	–	6	1	–	8	–	–	13	–
PACIFIC	86	1,498	10,491	8	305	211	17	935	4	16	1,357	14
Wash.	3	393	559	3	50	33	3	208	3	5	136	1
Oreg.	65	470	367	2	33	19	3	132	–	8	155	–
Calif.	18	622	9,469	3	207	121	9	552	1	3	1,046	13
Alaska	–	1	60	–	10	34	1	13	–	–	8	–
Hawaii	–	12	36	–	5	5	1	30	–	–	12	–
Guam	NA	25	9	–	1	1	NA	39	NA	NA	4	1
P.R.	12	303	1,030	–	10	1	51	1,602	1	–	17	10
V.I.	–	6	14	–	1	–	–	1	–	–	1	–
Pac. Trust Terr.	–	53	–	–	1	–	–	15	–	–	2	–

NA: Not available.

*Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

†The following delayed reports will be reflected in next week's cumulative totals: Measles: Va. –2, Men. inf.: Ind. +2, Iowa +5, Ga. +2; Pertussis: Ga. +1; Rubella: Ga. +1.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending December 9, 1978, and December 10, 1977 (49th week)

REPORTING AREA	TUBERCULOSIS		TULA-REMIA	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSF)		VENEREAL DISEASES (Civilian)						RABIES (in Animals)
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1978	CUM. 1978	CUM. 1978	1978	CUM. 1978	1978	CUM. 1978	1978	CUM. 1978	CUM. 1977*	1978	CUM. 1978	CUM. 1977*	CUM. 1978
UNITED STATES	543	27,442	134	7	487	5	999	21,421	956,230	943,353	453	20,425	19,266	2,976
NEW ENGLAND	16	901	2	-	78	-	13	644	24,308	25,472	21	560	771	96
Maine†	-	65	-	-	-	-	-	64	2,010	1,946	-	9	28	76
N.H.	-	15	-	-	5	-	-	21	1,117	1,062	-	5	5	3
Vt.	1	40	-	-	1	-	-	4	587	625	-	3	7	2
Mass.	13	534	-	-	60	-	5	260	10,605	10,821	19	348	534	7
R.I.	2	68	-	-	4	-	1	55	1,823	1,962	-	24	9	-
Conn.	-	179	2	-	8	-	7	240	8,166	9,056	2	171	188	8
MID. ATLANTIC	70	4,238	6	5	70	-	57	2,590	103,916	98,985	83	2,769	2,744	99
Upstate N.Y.	8	730	5	-	10	-	31	301	17,459	17,149	7	192	248	64
N.Y. City	29	1,352	1	5	45	-	4	1,100	39,313	38,204	59	1,930	1,736	-
N.J.	14	945	-	-	8	-	13	586	19,371	17,721	15	343	361	14
Pa.	19	1,211	-	-	7	-	9	603	27,773	25,911	2	304	399	21
E.N. CENTRAL	78	4,456	1	-	39	-	49	3,477	149,314	149,177	50	2,344	1,992	187
Ohio†	14	832	1	-	7	-	23	914	38,926	39,573	2	433	450	21
Ind.	6	514	-	-	2	-	1	478	15,074	13,855	2	164	150	13
Ill.	30	1,681	-	-	17	-	25	1,156	47,619	48,087	27	1,464	1,053	64
Mich.†	19	1,193	-	-	13	-	-	740	34,585	34,602	17	220	234	8
Wis.	9	236	-	-	-	-	-	189	13,110	13,060	2	63	105	81
W.N. CENTRAL	18	900	27	-	20	1	51	873	48,097	48,958	3	410	424	601
Minn.	4	153	-	-	7	-	-	125	8,060	8,754	1	148	147	186
Iowa	5	103	1	-	3	-	1	100	5,328	5,783	-	34	40	127
Mo.	6	403	22	-	5	-	23	435	21,299	20,094	1	138	160	82
N. Dak.	-	32	-	-	-	-	1	16	873	916	-	3	3	98
S. Dak.†	1	71	-	-	-	-	7	38	1,634	1,502	-	3	9	69
Nebr.	2	25	-	-	1	1	12	37	3,438	4,240	1	14	25	7
Kans.†	-	113	4	-	4	-	7	122	7,465	7,669	-	70	40	32
S. ATLANTIC	162	5,978	10	1	64	4	535	5,541	231,495	231,128	98	5,333	5,220	470
Del.	2	54	-	-	3	-	5	119	3,338	3,121	-	13	20	3
Md.†	19	892	5	-	11	-	105	778	29,946	28,961	5	406	310	-
D.C.	-	297	-	-	1	-	1	330	15,689	15,173	6	408	522	-
Va.	67	680	5	-	6	-	111	493	22,595	23,978	7	446	516	14
W. Va.	6	220	-	-	7	-	11	74	3,200	3,240	-	30	5	12
N.C.†	23	916	-	-	2	2	199	590	32,832	34,832	7	569	690	14
S.C.	13	515	-	-	9	-	56	486	22,814	21,911	3	271	236	113
Ga.	-	830	-	-	4	2	47	1,105	45,099	44,366	32	1,348	1,189	279
Fla.†	32	1,574	-	1	21	-	-	1,558	55,982	55,546	38	1,842	1,732	35
E.S. CENTRAL	31	2,601	7	-	10	-	180	1,303	80,640	83,144	27	1,079	747	155
Ky.	NA	593	3	NA	2	NA	42	NA	10,597	11,224	NA	141	106	73
Tenn.	11	790	3	-	3	-	111	290	29,493	33,328	19	370	237	31
Ala.	10	632	1	-	3	-	13	601	23,326	22,983	4	190	160	51
Miss.	10	586	-	-	2	-	14	412	17,224	15,609	4	378	244	-
W.S. CENTRAL	86	3,288	64	-	58	-	99	2,828	127,084	120,001	109	3,310	2,731	877
Ark.	6	379	40	-	9	-	16	240	9,405	8,984	2	70	64	146
La.†	21	587	6	-	4	-	2	442	20,836	18,257	21	693	607	22
Okla.	6	326	12	-	5	-	54	336	12,059	11,536	-	89	78	182
Tex.	53	1,996	6	-	40	-	27	1,810	84,784	81,224	86	2,458	1,982	527
MOUNTAIN	17	829	10	-	20	-	11	809	36,727	38,183	6	453	401	112
Mont.	-	58	-	-	3	-	2	51	2,049	2,022	-	9	6	19
Idaho	-	31	3	-	5	-	3	14	1,508	1,727	-	13	12	-
Wyo.	1	15	2	-	-	-	1	16	908	906	-	9	3	-
Colo.	-	106	1	-	4	-	2	224	10,148	9,984	4	147	118	38
N. Mex.	3	132	-	-	2	-	-	56	5,252	5,601	1	81	84	25
Ariz.	6	374	1	-	4	-	1	296	9,529	10,483	-	105	151	23
Utah†	4	40	3	-	1	-	-	72	2,010	2,310	-	13	11	7
Nev.	3	73	-	-	1	-	2	80	5,323	5,150	1	76	16	-
PACIFIC	65	4,251	7	1	128	-	4	3,356	154,649	148,305	56	4,167	4,236	379
Wash.†	NA	273	-	-	7	-	1	196	12,539	11,406	NA	213	247	2
Oreg.	3	176	4	-	1	-	2	284	10,490	10,250	1	161	134	12
Calif.	56	3,237	3	1	109	-	1	2,663	124,129	118,715	54	3,740	3,791	357
Alaska	-	66	-	-	-	-	-	159	4,794	4,904	-	12	27	8
Hawaii	6	499	-	-	11	-	-	54	2,697	3,030	1	41	37	-
Guam	NA	54	-	NA	-	NA	-	NA	123	207	NA	-	2	-
P.R.	11	369	-	-	3	-	-	25	2,075	2,986	14	476	517	36
V.I.	-	4	-	-	2	-	-	7	199	208	1	17	9	-
Pac. Trust Terr.	-	11	-	-	-	-	-	6	63	-	-	-	-	-

NA: Not available.

*Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

†The following delayed reports will be reflected in next week's cumulative totals: TB: Mich. –1, Kans, –2, Md. –11, N.C. –3, La. +20, Utah +3, Wash. +34; GC: Maine –1 civ., Fla. +938 civ. +9 mil., Wash. +114 mil; Syphilis: Fla. +39 civ., Wash. +28 civ. +1 mil; An. rabies: Ohio +1, S. Dak. +16.

TABLE IV. Deaths in 121 U.S. cities,* week ending December 9, 1978 (49th week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL
	ALL AGES	≥65	45-64	25-44	<1	
NEW ENGLAND	661	436	134	45	24	28
Boston, Mass.	176	103	39	14	10	10
Bridgeport, Conn.	43	28	11	2	1	3
Cambridge, Mass.	21	16	4	1	–	2
Fall River, Mass.	29	19	6	3	1	–
Hartford, Conn.	53	31	9	6	4	1
Lowell, Mass.	36	27	7	2	–	1
Lynn, Mass.	24	18	4	1	–	–
New Bedford, Mass.	19	12	5	–	2	1
New Haven, Conn.	50	33	7	6	2	1
Providence, R.I.	70	50	16	1	2	6
Somerville, Mass.	12	8	2	1	–	–
Springfield, Mass.	49	37	8	4	–	1
Waterbury, Conn.	22	19	2	–	–	–
Worcester, Mass.	57	35	14	4	2	2
MID. ATLANTIC	2,299	1,515	504	150	60	77
Albany, N.Y.	55	33	13	2	2	2
Allentown, Pa.	21	13	5	2	–	–
Buffalo, N.Y.	150	104	32	10	2	11
Camden, N.J.	29	22	2	–	1	–
Elizabeth, N.J.	22	16	3	2	–	1
Erie, Pa.†	40	32	8	–	–	4
Jersey City, N.J.	42	30	7	1	2	2
Newark, N.J.	54	29	14	5	3	3
N.Y. City, N.Y.	1,513	978	340	108	40	38
Paterson, N.J.	42	30	5	4	3	3
Philadelphia, Pa.†	290	186	74	12	13	11
Pittsburgh, Pa.†	34	26	7	–	–	1
Reading, Pa.	35	27	7	1	–	2
Rochester, N.Y.	116	88	19	3	3	8
Schenectady, N.Y.	28	19	5	4	–	–
Scranton, Pa.†	31	21	10	–	–	–
Syracuse, N.Y.	103	67	28	3	3	–
Trenton, N.J.	33	19	12	1	1	3
Utica, N.Y.	30	23	5	2	–	2
Yonkers, N.Y.	26	17	7	2	–	2
E.N. CENTRAL	2,441	1,461	627	144	120	68
Akron, Ohio	73	51	14	4	3	–
Canton, Ohio	47	27	19	–	–	3
Chicago, Ill.	634	350	184	45	30	16
Cincinnati, Ohio	129	78	28	4	15	4
Cleveland, Ohio	196	94	63	14	18	8
Columbus, Ohio	129	71	33	6	11	5
Dayton, Ohio	112	76	28	3	3	2
Detroit, Mich.	293	178	74	19	12	5
Evansville, Ind.	44	34	8	–	–	1
Fort Wayne, Ind.	38	26	4	5	1	3
Gary, Ind.	19	8	7	1	1	–
Grand Rapids, Mich.	60	30	20	4	5	1
Indianapolis, Ind.	149	93	34	7	8	2
Madison, Wis.	36	23	7	2	2	2
Milwaukee, Wis.	156	113	30	6	2	1
Peoria, Ill.	32	20	8	3	1	2
Rockford, Ill.	52	38	8	5	–	3
South Bend, Ind.	59	30	19	5	1	8
Toledo, Ohio	114	81	23	5	2	1
Youngstown, Ohio	69	40	16	6	5	1
W.N. CENTRAL	772	483	183	41	37	32
Des Moines, Iowa	49	34	13	1	–	5
Duluth, Minn.	29	20	3	1	4	2
Kansas City, Kans.	31	16	6	4	1	1
Kansas City, Mo.	142	89	36	8	4	8
Lincoln, Nebr.	30	20	6	–	1	–
Minneapolis, Minn.	93	56	23	8	5	3
Omaha, Nebr.	87	54	19	5	5	1
St. Louis, Mo.	174	101	44	10	15	6
St. Paul, Minn.	73	48	19	2	1	–
Wichita, Kans.	64	45	14	2	1	6
S. ATLANTIC	1,329	789	331	98	58	50
Atlanta, Ga.	149	76	47	14	–	3
Baltimore, Md.	137	91	36	5	3	1
Charlotte, N.C.	67	39	13	6	4	4
Jacksonville, Fla.	87	52	19	7	5	4
Miami, Fla.	110	53	34	8	13	–
Norfolk, Va.	52	33	14	2	2	3
Richmond, Va.	78	45	21	5	2	5
Savannah, Ga.	49	26	17	4	–	2
St. Petersburg, Fla.	98	83	12	1	1	5
Tampa, Fla.	63	44	13	3	2	5
Washington, D.C.	398	228	93	40	21	16
Wilmington, Del.	41	19	12	3	5	2
E.S. CENTRAL	670	387	190	47	21	15
Birmingham, Ala.	105	55	33	5	4	1
Chattanooga, Tenn.	43	24	13	4	2	3
Knoxville, Tenn.	46	28	10	5	2	–
Louisville, Ky.	128	66	36	12	8	6
Memphis, Tenn.	154	100	40	12	–	–
Mobile, Ala.	35	18	11	3	1	1
Montgomery, Ala.	50	35	12	2	–	1
Nashville, Tenn.	109	61	35	4	4	3
W.S. CENTRAL	1,302	697	357	99	71	41
Austin, Tex.	50	28	13	4	3	4
Baton Rouge, La.	32	20	9	1	1	4
Corpus Christi, Tex.	42	23	12	4	–	2
Dallas, Tex.	221	116	66	17	18	5
El Paso, Tex.	72	27	19	2	5	4
Fort Worth, Tex.	88	58	18	8	2	–
Houston, Tex.	307	143	90	34	17	7
Little Rock, Ark.	70	40	15	4	9	2
New Orleans, La.	114	66	30	9	4	–
San Antonio, Tex.	161	93	44	8	6	3
Shreveport, La.	44	29	8	4	1	3
Tulsa, Okla.	101	54	33	5	5	7
MOUNTAIN	570	345	158	30	17	21
Albuquerque, N.Mex.	58	36	12	5	1	6
Colo. Springs, Colo.	35	18	12	2	1	4
Denver, Colo.	107	62	33	6	2	3
Las Vegas, Nev.	67	32	25	4	1	4
Ogden, Utah	16	11	2	2	1	1
Phoenix, Ariz.	124	87	29	1	6	–
Pueblo, Colo.	19	12	6	1	–	2
Salt Lake City, Utah	60	33	15	7	3	1
Tucson, Ariz.	84	54	24	2	2	–
PACIFIC	1,987	1,261	456	148	58	68
Berkeley, Calif.	21	12	8	1	–	–
Fresno, Calif.	62	37	15	5	4	3
Glendale, Calif.	38	27	9	2	–	1
Honolulu, Hawaii	50	32	10	2	2	1
Long Beach, Calif.	110	74	28	5	2	3
Los Angeles, Calif.	663	424	144	58	17	29
Oakland, Calif.	84	58	24	2	–	6
Pasadena, Calif.	35	20	7	3	3	–
Portland, Oreg.	146	96	29	12	5	5
Sacramento, Calif.	66	43	11	9	1	2
San Diego, Calif.	113	54	40	10	5	1
San Francisco, Calif.	181	113	42	13	5	2
San Jose, Calif.	174	100	41	15	9	7
Seattle, Wash.	147	107	25	9	1	4
Spokane, Wash.	58	39	12	2	3	4
Tacoma, Wash.	39	25	11	–	1	–
TOTAL	12,031	7,374	2,940	802	466	400
Expected Number	11,104	3,831	2,791	673	413	387

*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, there will now be 117 cities involved in the generation of the expected values used to monitor pneumonia and influenza activity in the United States. Data from these 4 cities will appear in the tables but will not be included in the totals for the United States and the Middle Atlantic Region.

Influenza — New York, California

New York City: An influenza A(H1N1) isolate has been reported from a 73-year-old individual in New York City, who was hospitalized on November 7 with mild pneumonia that developed 3 days after the onset of an upper respiratory tract infection.

California: Additional isolates of H1N1 influenza A have been obtained in California. The first of these was from a 13-year-old male in Los Angeles, whose illness began on November 17. Three additional isolates were obtained from siblings aged 9, 11, and 12 living in Santa Barbara County. They became ill November 24 and 25. During late October to mid-November, several outbreaks of influenza-like illness were reported among persons less than 25 years old in Ventura and Santa Barbara Counties. By December 11, outbreaks of influenza-like illness had been reported in schools in many areas of the state, with absenteeism in some places reaching 50%.

An influenza isolate from a 22-year-old patient in Los Angeles, who developed an upper respiratory illness on November 18, has been identified as influenza type C by CDC.

Reported by J Cherry, MD, University of California at Los Angeles; Los Angeles County Health Dept; California Dept of Health Services; I Spigland, MD, Montefiore Hospital, New York City; JS Marr, MD, New York City Epidemiologist, Bur of Preventable Diseases; Immunization Div, Bur of State Services, and WHO Collaborating Center for Influenza, Bur of Laboratories, CDC.

Editorial Note: Influenza C is rarely isolated, possibly because the virus normally grows only in the amniotic cavity of embryonated hens' eggs, it agglutinates a restricted range of indicator red blood cells (e.g., chicken and human "O," but not guinea pig cells), and it elutes from red blood cells rapidly unless maintained at refrigerated temperatures throughout the hemagglutination test (*1,2*). On the basis of serologic surveys, the virus is believed to infect the majority of the population during childhood. Illness is probably less severe than that caused by most influenza A or B viruses, and it has not been recognized as a cause of epidemics in the United States. Little evidence of antigenic drift has been observed in influenza C viruses since the first isolate was obtained in 1947, and no subtypes have been defined. Because expanded surveillance programs in young persons may result in greater frequency of isolation of influenza C than in the past, this virus should be considered when identifying putative influenza-like agents that have been isolated in the amniotic cavity of embryonated eggs and do not appear to be current influenza A or B strains.

References

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Aseptic Meningitis — Maryland

An outbreak of aseptic meningitis occurred in a tri-county area of eastern Maryland between July 16 and August 20, 1978. The outbreak peaked during the week of August 7-13. Through active case finding, 55 patients with aseptic meningitis were identified: 25 were considered to be definitive cases, 26 presumptive, and 4 suspected.* Twenty-three

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*A **definitive** case of aseptic meningitis was defined as fever, headache and/or stiff neck, cerebrospinal fluid pleocytosis with negative bacterial cultures, and recovery without antibiotics. A **presumptive** case was one with fever, headache and/or stiff neck, recovery without antibiotics, known contact of a patient with definitive meningitis, and no lumbar puncture performed. A **suspected** case was one with fever, headache and/or stiff neck, plus 2 of the following: sore throat, abdominal cramping, and rash; no known contact with meningitis patients; and no lumbar puncture.

Aseptic Meningitis — Continued

of the cases were located in a predominantly non-white area of County A; 8, including adults and children, could be linked epidemiologically to a local day-care center; and 15 were clustered in a group of homes adjacent to a migrant labor camp, which had no contact with the day-care center. Of the 55 patients, 36 (65.5%) were between the ages of 5 and 19 years. The attack rate for meningitis among white patients was 58/100,000 population; that for non-whites was 251/100,000. The overall attack rate was 107/100,000.

From January 1-October 13, 1978, Maryland reported 233 patients with aseptic meningitis, including the 55 from the tri-county area who were identified through active case finding. During the summer outbreak period, the state laboratory reported that 69 of 77 non-polio enteroviral isolates were echovirus 9.

This year's report records the largest number of aseptic meningitis cases associated with a single enteroviral agent since aseptic meningitis became reportable in the state in 1963. During the past 10 years, the average reported number of patients with aseptic meningitis has been 86 per year. The number of echovirus 9 isolations this year is nearly triple the number from 1971, the most recent year with major echovirus 9 activity in Maryland.

Reported by DL Sorley, MD, MPH, State Epidemiologist, Maryland State Dept of Health and Mental Hygiene; Field Services Div, Viral Diseases Div, Bur of Epidemiology, CDC.

Current Trends

Varicella-Zoster Immune Globulin

Varicella-Zoster Immune Globulin (VZIG) continues to be available for immunodeficient children exposed to chickenpox at no cost through the Division of Clinical Microbiology, Sidney Farber Cancer Institute, 44 Binney Street, Boston, Massachusetts (617/732-3121). Former VZIG consultants and the Immunization Division, CDC (404/329-3745) are available for consultation regarding alternative modes of therapy.

Since VZIG is still an investigational drug and its supply is limited, several criteria for release apply (Table 1). With regard to the age of patients, VZIG will be made available for certain patients less than 21 years of age on an *individual* basis. While a *request* for treatment must be initiated within 72 hours of exposure, *treatment* may be expected to modify or even prevent disease if started within 96 hours of exposure.

Reported by Sidney Farber Cancer Institute, Boston, Massachusetts; and Immunization Div, Bur of State Services, CDC.

TABLE 1. Five criteria for release of Varicella-Zoster Immune Globulin (VZIG) for the prophylaxis of varicella

1. One of the following underlying illnesses or conditions
- **A. Leukemia or lymphoma**
- **B. Congenital or acquired immunodeficiency**
- **C. Under immunosuppressive medication**
- **D. Newly born of mother with varicella**

2. One of the following types of exposure to varicella or zoster patient
- **A. Household contact**
- **B. Playmate contact (>1-hour play indoors)**
- **C. Hospital contact (in same 2- to 4-room bedroom or adjacent beds in a large ward)**
- **D. Newborn contact (newborn whose mother contracted varicella within 4 days before delivery or within 48 hours after delivery)**

3. Negative or unknown prior disease history

4. Age of less than 15 years

5. The request for treatment must be initiated within 72 hours of exposure

International Notes

Yellow Fever – Trinidad

On November 7, 1978, the Ministry of Health (MIH) for Trinidad and Tobago received reports that monkeys were dying in the Guayaguayare Forest in southeastern Trinidad. Investigations following a similar report in 1959 led to the discovery of an epizootic of yellow fever in monkeys and a single case in man.

Officials of the MIH, Ministry of Agriculture, and Caribbean Epidemiology Center (CAREC) visited the area on November 9 and verified the reports. They arranged for the collection of *Haemogogus* mosquitoes and for the capture of sick or dying monkeys. Viral studies have shown that the *Haemogogus* mosquitoes were infected with yellow fever virus. An incompletely identified viral specimen in the brain of a dead monkey is still under study. The MIH immediately began to intensify vaccination, surveillance, and efforts to control *Aedes aegypti*.

Armed forces and forest workers had previously been vaccinated. The expanded program will include school children and residents who live near forested areas and all MIH personnel. Intensified surveillance for sick and dying monkeys has revealed no substantiated reports of sick monkeys in any other area than the Guayaguayare Forest, and since November 18 there have been no reports of sick monkeys from the Guayaguayare Forest itself. *Haemogogus* mosquitoes are being collected from the Chaguaramas Forest, located in northern Trinidad, because of the large adjacent urban areas. Although surveillance for clinical cases of yellow fever in humans has been intensified, no human cases have been found. Efforts to control *A. aegypti* have been increased in the residential areas bordering the forests, and in all hospitals and their immediate environs.

Reported by the Ministry of Health, Trinidad and Tobago, in the Caribbean Surveillance Report, December 1978.

Editorial Note: The forested areas of Trinidad should now be considered enzootic for yellow fever. Travelers to Trinidad who plan to visit the forested areas should be vaccinated for yellow fever. Although *A. aegypti*, the mosquito vector of urban yellow fever, is present in urban areas of Trinidad, these areas are uninfected. Thus, those who limit their travel to Port of Spain and other urban areas need not be vaccinated.

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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: Center for Disease Control, Attn: Editor, Morbidity and Mortality Weekly Report, Atlanta, Georgia 30333.

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Erratum, Vol. 27, No. 49

p 489 In the table accompanying the "Measles – Texas, 1978" article, the brackets indicating "adequate" and "inadequate" vaccine status were misplaced, giving the false impression that live vaccine at less than 1 year of age is considered to be an adequate vaccination. The corrected table is reprinted below.

CORRECTED TABLE 2. Vaccine histories of 88 measles cases, Harris County, Texas, January-October, 1978

	Vaccine status and details	Cases	Percent of total
Adequate	Vaccinated-documented		
Adequate	Live vaccine ≥1 year	27	31
Inadequate	Live vaccine <1 year	20	23
Inadequate	Not vaccinated		
Inadequate	No reason given	9	10
Inadequate	Less than 15 months old	20	23
Inadequate	Claimed prior measles illness	4	5
Inadequate	Other		
Inadequate	Vaccinated–undocumentable	2	2
Inadequate	Unknown or uncertain history	6	7

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