

Morbidity and Mortality



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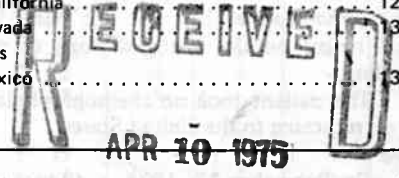
EPIDEMIOLOGIC NOTES AND REPORTS
FATAL MALARIA - Arizona, Indiana, California

Case 1

On July 29, 1974, a 45-year-old resident of Tucson, Arizona, was found unresponsive in his apartment and pronounced dead on arrival at a local hospital. Postmortem examination showed the immediate cause of death to be malarial myocarditis from infection with *Plasmodium falciparum*.

The man had returned to the United States on June 30, 1974, after a 1-month tour of Ethiopia and Tanzania; he took no malaria chemoprophylaxis. In addition, he had a history of malaria acquired in Korea in the early 1950s. On returning to the United States, he visited friends in Cincinnati, where he complained of headache and said he thought he was having a recurrence of malaria. On returning to Tucson, he

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consulted a physician and complained of headache, but malaria was not considered. He continued to complain of headaches, but because he lived in Arizona, no other symptoms are known.

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	14th WEEK ENDING		MEDIAN 1970-1974	CUMULATIVE, FIRST 14 WEEKS			
	April 5, 1975	April 6, 1974		1975	1974	MEDIAN 1970-1974	
Aseptic meningitis	34	38	31	493	460	460	
Brucellosis	1	1	4	36	27	31	
Chickenpox	4,062	4,526	---	56,784	52,491	---	
Diphtheria	7	3	3	129	53	57	
Encephalitis	Primary	15	20	179	237	258	
	Post-Infectious	4	2	6	66	66	
Hepatitis, Viral	Type B	253	170	2,869	2,392	2,270	
	Type A	711	875	9,744	11,960	---	
	Type unspecified	155	159	1,019	2,083	15,223	
Malaria	2	1	15	69	41	406	
Measles (rubeola)	691	806	1,378	6,949	7,961	11,709	
Meningococcal infections, total		29	48	473	476	490	
	Civilian	29	46	46	460	468	
Military	---	2	3	13	11	22	
Mumps	1,764	1,633	2,078	21,342	23,693	29,536	
Pertussis	17	25	---	310	363	---	
Rubella (German measles)	671	398	1,465	4,820	4,061	11,194	
Tetanus	---	---	1	16	14	19	
Tuberculosis	694	634	---	8,066	7,730	---	
Tularemia	2	1	1	14	27	27	
Typhoid fever	2	1	3	64	87	68	
Typhus, tick-borne (Rky. Mt. spotted fever)	1	---	1	13	15	10	
Venereal Diseases:							
	Gonorrhea	18,303	16,755	---	248,407	255,502	---
	Military	560	574	---	8,036	7,333	---
Syphilis, primary and secondary	Civilian	533	488	---	7,001	6,541	---
	Military	2	9	---	88	122	---
Rabies in animals	51	66	85	530	761	936	

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	---	Poliomyelitis, total: Ill. 1	2
Botulism:	8	Paralytic:	1
Congenital rubella syndrome:	6	Psittacosis: Up State N.Y. 1	10
Leptospirosis: Conn. 1, La. 2, Texas 1, Hawaii 2	53	Rabies in man:	1
Leptospirosis:	11	Trichinosis:	29
Plague:	1	Typhus, murine: Texas 1	6

MALARIA - Continued

Case 2

On December 10, 1974, a 69-year-old woman, who was a missionary in a religious group that refuses all medical therapy, returned to Hartford City, Indiana, after a 3-month stay in Nigeria. While in West Africa she had developed a pox-like rash, appearing first on the legs, then on the trunk and face. The rash, which was accompanied by no constitutional symptoms, soon receded in a reverse order and left no scar. Two weeks later she returned to the United States, where upon arrival she began having malaise, with intermittent chills and fever. She sought no medical attention. After 10 days these symptoms became more severe, and on the 12th day after her return to the United States, she became incoherent, lapsed into coma, and died on the evening of December 25. Postmortem examination revealed widespread deposition of malarial pigment and masses of *Plasmodium*-infected erythrocytes in the hepatic and splenic vasculature. The *Plasmodium* species has not yet been identified, and the final report on the histopathology of neurologic tissue is pending.

The patient took no chemoprophylaxis while in Africa or on returning to the United States.

Case 3

On December 27, 1974, a 49-year-old petroleum engineer from San Diego, California, had acute shaking chills, with generalized myalgia and headache occurring the next day. Three days later the chills recurred, and the man had a temperature of 40°C, abdominal cramps, nausea, vomiting, and diarrhea. His wife phoned a local physician, who prescribed penicillin. Three days later the man became delirious and tachypneic and was taken to a local hospital, where he was seen by another physician. On admission he had a temperature of 40.1°C, a pulse of 136 per minute, and a blood pressure of 100/70. He was obtunded and had Kussmaul respirations. In addition, his liver and spleen were enlarged, and he was icteric. Laboratory data were compatible with hepatic and renal impairment, hemolytic anemia, and metabolic acidosis. A blood smear revealed *Plasmodium* organisms that were initially interpreted as *P. malariae*, although later the Microbial Disease Laboratory of the California State Department of Health determined them to be *P. falciparum*. Cerebrospinal fluid was normal. Treatment was immediately begun with chloroquine hydrochloride (200 mg of chloroquine base) intravenously every 6 hours. The patient's blood pressure remained stable, and his urine output remained 100

ml per hour. Despite intensive therapy, however, the metabolic acidosis continued to worsen, and the patient died 14 hours after admission. Postmortem examination revealed intravascular parasites in most organs, including the capillaries of the liver and spleen; but tissue obtained from the brain was normal.

The patient had been in the area of Pointe Noire, Peoples Republic of the Congo (Brazzaville) from the middle of March, 1974, until returning to the United States December 14, 1974. Although the patient reportedly took chloroquine each week for the last 2 months he was in Africa, he may not have used it regularly prior to that period; and he did not take it after returning to the United States.

(Reported by Robert Hirsch, MD, private physician, Tucson, Arizona; Joseph J Halka, MD, Deputy Medical Examiner, Pima County, Arizona; Philip Hotchkiss, DVM, Bureau of Acute Disease Control, Arizona Department of Health Services; Charles L Barrett, MD, Medical Epidemiologist, Indiana State Board of Health; Jeffrey R Granett, MD, private physician, Escondido, California; Donald G Ramras, MD, Acting Director of Public Health, San Diego County; James Chin, MD, Chief, Infectious Diseases Section, California State Department of Health; the Parasitic Disease Branch, Parasitic Diseases and Veterinary Public Health Division, Bureau of Epidemiology, CDC; and an EIS Officer.)

Editorial Note

These 3 case reports bring to 6 the total number of deaths from malaria reported in the United States in 1974. *Plasmodium falciparum*, responsible for malignant tertian malaria, has been the species involved in 5 of the cases and is suspected in Case 2 reported here. In 1973, over 95% of the *P. falciparum* cases diagnosed in the United States occurred within 2 months of the patient's arrival in this country. Travelers to most malarious areas of the world can prevent the onset of malaria symptoms by taking 500 mg of chloroquine phosphate weekly by mouth beginning 1 week before arrival in the endemic area, weekly while there, and for 6 weeks after leaving the endemic area. If a traveler experiences a febrile illness after returning from a malarious area, he should alert his physician to his having been exposed. Likewise, physicians should take a travel history of any patient with a febrile illness. Because *P. falciparum* malaria infections are usually rapidly progressive and can be fatal, prompt diagnosis and therapy are essential. Parenteral chloroquine and quinine are available on an emergency basis from the Parasitic Disease Drug Service, CDC, Atlanta.

EPIDEMIOLOGIC NOTES AND REPORTS

TULAREMIA - California

A 51-year-old man was hospitalized in October, 1974, with a 1-week history of fever, chills, malaise, and diarrhea. Stool cultures were negative for pathogens, and various studies, including sigmoidoscopy, barium enema, and rectal biopsy, suggested a diagnosis of pseudomembranous ulcerative colitis. The diarrhea gradually resolved, but fever continued. A large, tender left axillary lymph node was noted, as was a scabbed erythematous lesion on the left hand. Culture of the hand lesion, which the patient attributed to an injury sustained while cutting wood, yielded *Staphylococcus aureus*. It was then learned that 3 days before onset of symptoms the

patient had shot and field-dressed a mature buck white-tailed deer (*Odocoileus virginianus*) in southern Mono County. He handled no other animals and had no known fly or tick bites, but he did drink from local streams. A diagnosis of tularemia was considered, and his tularemia agglutinating antibody titer was found to be 1:320. Lymph-node aspiration yielded only a little bloody fluid, which was negative by culture for *Francisella tularensis*. Several blood cultures were also negative, as was a culture of the rectal biopsy specimen. (No antibiotics had been given before obtaining these specimens.) The

(Continued on page 131)

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**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING APRIL 5, 1975 AND APRIL 6, 1974 (14th WEEK)**

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
						1975	1974	1975	1975	1975	1975		
UNITED STATES	34	1	4,062	7	129	15	19	4	253	711	155	2	69
NEW ENGLAND	-	-	367	-	-	-	1	-	18	32	12	-	3
Maine *	-	-	8	-	-	-	-	-	-	1	-	-	-
New Hampshire *	-	-	14	-	-	-	-	-	-	6	-	-	-
Vermont	-	-	18	-	-	-	-	-	1	3	-	-	-
Massachusetts	-	-	127	-	-	-	1	-	2	5	11	-	2
Rhode Island	-	-	113	-	-	-	-	-	3	7	-	-	-
Connecticut	-	-	87	-	-	-	-	-	12	10	1	-	1
MIDDLE ATLANTIC	2	-	230	-	1	3	2	-	31	82	46	-	10
Upstate New York	-	-	80	-	-	1	1	-	17	38	26	-	3
New York City	1	-	148	-	-	-	-	-	3	24	-	-	3
New Jersey *	-	-	NN	-	-	-	-	-	7	2	18	-	3
Pennsylvania *	1	-	2	-	1	2	1	-	4	18	2	-	1
EAST NORTH CENTRAL	2	-	1,677	-	1	-	2	3	49	163	10	-	1
Ohio *	-	-	193	-	-	-	1	1	16	45	-	-	-
Indiana *	-	-	115	-	-	-	-	-	-	11	-	-	-
Illinois	-	-	-	-	-	-	-	-	26	64	7	-	1
Michigan	2	-	889	-	1	-	1	1	2	38	3	-	-
Wisconsin	-	-	480	-	-	-	-	1	5	5	-	-	-
WEST NORTH CENTRAL	5	-	313	-	-	1	-	-	22	30	8	-	3
Minnesota	-	-	25	-	-	-	-	-	13	11	-	-	1
Iowa	1	-	175	-	-	1	-	-	3	3	1	-	-
Missouri *	4	-	18	-	-	-	-	-	3	-	7	-	2
North Dakota	-	-	14	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	2	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	15	-	-	-	-	-	-	-	-	-	-
Kansas	-	-	64	-	-	-	-	-	3	16	-	-	-
SOUTH ATLANTIC	5	-	433	-	-	1	3	-	30	110	18	2	10
Delaware	-	-	5	-	-	-	-	-	1	2	-	-	-
Maryland	1	-	55	-	-	-	1	-	5	6	2	-	1
District of Columbia	-	-	62	-	-	-	-	-	6	8	-	-	-
Virginia	-	-	26	-	-	1	1	-	9	4	4	-	4
West Virginia	-	-	247	-	-	-	-	-	-	4	1	1	1
North Carolina	-	-	NN	-	-	-	-	-	3	13	1	1	2
South Carolina	-	-	38	-	-	-	-	-	1	11	4	-	-
Georgia	-	-	-	-	-	-	-	-	-	27	-	-	-
Florida	4	-	-	-	-	-	1	-	5	35	6	-	2
EAST SOUTH CENTRAL	1	-	186	-	-	1	2	1	10	24	-	-	6
Kentucky	-	-	132	-	-	-	1	-	-	-	-	-	2
Tennessee	1	-	NN	-	-	1	-	1	9	20	-	-	-
Alabama	-	-	46	-	-	-	-	-	-	-	-	-	3
Mississippi	-	-	8	-	-	-	1	-	1	4	-	-	1
WEST SOUTH CENTRAL	8	1	515	-	1	4	5	-	4	85	8	-	7
Arkansas	-	-	1	-	-	-	-	-	-	12	3	-	1
Louisiana	6	-	NN	-	-	1	2	-	-	2	-	-	-
Oklahoma	-	-	57	-	-	2	1	-	1	15	4	-	1
Texas	2	1	457	-	1	1	2	-	3	56	1	-	5
MOUNTAIN	-	-	71	-	12	1	-	-	6	36	16	-	10
Montana	-	-	33	-	-	-	-	-	-	8	1	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	1	-	-	-
Colorado	-	-	31	-	-	1	-	-	-	2	5	-	8
New Mexico	-	-	5	-	1	-	-	-	3	7	2	-	-
Arizona	-	-	-	-	11	-	-	-	3	2	1	-	2
Utah	-	-	2	-	-	-	-	-	-	11	7	-	-
Nevada *	-	-	-	-	-	-	-	-	-	5	-	-	-
PACIFIC	11	-	270	7	114	4	4	-	83	149	37	-	19
Washington	1	-	167	7	111	3	-	-	7	24	11	-	2
Oregon	-	-	2	-	-	-	1	-	2	5	2	-	-
California *	10	-	-	-	2	1	3	-	73	114	24	-	16
Alaska	-	-	13	-	1	-	-	-	-	1	-	-	-
Hawaii	-	-	88	-	-	-	-	-	1	5	-	-	1
Guam	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	21	-	-	-	-	-	-	15	-	-	1
Virgin Islands	-	-	4	-	-	-	1	-	-	-	-	-	-

*Delayed reports: Aseptic meningitis: (1974) N.J. 1
 Chickenpox: Me. 35, Ohio 6, Mo. 312, Calif. 48
 Encephalitis, primary: Pa. delete 1

Hepatitis A: Me. 4, N.H. delete 2, Ind. delete 1,
 Nev. 2; (1974) Pa. 2
 Hepatitis unspecified: Me. 1, N.H. 1

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING APRIL 5, 1975 AND APRIL 6, 1974 (14th WEEK) - Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TEI ANUS
	1975	Cumulative		1975	Cumulative		1975	Cum. 1975	1975	1975	Cum. 1975	Cum. 1975
		1975	1974		1975	1974						
UNITED STATES	691	6,949	7,961	29	473	476	1,764	21,342	17	671	4,820	16
NEW ENGLAND	4	66	426	6	30	28	59	848	-	124	787	-
Maine *	-	4	23	-	2	1	-	48	-	-	17	-
New Hampshire *	2	18	201	-	1	6	-	55	-	13	234	-
Vermont	-	-	8	-	-	-	3	5	-	10	24	-
Massachusetts *	-	23	116	3	9	7	8	110	-	81	423	-
Rhode Island *	-	1	49	1	3	6	29	360	-	-	12	-
Connecticut	2	20	29	2	15	8	19	270	-	20	77	-
MIDDLE ATLANTIC	15	368	2,991	2	35	62	74	1,047	2	161	533	1
Upstate New York	7	112	48	1	13	25	27	465	1	-	52	-
New York City	5	54	168	-	7	12	22	208	1	9	65	1
New Jersey	-	124	2,463	-	4	21	19	186	-	133	293	-
Pennsylvania *	3	78	312	1	11	4	6	188	-	19	123	-
EAST NORTH CENTRAL	129	2,342	3,112	6	72	50	808	9,284	4	171	1,294	-
Ohio *	6	42	1,349	1	13	16	62	856	-	11	70	-
Indiana	8	158	100	1	4	3	71	1,022	-	16	184	-
Illinois	27	483	520	1	11	7	113	927	1	8	121	-
Michigan	78	1,237	982	3	35	16	415	4,457	1	122	690	-
Wisconsin	10	422	161	-	9	8	147	2,022	2	14	229	-
WEST NORTH CENTRAL	160	1,957	218	-	29	33	73	1,642	1	31	389	1
Minnesota	-	-	76	-	6	13	1	25	-	-	12	-
Iowa	7	203	7	-	4	5	46	466	-	-	8	-
Missouri *	16	98	30	-	15	9	4	425	1	12	121	1
North Dakota	106	374	24	-	-	1	16	281	-	-	43	-
South Dakota	2	206	19	-	-	2	-	4	-	-	2	-
Nebraska	-	186	2	-	1	-	1	6	-	-	5	-
Kansas	29	890	60	-	3	3	5	435	-	19	198	-
SOUTH ATLANTIC	11	81	280	7	97	91	132	1,338	-	32	322	6
Delaware	1	1	3	1	2	3	-	5	-	-	6	-
Maryland	-	-	20	-	5	13	-	32	-	1	1	-
District of Columbia	-	-	2	-	4	-	6	29	-	-	-	-
Virginia *	1	9	11	1	11	14	27	300	-	1	23	-
West Virginia	9	50	66	2	4	4	79	557	-	12	68	-
North Carolina	-	1	2	2	18	18	-	31	-	-	5	2
South Carolina	-	1	25	-	12	9	4	24	-	16	188	2
Georgia	-	-	1	-	7	4	-	-	-	-	-	-
Florida	-	19	150	1	34	26	16	360	-	2	31	2
EAST SOUTH CENTRAL	16	91	50	2	63	53	127	1,815	2	28	287	1
Kentucky	-	55	37	-	23	24	44	822	-	12	65	1
Tennessee	15	31	1	1	23	24	51	763	-	9	206	-
Alabama	-	1	2	-	10	5	28	170	-	6	11	-
Mississippi	1	4	10	1	7	-	4	60	2	1	5	-
WEST SOUTH CENTRAL	6	93	97	4	85	94	186	1,801	4	44	310	3
Arkansas	-	-	4	-	4	8	8	21	-	-	-	-
Louisiana	-	-	6	-	16	13	11	187	3	22	118	1
Oklahoma	2	17	11	-	8	12	7	63	1	5	61	-
Texas	4	76	76	4	57	61	160	1,530	-	17	131	2
MOUNTAIN	42	517	334	1	15	11	32	235	-	27	241	-
Montana	-	-	173	-	2	1	-	3	-	21	171	-
Idaho	-	4	44	-	1	1	-	3	-	-	7	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	41	505	24	1	6	2	26	133	-	3	43	-
New Mexico *	-	2	37	-	3	2	-	12	-	-	8	-
Arizona	-	4	4	-	1	3	-	-	-	1	2	-
Utah	-	-	-	-	2	1	4	46	-	2	7	-
Nevada *	1	2	52	-	-	1	2	38	-	-	3	-
PACIFIC	308	1,434	453	1	47	54	273	3,332	4	53	657	4
Washington	6	51	35	-	7	7	129	1,832	-	5	141	-
Oregon	-	52	-	-	-	7	25	205	-	1	65	-
California	268	1,297	409	1	40	37	99	1,256	4	47	446	4
Alaska	-	-	-	-	-	2	19	30	-	-	-	-
Hawaii	34	34	9	-	-	1	1	9	-	-	5	-
Guam	-	4	4	-	-	1	-	13	-	-	1	-
Puerto Rico	19	203	236	-	1	-	30	281	-	-	14	7
Virgin Islands	-	4	10	-	-	-	10	30	-	-	2	-

*Delayed reports: Measles: Mass. delete 2, R.I. delete 1,
Pa. 26, Ohio delete 1, Mo. 1,
N.M. delete 1; (1974) Ohio delete 4, N.M. 1
Meningococcal infections: Me. delete 1, Pa. delete 2

Mumps: Me. 9, Mo. 7, Nev. 1
Pertussis: Va. delete 1
Rubella: Me. 2, N.H. delete 1, Ohio delete 6, Mo. 1

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**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING APRIL 5, 1975 AND APRIL 6, 1974 (14th WEEK) - Continued**

AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES (Civilian Cases Only)						RABIES IN ANIMALS
	1975	Cum. 1975	Cum. 1975	1975	Cum. 1975	1975	Cum. 1975	1975	GONORRHEA		SYPHILIS (Pri. & Sec.)		Cum. 1975	
									1975	1974	1975	1974		
UNITED STATES	694	8,066	14	2	64	1	13	18,303	248,407	225,502	533	7,001	6,541	530
NEW ENGLAND	16	289	-	-	7	-	-	511	6,910	5,724	14	254	248	12
Maine *	1	23	-	-	-	-	-	-	401	413	-	4	11	11
New Hampshire	1	13	-	-	-	-	-	20	223	162	-	10	3	-
Vermont	1	5	-	-	-	-	-	10	140	163	-	4	1	-
Massachusetts	5	142	-	-	3	-	-	184	3,341	2,667	11	169	176	-
Rhode Island	2	37	-	-	-	-	-	18	495	461	-	4	5	-
Connecticut	6	69	-	-	4	-	-	279	2,310	1,858	3	63	52	1
MIDDLE ATLANTIC	113	1,381	2	1	12	-	-	2,013	29,814	28,039	77	1,283	1,394	14
Upstate New York	-	178	1	1	3	-	-	320	5,466	5,252	9	135	139	12
New York City	57	622	-	-	4	-	-	964	13,663	11,724	48	755	793	-
New Jersey	19	262	1	-	2	-	-	389	3,754	4,174	10	200	229	-
Pennsylvania	37	319	-	-	3	-	-	340	6,931	6,889	10	193	233	2
EAST NORTH CENTRAL	141	1,213	-	-	8	-	1	3,204	41,423	35,895	27	551	547	11
Ohio	42	364	-	-	1	-	1	571	11,064	9,914	8	119	71	-
Indiana	22	170	-	-	-	-	-	399	3,711	3,199	5	41	51	-
Illinois	22	299	-	-	6	-	-	1,409	14,118	11,075	5	258	284	-
Michigan *	49	355	-	-	1	-	-	528	8,402	8,587	7	99	113	-
Wisconsin	6	25	-	-	-	-	-	297	4,128	3,120	2	34	28	11
WEST NORTH CENTRAL	33	303	4	-	3	-	-	461	11,917	11,500	12	154	149	119
Minnesota	3	43	-	-	1	-	-	208	2,482	2,544	-	16	15	37
Iowa	10	26	-	-	-	-	-	25	1,482	1,659	-	9	12	22
Missouri	15	165	3	-	2	-	-	79	4,350	3,628	12	95	97	14
North Dakota	1	1	-	-	-	-	-	11	193	194	-	3	1	32
South Dakota *	1	15	-	-	-	-	-	21	500	508	-	3	1	-
Nebraska	-	9	-	-	-	-	-	40	1,019	919	-	3	3	2
Kansas	3	44	1	-	-	-	-	77	1,891	2,048	-	25	20	12
SOUTH ATLANTIC	154	1,896	4	-	3	-	7	4,685	61,571	56,043	126	2,168	2,078	86
Delaware	-	36	-	-	-	-	-	103	886	838	2	24	22	-
Maryland *	26	301	-	-	-	-	-	580	6,915	5,095	6	169	225	-
District of Columbia	7	111	-	-	-	-	-	213	3,803	5,554	14	178	182	-
Virginia	17	218	2	-	1	-	-	365	6,277	5,096	9	183	251	50
West Virginia	4	74	-	-	-	-	-	42	738	664	2	9	8	1
North Carolina	23	277	-	-	2	-	7	545	9,080	7,511	4	273	224	1
South Carolina	10	112	2	-	-	-	-	465	5,787	5,920	3	166	173	2
Georgia	25	280	-	-	-	-	-	873	11,074	10,016	29	318	326	25
Florida	42	487	-	-	-	-	-	1,499	17,011	15,349	57	848	667	7
EAST SOUTH CENTRAL	54	671	2	-	2	-	2	1,357	20,165	19,226	20	311	339	65
Kentucky *	5	119	1	-	1	-	1	190	2,625	2,355	2	50	76	52
Tennessee	36	254	1	-	-	-	-	591	8,082	7,559	5	115	131	6
Alabama	6	204	-	-	-	-	1	230	5,374	5,421	10	85	65	7
Mississippi	7	94	-	-	1	-	-	346	4,084	3,891	3	61	67	-
WEST SOUTH CENTRAL	66	890	2	-	1	1	3	2,271	31,423	29,928	35	641	597	145
Arkansas	11	125	2	-	-	-	1	125	3,253	3,259	1	18	30	17
Louisiana	11	129	-	-	-	-	-	637	5,988	6,457	7	150	175	3
Oklahoma	5	93	-	-	-	1	2	201	2,837	2,295	1	31	43	40
Texas	39	543	-	-	1	-	-	1,308	19,345	17,917	26	442	349	85
MOUNTAIN	22	165	-	-	3	-	-	798	9,685	8,037	11	183	158	24
Montana	-	2	-	-	-	-	-	50	547	480	-	3	-	10
Idaho	1	5	-	-	-	-	-	17	471	507	-	3	-	-
Wyoming	1	6	-	-	1	-	-	20	238	192	-	1	2	-
Colorado	-	-	-	-	-	-	-	200	2,579	2,296	2	37	34	-
New Mexico	4	37	-	-	1	-	-	172	1,720	1,115	3	53	30	10
Arizona	12	84	-	-	1	-	-	213	2,540	2,126	5	63	63	4
Utah	1	7	-	-	-	-	-	43	578	398	-	4	5	-
Nevada *	3	24	-	-	-	-	-	83	1,012	923	1	19	24	-
PACIFIC	95	1,258	-	1	25	-	-	3,003	35,499	31,110	211	1,456	1,031	54
Washington *	7	102	-	1	2	-	-	321	3,345	2,993	13	69	37	-
Oregon	8	51	-	-	-	-	-	118	2,924	2,689	2	31	24	-
California	75	978	-	-	23	-	-	2,473	27,769	24,164	195	1,342	959	51
Alaska	-	6	-	-	-	-	-	55	870	663	1	1	-	3
Hawaii	5	121	-	-	-	-	-	36	591	601	-	13	11	-
Guam	-	22	-	-	-	-	-	-	98	-	-	1	-	-
Puerto Rico	11	123	-	-	-	-	-	55	867	867	29	206	262	17
Virgin Islands	-	3	-	-	-	-	-	-	46	199	-	9	18	-

*Delayed reports: Tuberculosis: Md. 15, Nev. 1
 Tularemia: Ky. 1
 Typhoid: Mich. delete 1
 Gonorrhea: Me. delete 1, S.D. delete 2, Ky. 108 Mil.
 Nev. 75, Wash. 238 civil., 11 Mil.

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING APRIL 5, 1975

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes					Pneumonia and Influenza All Ages	Area	All Causes					Pneumonia and Influenza All Ages
	All Ages	65 years and over	45-64 years	25-44 years	Under 1 year			All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
NEW ENGLAND	714	449	167	34	29	42	SOUTH ATLANTIC	1,174	637	329	107	55	47
Boston, Mass.	204	120	51	9	11	13	Atlanta, Ga.	107	52	34	14	5	7
Bridgeport, Conn.	51	36	10	2	-	5	Baltimore, Md.	163	91	47	11	6	5
Cambridge, Mass.	28	18	8	2	-	-	Charlotte, N. C.	63	20	23	10	7	2
Fall River, Mass.	23	14	9	-	-	-	Jacksonville, Fla.	123	67	27	14	5	-
Hartford, Conn.	84	46	17	8	10	6	Miami, Fla.	111	57	36	7	6	2
Lowell, Mass.	21	13	5	2	-	-	Norfolk, Va.	64	35	14	8	5	7
Lynn, Mass.	17	10	6	1	-	-	Richmond, Va.	88	48	22	11	3	8
New Bedford, Mass.	28	20	6	-	1	3	Savannah, Ga.	38	26	7	1	1	3
New Haven, Conn.	65	46	12	4	3	1	St. Petersburg, Fla.	75	64	10	1	-	-
Providence, R. I.	61	36	14	3	2	11	Tampa, Fla.	74	43	22	4	4	6
Somerville, Mass.	13	13	-	-	-	-	Washington, D. C.	227	114	73	23	10	6
Springfield, Mass.	43	28	11	-	1	3	Wilmington, Del.	41	20	14	3	3	1
Waterbury, Conn.	20	14	3	2	2	-	EAST SOUTH CENTRAL	663	374	197	45	14	22
Worcester, Mass.	56	35	15	1	1	-	Birmingham, Ala.	105	57	27	10	4	2
MIDDLE ATLANTIC	2,972	1,949	743	134	55	164	Chattanooga, Tenn.	46	30	9	3	-	1
Albany, N. Y.	48	35	11	1	1	-	Knoxville, Tenn.	47	31	9	4	1	2
Allentown, Pa.	21	15	5	-	-	2	Louisville, Ky.	118	61	45	10	2	9
Buffalo, N. Y.	141	96	32	6	1	14	Memphis, Tenn.	169	96	55	10	1	1
Camden, N. J.	31	18	10	2	1	4	Mobile, Ala.	43	27	10	1	2	2
Elizabeth, N. J.	32	22	10	-	-	1	Montgomery, Ala.	32	20	6	2	1	1
Erie, Pa.	40	24	10	3	2	5	Nashville, Tenn.	103	52	36	5	3	4
Jersey City, N. J.	59	38	19	1	-	1	WEST SOUTH CENTRAL	1,210	643	352	102	57	42
Newark, N. J.	72	38	22	5	3	2	Austin, Tex.	48	30	9	3	3	3
New York City, N. Y. *	1,483	986	352	74	23	79	Baton Rouge, La.	52	32	13	6	-	1
Paterson, N. J.	51	30	14	1	3	4	Corpus Christi, Tex.	32	16	3	4	2	-
Philadelphia, Pa.	392	247	110	17	10	5	Dallas, Tex.	174	94	50	14	8	6
Pittsburgh, Pa.	219	129	61	9	6	18	El Paso, Tex.	55	29	16	6	1	1
Reading, Pa.	41	28	11	1	1	2	Fort Worth, Tex.	92	53	24	7	3	3
Rochester, N. Y.	117	85	23	6	2	13	Houston, Tex.	265	119	94	25	14	4
Schenectady, N. Y.	18	13	4	1	-	2	Little Rock, Ark.	57	31	21	2	2	4
Scranton, Pa.	53	38	11	1	1	6	New Orleans, La.	156	81	43	13	12	5
Syracuse, N. Y.	71	51	17	1	1	-	San Antonio, Tex.	104	53	32	10	6	1
Trenton, N. J.	38	27	8	-	-	2	Shreveport, La.	86	45	27	8	4	7
Utica, N. Y.	23	13	8	2	-	2	Tulsa, Okla.	89	60	20	4	2	7
Yonkers, N. Y.	22	16	5	1	-	2	MOUNTAIN	526	319	128	34	18	20
EAST NORTH CENTRAL	2,459	1,428	678	152	90	72	Albuquerque, N. Mex.	43	26	10	2	1	6
Akron, Ohio	65	40	15	4	4	-	Colorado Springs, Colo.	25	16	9	-	-	3
Canton, Ohio	44	34	9	1	-	2	Denver, Colo.	111	77	22	6	2	3
Chicago, Ill.	604	315	179	47	31	19	Las Vegas, Nev.	17	11	5	-	-	1
Cincinnati, Ohio	140	97	30	5	6	2	Ogden, Utah	23	13	7	1	1	3
Cleveland, Ohio	187	107	59	10	4	8	Phoenix, Ariz.	119	69	28	11	2	2
Columbus, Ohio	136	81	40	10	3	6	Portland, Colo.	19	12	4	3	-	1
Dayton, Ohio	116	71	30	7	4	1	Salt Lake City, Utah	70	33	21	6	7	-
Detroit, Mich.	335	185	86	29	11	6	Tucson, Ariz.	99	62	22	5	5	1
Evansville, Ind.	36	24	10	-	1	2	PACIFIC	1,691	1,054	409	117	49	63
Fort Wayne, Ind.	42	22	10	5	3	1	Berkeley, Calif.	14	11	2	-	-	-
Gary, Ind.	20	11	6	1	1	3	Fresno, Calif.	66	39	18	3	5	2
Grand Rapids, Mich.	50	31	11	2	4	4	Glendale, Calif.	29	24	3	1	1	1
Indianapolis, Ind.	146	75	43	15	4	4	Honolulu, Hawaii	53	30	14	3	2	-
Madison, Wis.	32	22	8	-	-	3	Long Beach, Calif.	106	60	41	4	-	4
Milwaukee, Wis.	172	109	47	4	5	3	Los Angeles, Calif.	475	283	110	46	20	11
Peoria, Ill.	43	22	13	-	6	1	Oakland, Calif.	84	59	19	3	-	-
Rockford, Ill.	33	17	12	3	1	3	Pasadena, Calif.	29	21	3	2	1	1
South Bend, Ind.	60	37	18	2	-	2	Portland, Ore.	124	81	31	7	2	11
Toledo, Ohio	132	89	29	5	2	-	Sacramento, Calif.	81	46	21	6	4	2
Youngstown, Ohio	66	39	23	2	-	2	San Diego, Calif.	135	80	33	9	6	1
WEST NORTH CENTRAL	726	456	167	43	36	24	San Francisco, Calif.	185	106	43	20	4	9
Des Moines, Iowa	40	27	8	1	2	3	San Jose, Calif.	53	37	10	3	1	2
Duluth, Minn.	42	26	11	3	2	-	Seattle, Wash.	157	103	42	6	1	10
Kansas City, Kans.	32	18	9	2	2	2	Spokane, Wash.	57	43	11	2	1	3
Kansas City, Mo.	101	64	23	5	6	3	Tacoma, Wash.	43	31	8	2	1	6
Lincoln, Nebr.	26	17	6	1	-	3	Total	12,135	7,309	3,170	768	403	496
Minneapolis, Minn.	113	75	22	3	8	4	Expected Number	12,619	7,572	3,375	814	377	483
Omaha, Nebr.	84	51	24	1	5	3							
St. Louis, Mo.	203	123	44	21	9	4							
St. Paul, Minn.	42	32	9	1	-	1							
Wichita, Kans.	43	23	11	5	2	1							

*Estimate based on average percent of divisional total.

TULAREMIA – Continued

patient was treated with streptomycin for 5 days and became afebrile in 36 hours; he was then given oral doxycycline for 2 weeks. The hand lesion healed promptly, and a second aspiration and culture of the axillary node was negative for *F. tularensis*. The diagnosis was confirmed, however, by serial tularemia agglutinating antibody titers: Oct. 15 - neg., Oct. 22 - 1:320, Oct. 23 - 1:640, Nov. 8 - 1:5120, Jan. 10 - 1:640.

The deer carcass had been cut and wrapped at a commercial meat locker. None of the other persons who handled the carcass became ill. Bone marrow from the frozen carcass was tested at the State Microbial Disease Laboratory and *F. tularensis* was isolated. The stored meat was then incinerated. (Reported in California Morbidity, No. 6, February 14, 1975.)

Editorial Note

Although gastrointestinal symptoms have been noted with some frequency in patients with typical ulceroglandular disease or ingestion tularemia, and ulcerations in the stomach, ileum, and cecum have occasionally been reported in patients with tularemia, documented pseudomembranous ulcerative colitis is most unusual (1-4). The inability to isolate *F. tularensis* from the stool specimen or rectal biopsy does not detract from the validity of the case, since cultures of clinical

specimens in documented tularemia cases are sometimes negative despite the use of appropriate selective media.

Another unusual aspect of this case was the fact that the patient's illness probably resulted from contact with tissues from an infected deer. Serologic evidence of infection in deer (*Odocoileus hemionus* and *O. virginianus*) has been reported, and human disease has occasionally been epidemiologically associated with deer, but this is the first reported human tularemia case acquired from a culture-proven infected deer (5,6).

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INTERNATIONAL NOTES
BOTULISM – Mexico

On March 8, 1975, a 29-year-old woman in Mexico City experienced abdominal discomfort and vomiting, with gradual onset of diplopia, weakness, dysarthria, ptosis, and difficulty breathing. She was hospitalized on March 10 and had a prolonged respiratory arrest on March 11, at which time a tracheostomy was performed. She did not recover consciousness after the arrest. Botulism was suspected, and on March 13 the patient was given polyvalent (ABE) botulinum antitoxin. Nevertheless, she died on March 16. Type A botulinum toxin was detected by CDC in a pre-treatment serum specimen collected on March 13.

Investigation revealed that on March 7 the woman had eaten a large quantity of tuna salad made with the contents of a 400-gram can of tuna which a relative said smelled "bad." One other person, a child, ate a very small amount of the salad and developed abdominal cramps and vomiting but no neurologic signs. She has now recovered completely.

Although the original can was not recovered, cans of the same size and brand were found in the store where the original can had been purchased. The tuna was canned by a plant

in Mexico and distributed only in Mexico. On March 14, the Mexican authorities recalled all cans of tuna produced by this plant.

(Reported by Guillermo Gosset Osuna, MD, Epidemiologist, Jesus Guzman Bahena, MD, Epidemiologist, Abel Gonzalez Cortes, MD, Chief of Epidemiology, David Bessudo M, MSc, Chief, Pola Becerril, QBP, Celea Gonzalez, QBP, National Diagnostic Reference Center, Institute of Health and Tropical Diseases, Directorate General of Public Health Investigations; Rafael Sanchez Lara, MD, Assistant Director for Control of Foods and Beverages, Directorate General of Control of Foods, Beverages, and Drugs, Mexico; Anaerobe Section, Enterobacteriology Branch, Bacteriology Division, Bureau of Laboratories and Enteric Diseases Branch, Bacterial Diseases Division, Bureau of Epidemiology, CDC.)

Editorial Note

This is the first reported case of botulism in Mexico since 4 cases were reported in 1967. The probable explanation for the low incidence of botulism is that home-canning is an uncommon practice in Mexico, since fresh foods are readily available throughout the year at moderate prices.

EPIDEMIOLOGIC NOTES AND REPORTS
BOTULISM – Nevada

On October 25, 1974, 4 women ate a common lunch which included a freshly-prepared beet salad made from home-canned beets. In the next 3 days, 3 of the women had onset of botulism, with the severity of their symptoms corresponding to the amount of beet salad consumed. All 3 women survived. The first patient, who had prepared the beet salad and eaten the most, awoke with nausea and diplopia on October 26. The next day she was hospitalized with ptosis, dysarthria, and severe bilateral oculomotor and facial nerve palsies. Her sensorium was clear, however, and she had

no sensory deficits. In addition, cerebrospinal fluid was normal, and a Tensilon* test was negative. That evening she had progressive respiratory failure, and a tracheostomy was performed. The next day she was treated with 4 vials of bivalent botulinum antitoxin. A pre-treatment serum specimen was positive at CDC for type A botulinum toxin.

*Use of trade names is for identification only and does not constitute endorsement of the Public Health Service or the U.S. Department of Health, Education, and Welfare.

BOTULISM — Continued

The second patient began having blurred vision, dysarthria, and dysphagia on October 27; by October 28 she had ptosis and was hospitalized. She was noted to have a decreased gag reflex, and a tracheostomy was performed because of her inability to handle salivary secretions. She was treated with 2 vials of bivalent botulinum antitoxin.

The third patient had only mild ptosis and difficulty focusing her eyes; her disease did not progress. She was treated with a cathartic but was not given botulinum antitoxin.

Type A botulinum toxin was isolated from samples of left-over salad and left-over beets, which came from 2 jars

that had been mixed just before serving. Pressure cooking was not employed in the preparation of the beets, but the beets in 1 of the jars were pickled. The beet salad reportedly tasted normal when eaten.

(Reported by David Dapra, MD, Neurologist, Reno, Nevada; Richard Grundy, MD, Carson City County Health Officer, Nevada; William M Edwards, MD, State Epidemiologist, Nevada State Department of Health and Welfare; Anaerobe Section, Enterobacteriology Branch, Bacteriology Division, Bureau of Laboratories, CDC.)

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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.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials.

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