

CENTER FOR DISEASE CONTROL

*Morbidity and Mortality*



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WEEKLY REPORT

For Week Ending August 31, 1974

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EPIDEMIOLOGIC NOTES AND REPORTS  
 FATAL ROCKY MOUNTAIN SPOTTED FEVER  
 Illinois, Louisiana, Virginia

Case 1

On May 29, 1974, an 8-year-old boy from central Louisiana, previously in excellent health developed fever, malaise, and lassitude. The following day, a rash developed on both wrists and spread to his face, trunk, and extremities. The patient was taken to a physician who made a diagnosis of varicella and initiated treatment with oral penicillin. The next day, he saw a second physician who made a diagnosis of scarlatina and continued oral penicillin therapy. On June 1, the patient was examined again, and a pinpoint exanthem and mild non-exudative pharyngitis were noted. Penicillin was continued.

CONTENTS

Epidemiologic Notes and Reports  
 Fatal Rocky Mountain Spotted Fever -  
 Illinois, Louisiana, Virginia ..... 301  
 Follow-Up on Cholera - Guam ..... 302  
 Surveillance Summary  
 Malaria - United States, 1973 ..... 307  
 International Notes  
 Quarantine Measures ..... 308

On June 5, 7 days after onset, the patient had a temperature of 105°F., was lethargic, and had a change in personality and was admitted to the U.S. Air Force Hospital England, England Air Force Base, Louisiana. At the time of admission, he had a general petechial exanthem involving his face, neck, trunk, upper and lower extremities, and the palms and

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

DISEASE	35th WEEK ENDING		MEDIAN 1969-1973	CUMULATIVE, FIRST 35 WEEKS		
	August 31, 1974	September 1, 1973		1974	1973	MEDIAN 1969-1973
Aseptic meningitis	112	189	189	1,855	2,689	2,689
Brucellosis	5	2	3	107	130	130
Chickenpox	227	213	---	99,130	144,732	---
Diphtheria	8	4	3	173	123	108
Encephalitis:						
Primary: Arthropod-borne and unspecified	22	65	41	609	930	900
Post-Infectious	5	4	7	189	208	238
Hepatitis, Viral:						
Type B	199	172	172	6,377	5,387	5,387
Type A	718	988	988	28,330	33,969	36,994
Type unspecified	143	2	44	5,617	158	1,881
Malaria	7	2	44	139	158	1,881
Measles (rubeola)	107	73	135	19,686	24,072	26,750
Meningococcal infections, total	17	23	23	954	1,035	1,739
Civilian	17	23	21	929	1,011	1,549
Military	---	---	1	25	24	184
Mumps	208	254	389	44,064	54,843	67,378
Pertussis	51	---	---	1,099	---	---
Rubella (German measles)	105	63	213	9,645	25,836	38,161
Tetanus	2	3	2	58	60	77
Tuberculosis, new active	583	572	---	20,663	21,167	---
Tularemia	12	7	5	104	116	97
Typhoid fever	18	7	8	263	466	208
Typhus, tick-borne (Rky. Mt. spotted fever)	41	22	15	644	511	354
Veneral Diseases:						
Gonorrhea	19,618	16,834	---	592,779	545,347	---
Syphilis, primary and secondary	491	406	---	16,374	16,344	---
Rabies in animals	58	76	65	1,985	2,518	2,517

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	2	Poliomyelitis, total	3
Botulism	9	Paralytic	3
Congenital rubella syndrome: Tex. 1	38	Psittacosis: Calif. 1, Mo. 7, Neb. 12, Tex. 6	103
Leprosy: Tex. 1	73	Rabies in man:	---
Leptospirosis	26	Trichinosis: Alaska 1, N.J. 1, Tex. 1	68
Plague	1	Typhus, murine:	15

**ROCKY MOUNTAIN SPOTTED FEVER – Continued**

soles of his feet. Bilateral conjunctival petechia, injected throat, and systemic lymphadenopathy were present. There were no localizing neurologic signs. At this time the parents revealed that the patient had had numerous tick bites prior to onset and that a tick had been removed the day before onset. The diagnosis of Rocky Mountain spotted fever was suspected, and treatment with tetracycline was initiated 5 hours after admission. Over the next 3 days, the patient developed gastrointestinal hemorrhage, cardiorespiratory arrest, aspiration pneumonia, and progressive neurologic deterioration. By June 8, respirations and reflexes were absent, and his pupils were dilated and fixed. After 24 hours of maintenance by a respirator, the patient was pronounced dead. A single acute serum specimen was later reported to have a febrile agglutination titer of 1:640 to proteus OX19, 1:320 to proteus OX2, and a complement-fixation titer of 1:8 to Rocky Mountain spotted fever.

**Case 2**

On May 12, a 61-year-old man from central Illinois, who had had a tick removed on May 8, developed malaise and generalized aches. Over the next 5 days, he had headache, conjunctivitis, photophobia, and fever. On May 20, he was found unconscious, having seizures, and was hospitalized. Rocky Mountain spotted fever was suspected, and treatment with tetracycline, gentamycin, and diphenylhydantoin was initiated. Two days later, he was transferred to a hospital in Springfield, Illinois, where on arrival he was comatose and had a generalized petechial rash. Over the next several weeks, his neurologic status remained poor, and his clinical course was complicated by renal failure requiring hemodialysis. He died on June 11, 1974, of progressive cerebral impairment. Brain stem compression with partial herniation was noted at autopsy. A complement-fixation titer to Rocky Mountain spotted fever on a single serum specimen taken late in his course was 1:128.

**Case 3**

On May 19, 1974, a 12-year-old boy from Richmond, Virginia, became ill with a temperature of 103°F. He was seen by a doctor who noted tick bites and posterior occipital lymphadenopathy associated with pharyngitis. The patient was treated with aspirin, but the fever continued, and he began to vomit intermittently. On May 22, he returned to the doctor with a temperature of 100°F. and a morbilliform rash on his face and chest. The illness was thought to be measles since the boy had no history of previous vaccination. On May 25 the boy's parents phoned the physician to report that

the boy was still vomiting, and he was given antinausea suppositories. On May 26, he suddenly became stuporous and unstable on his feet and was taken to the office where he convulsed twice for approximately 50 seconds each. He was admitted to the hospital that day, where he became more unresponsive and disoriented and required phenobarbital for sedation. Treatment was begun with chloramphenicol, and he was transferred to another hospital for intensive care. Lumbar puncture was done with an opening pressure of 350 mm water, and the cerebrospinal fluid had a white blood cell count of 20/mm<sup>3</sup>. The patient died within 24 hours, and disseminated intravascular coagulation was diagnosed at autopsy. A serum specimen that had been obtained on May 27 was subsequently reported as having a titer of less than 1:8 to Rocky Mountain spotted fever. However, another serum specimen taken at autopsy had a complement-fixation titer of 1:64. (Reported by Gary M. Kammer, Major, USAF, MC, Department of Internal Medicine, Hector F. Davila, Major, USAF, MC, Department of Pediatrics, Thomas E. Kupferer, Captain, USAF, BSC, Environmental Health Services, USAF Hospital England, England AFB, Louisiana; Charles T. Caraway, D.V.M., State Epidemiologist, Louisiana Health and Social and Rehabilitation Services Administration; Richard T. Bilinsky, M.D., Stephen Jaffee, M.D., Private Physicians, Springfield, Illinois; Byron J. Francis, M.D., State Epidemiologist, Illinois Department of Public Health; Fred Rojal, M.D., and David Armstrong, M.D., Private Physicians, Richmond, Virginia; and Robert Jackson, M.D., State Epidemiologist, Virginia State Department of Health.)

**Editorial Note**

The number of reported cases of Rocky Mountain spotted fever in the United States has been increasing since 1968, reaching 668 cases in 1973, the highest ever reported. The number of cases reported in the first 34 weeks of 1974 is running 19% ahead of the 1973 figure. The increase in the number of reported cases is due in part to improved surveillance, but it appears that there has been a real increase in the incidence of the disease in recent years. About 6% of Rocky Mountain spotted fever cases are fatal. In many of these cases, an initial diagnosis of measles, meningococcemia, or other febrile exanthem is made, and treatment is initiated with penicillin or another antibiotic, which is ineffective against rickettsial organisms. However, even with prompt diagnosis and initiation of tetracycline or chloramphenicol therapy, fatal complications may occur. The immediate cause of death commonly appears to be cerebral edema, cardiac arrhythmia, or refractory hypotension.

**FOLLOW-UP ON CHOLERA – Guam**

As of the week of August 26, no additional cases of cholera were reported in Guam. Approximately 150 stool samples collected at 1 municipal hospital, 1 naval hospital, 1 Air Force clinic, and 2 private clinics in Guam have been cultured for *Vibrio cholerae*; none have been positive.

Additional environmental studies have revealed the presence of *V. cholerae*, El Tor, Inaba, in 3 storm drains that empty into Agana Bay and in a sewage line adjacent to the Bay. These isolates were obtained from samples taken after a severe tropical rain storm which caused a sewage overflow into the storm drains. The isolated Inaba strain appeared sucrose-negative on TCBS medium, but fermented sucrose

within 24 hours in sucrose broth. *V. cholerae*, El Tor, Ogawa, was also isolated from the sewer line. Further studies are in progress to determine the prevalence of *V. cholerae* in sewage and marine environments in Guam.

(Reported by Abdiel M. Angeles, M.D., Chief, Communicable Disease Control, Eduardo del Rosario, M.D., Officer in Charge, Foreign Quarantine, Emelita Santos, Laboratory Technologist, John Rosario, R.S., M.P.H., Chief of Consumer Protection, Richard A. Mackie, M.S., Chief, Environmental Health Section, and a Public Health Advisor, Department of Public Health and Social Services, Guam; O. V. Natarajan, Ph.D.)  
(Continued on page 307)

# Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING AUGUST 31, 1974 AND SEPTEMBER 1, 1973 (35th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
	1974	1974	1974	1974	Cum. 1974	Primary: Arthropod-borne and Unspecified		Post Infectious	Type B	Type A	Type Unspecified	1974	Cum. 1974
						1974	1973		1974	1974	1974		
UNITED STATES	112	5	227	8	173	22	65	5	199	718	143	7	139
NEW ENGLAND	3	-	32	-	-	-	5	-	4	30	6	-	6
Maine *	-	-	-	-	-	-	-	-	-	3	-	-	-
New Hampshire	-	-	-	-	-	-	2	-	-	1	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	3	-	-	-
Massachusetts	3	-	9	-	-	-	2	-	2	9	6	-	2
Rhode Island	-	-	10	-	-	-	-	-	1	8	-	-	3
Connecticut	-	-	13	-	-	-	1	-	1	6	-	-	1
MIDDLE ATLANTIC	17	-	28	-	1	-	2	-	46	118	49	3	22
Upstate New York	9	-	3	-	-	-	1	-	10	41	21	2	6
New York City	1	-	25	-	-	-	-	-	3	20	-	-	9
New Jersey	7	-	NN	-	-	-	-	-	11	33	24	-	3
Pennsylvania *	-	-	-	-	1	-	1	-	22	24	4	1	4
EAST NORTH CENTRAL	7	-	68	-	2	1	31	-	48	128	8	1	12
Ohio	1	-	4	-	1	-	13	-	14	26	-	1	5
Indiana	1	-	25	-	-	-	-	-	2	14	-	-	-
Illinois	1	-	-	-	1	-	1	-	19	36	4	-	2
Michigan	4	-	3	-	-	1	8	-	11	40	4	-	4
Wisconsin	-	-	36	-	-	-	9	-	2	12	-	-	1
WEST NORTH CENTRAL	14	-	11	-	-	10	7	1	14	16	7	-	4
Minnesota	-	-	-	-	-	-	-	1	9	5	4	-	1
Iowa	4	-	2	-	-	3	3	-	1	4	1	-	1
Missouri	10	-	-	-	-	7	4	-	1	1	2	-	1
North Dakota	-	-	1	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	4	-	-	-	-	-	-	2	-	-	1
Nebraska	-	-	2	-	-	-	-	-	2	-	-	-	-
Kansas	-	-	2	-	-	-	-	-	1	4	-	-	-
SOUTH ATLANTIC	14	2	21	-	1	8	7	-	25	120	18	-	21
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	3	7	-	-	3
District of Columbia	-	-	-	-	-	-	-	-	1	-	-	-	2
Virginia	4	-	2	-	-	-	-	-	2	6	3	-	6
West Virginia	2	-	18	-	-	-	2	-	-	2	-	-	-
North Carolina	2	2	NN	-	1	1	2	-	5	23	7	-	4
South Carolina	-	-	1	-	-	-	-	-	-	1	4	-	-
Georgia	-	-	-	-	-	-	-	-	-	22	-	-	1
Florida	6	-	-	-	-	7	3	-	14	59	4	-	5
EAST SOUTH CENTRAL	2	1	12	-	-	1	4	1	6	42	1	-	4
Kentucky *	1	-	5	-	-	-	-	-	1	14	-	-	3
Tennessee	-	1	NN	-	-	1	4	1	4	18	-	-	1
Alabama	-	-	2	-	-	-	-	-	1	7	1	-	-
Mississippi	1	-	5	-	-	-	-	-	-	3	-	-	-
WEST SOUTH CENTRAL	5	-	24	-	9	-	5	1	2	83	3	-	10
Arkansas	-	-	-	-	-	-	-	-	-	7	1	-	1
Louisiana *	-	-	NN	-	-	-	-	-	-	1	-	-	1
Oklahoma	2	-	1	-	-	-	3	-	-	5	2	-	3
Texas	3	-	23	-	9	-	2	1	2	70	-	-	5
MOUNTAIN	1	-	12	-	28	1	-	-	10	49	27	-	7
Montana	-	-	5	-	-	-	-	-	-	1	3	-	-
Idaho	1	-	-	-	-	-	-	-	-	2	1	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	-	-	2	-	-	-	-	-	7	12	18	-	5
New Mexico	-	-	5	-	10	1	-	-	2	12	-	-	1
Arizona	-	-	-	-	18	-	-	-	1	14	5	-	-
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	8	-	-	1
PACIFIC	49	2	19	8	132	1	4	2	44	132	24	3	53
Washington	-	-	1	8	121	-	-	-	2	7	5	-	-
Oregon	1	-	2	-	-	-	-	-	2	29	1	1	2
California *	48	2	-	-	7	1	4	2	38	94	18	2	49
Alaska	-	-	9	-	4	-	-	-	-	1	-	-	-
Hawaii	-	-	7	-	-	-	-	-	2	1	-	-	2
Guam *	-	-	-	-	-	-	-	-	-	-	-	-	2
Puerto Rico	-	-	6	-	-	-	-	-	-	-	11	-	1
Virgin Islands	---	---	---	---	---	---	---	---	---	---	---	---	-

\*Delayed reports: Aseptic Meningitis: La. delete 5  
 Chickenpox: Me. 6, Calif. 2, Guam 3  
 Hepatitis B: Pa. 2, La. delete 4  
 Hepatitis A: Me. 6, Pa. delete 2, Ky. delete 1,  
 La. delete 1, Guam 9

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING AUGUST 31, 1974 AND SEPTEMBER 1, 1973 (35th WEEK) - Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS. TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1974	Cumulative		1974	Cumulative		1974	Cum. 1974	1974	1974	Cum. 1974	Cum. 1974
		1974	1973		1974	1973						
UNITED STATES	107	19,686	24,072	17	954	1,035	208	44,064	51	105	9,645	58
NEW ENGLAND	8	916	7,346	-	51	46	10	5,849	-	2	960	1
Maine *	-	41	64	-	2	1	-	784	-	-	276	-
New Hampshire	-	198	857	-	12	6	-	279	-	-	16	1
Vermont	-	57	118	-	2	3	-	28	-	-	18	-
Massachusetts	6	385	3,903	-	15	12	-	950	-	-	330	-
Rhode Island	-	59	603	-	7	3	10	2,393	-	-	19	-
Connecticut	2	176	1,801	-	13	21	-	1,415	-	2	301	-
MIDDLE ATLANTIC	26	7,978	2,429	8	146	140	21	3,536	5	7	1,047	6
Upstate New York	5	928	795	1	55	48	7	861	5	3	237	2
New York City	10	580	888	6	33	29	8	617	-	2	142	1
New Jersey *	8	5,521	401	-	42	33	1	653	-	-	436	2
Pennsylvania	3	949	345	1	16	30	5	1,405	-	2	232	1
EAST NORTH CENTRAL	41	7,585	8,450	3	111	136	51	12,607	14	34	3,175	9
Ohio	2	3,025	280	2	39	54	8	3,106	-	1	491	2
Indiana	3	223	629	1	11	4	2	974	-	14	536	-
Illinois	22	1,972	2,044	-	10	24	12	1,099	11	4	501	3
Michigan	6	1,904	4,353	-	35	39	4	5,381	2	2	1,176	3
Wisconsin	8	461	1,144	-	16	15	25	2,047	1	13	471	1
WEST NORTH CENTRAL	-	685	439	-	71	79	3	2,671	-	5	213	9
Minnesota	-	83	19	-	22	7	-	41	-	1	12	1
Iowa	-	134	277	-	13	19	-	1,617	-	-	15	-
Missouri	-	261	52	-	18	32	-	381	-	1	35	2
North Dakota	-	28	58	-	3	3	3	33	-	3	14	3
South Dakota	-	27	-	-	3	4	-	2	-	-	25	-
Nebraska	-	2	6	-	3	7	-	81	-	-	6	-
Kansas	-	150	27	-	9	7	-	516	-	-	106	3
SOUTH ATLANTIC	12	517	1,199	2	190	173	23	5,388	10	38	1,130	12
Delaware	-	7	8	1	5	1	1	91	-	-	27	-
Maryland	-	22	12	-	18	23	-	107	-	-	4	-
District of Columbia	-	3	5	-	1	4	-	49	-	-	4	-
Virginia	1	34	414	-	30	31	4	564	6	-	41	3
West Virginia *	9	176	202	-	7	4	9	2,915	-	37	242	-
North Carolina	-	5	4	1	41	37	NN	NN	4	-	53	3
South Carolina	-	48	58	-	16	12	1	111	-	-	590	1
Georgia	-	4	151	-	8	21	-	1	-	-	2	-
Florida	2	218	345	-	64	40	8	1,550	-	1	167	5
EAST SOUTH CENTRAL	5	209	598	-	98	91	21	5,499	6	4	528	2
Kentucky	5	145	367	-	38	32	9	2,210	-	1	189	-
Tennessee	-	34	165	-	44	37	11	2,418	5	1	264	1
Alabama	-	17	9	-	9	15	1	501	-	1	59	-
Mississippi	-	13	57	-	7	7	-	370	1	1	16	1
WEST SOUTH CENTRAL	4	185	669	2	157	162	39	3,081	-	1	315	7
Arkansas	-	6	69	-	11	13	1	128	-	-	8	-
Louisiana *	-	13	84	-	32	36	15	216	-	-	58	3
Oklahoma	-	25	53	-	17	29	4	366	-	-	44	1
Texas	4	141	463	2	97	84	19	2,371	-	1	205	3
MOUNTAIN	6	734	717	1	30	32	7	1,038	-	4	402	-
Montana	-	372	16	-	1	6	-	172	-	-	65	-
Idaho	-	51	252	-	2	4	-	156	-	1	15	-
Wyoming	-	1	80	-	3	-	-	9	-	-	-	-
Colorado	-	30	105	1	8	11	3	500	-	-	158	-
New Mexico	6	61	116	-	2	3	4	176	-	3	114	-
Arizona	-	15	19	-	5	4	-	-	-	-	-	-
Utah	-	5	128	-	6	2	-	20	-	-	17	-
Nevada	-	199	1	-	3	2	-	5	-	-	33	-
PACIFIC	5	877	2,225	1	100	176	33	4,395	16	10	1,875	12
Washington	-	63	1,010	-	11	18	-	1,525	3	3	336	1
Oregon	-	-	454	-	12	12	8	765	-	5	210	1
California	5	753	677	1	71	140	20	1,947	13	2	1,312	10
Alaska	-	-	65	-	3	6	5	102	-	-	-	-
Hawaii	-	61	19	-	3	-	-	56	-	-	17	-
Guam *	-	14	49	-	1	-	-	354	-	-	5	-
Puerto Rico	7	574	1,781	-	6	8	12	912	2	-	28	3
Virgin Islands	---	24	1	---	-	-	---	30	---	---	-	1

\*Delayed reports: Meningococcal Infections: La. delete 1  
Mumps: W. Va. 10, Guam 1  
Pertussis: N. J. delete 3  
Rubella: Me. 4

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING AUGUST 31, 1974 AND SEPTEMBER 1, 1973 (35th WEEK) - Continued

AREA	TUBERCULOSIS (New Active)		TULAREMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES						RABIES IN ANIMALS
	1974	Cum. 1974		Cum. 1974	1974	Cum. 1974	1974	Cum. 1974	GONORRHEA		SYPHILIS (Pri. & Sec.)		Cum. 1974	
			1974						Cumulative	1974	Cumulative			
												1974		1973
UNITED STATES	583	20,663	104	18	263	41	644	19,618	592,779	545,347	491	16,374	16,344	1,985
NEW ENGLAND	21	850	-	-	7	1	8	293	14,214	14,779	11	345	457	17
Maine	2	68	-	-	-	-	-	43	1,287	862	2	26	21	1
New Hampshire	-	19	-	-	1	-	-	27	511	511	-	9	5	3
Vermont	-	17	-	-	-	-	-	10	417	245	-	2	13	1
Massachusetts	17	463	-	-	3	1	6	126	5,907	6,856	3	137	208	4
Rhode Island	-	78	-	-	2	-	2	20	1,363	1,509	-	12	10	4
Connecticut	2	205	-	-	1	-	-	67	4,729	4,796	6	159	200	4
MIDDLE ATLANTIC	103	3,735	2	7	42	2	55	2,247	72,057	77,082	100	3,641	3,739	47
Upstate New York	17	525	2	4	10	-	26	393	13,577	13,643	7	336	241	17
New York City	29	1,447	-	1	24	-	1	990	31,483	35,575	73	2,113	2,307	-
New Jersey	28	714	-	2	7	-	4	218	9,719	10,863	14	584	661	18
Pennsylvania	29	1,049	-	-	1	2	24	646	17,278	17,001	6	608	530	12
EAST NORTH CENTRAL	95	2,843	5	1	23	3	22	2,698	86,839	63,814	40	1,212	889	146
Ohio *	16	766	-	-	5	3	15	1,096	25,535	20,523	4	190	183	26
Indiana	18	426	-	-	1	-	1	371	9,201	7,697	3	132	200	11
Illinois	44	832	3	1	10	-	6	445	21,930	9,163	27	545	135	25
Michigan	14	743	-	-	6	-	-	543	20,935	19,747	4	271	318	3
Wisconsin	3	76	2	-	1	-	-	243	9,238	6,684	2	74	53	81
WEST NORTH CENTRAL	18	765	19	-	7	1	15	1,168	31,246	30,103	20	412	245	536
Minnesota	3	125	-	-	3	-	-	265	7,294	6,274	-	58	73	189
Iowa	-	82	-	-	1	-	1	162	3,982	4,090	-	24	58	98
Missouri *	9	370	14	-	1	1	10	458	10,013	10,088	17	280	86	24
North Dakota	3	20	2	-	-	-	-	17	475	444	-	3	1	87
South Dakota	-	38	3	-	-	-	1	62	1,496	1,468	-	2	4	91
Nebraska	1	33	-	-	-	-	-	49	2,595	3,150	1	9	7	4
Kansas	2	97	-	-	2	-	3	155	5,391	4,589	2	36	16	43
SOUTH ATLANTIC	122	4,358	8	5	39	23	369	4,764	152,690	136,996	153	5,261	4,852	260
Delaware	2	75	-	-	-	1	10	69	2,072	1,925	2	55	65	1
Maryland *	14	552	-	-	5	1	42	423	15,819	11,624	5	495	480	19
District of Columbia	5	261	-	-	1	-	-	394	11,141	11,464	11	442	592	-
Virginia *	19	546	3	-	1	4	122	676	13,485	13,768	12	567	524	67
West Virginia	5	198	-	2	10	-	4	55	1,750	2,042	3	12	17	25
North Carolina *	21	680	3	-	3	4	93	869	20,276	20,349	28	656	404	33
South Carolina *	6	419	-	-	3	3	52	171	15,428	13,959	1	569	749	3
Georgia	18	609	2	-	2	10	44	707	31,813	26,400	24	594	734	81
Florida	32	1,018	-	3	14	-	2	1,400	40,906	35,465	67	1,871	1,287	31
EAST SOUTH CENTRAL	55	1,853	9	3	40	5	91	1,640	50,755	45,733	23	846	1,029	182
Kentucky	8	410	2	-	14	-	13	127	6,226	5,564	4	195	365	113
Tennessee	13	576	5	2	19	1	56	714	20,090	17,493	11	336	302	43
Alabama	23	558	2	1	4	3	10	417	14,026	13,091	-	154	124	25
Mississippi	11	309	-	-	3	1	12	382	10,413	9,585	8	161	238	1
WEST SOUTH CENTRAL	43	2,399	46	-	21	6	75	2,809	79,434	74,322	50	1,523	1,858	439
Arkansas	6	288	26	-	1	-	8	475	7,881	8,828	1	72	103	56
Louisiana *	6	347	2	-	8	-	1	730	16,422	15,666	12	425	560	21
Oklahoma *	1	212	13	-	2	2	54	285	7,383	7,454	1	93	120	112
Texas	30	1,552	5	-	10	4	12	1,319	47,748	42,374	36	933	1,075	250
MOUNTAIN	26	665	10	-	13	-	6	979	23,010	19,492	18	391	505	118
Montana	-	54	-	-	-	-	1	21	1,239	1,121	-	3	3	5
Idaho	-	22	-	-	-	-	1	24	1,217	1,234	-	9	9	-
Wyoming	-	13	5	-	3	-	1	43	473	337	1	6	21	9
Colorado	22	137	-	-	-	-	1	280	6,422	5,202	3	87	150	27
New Mexico *	-	135	2	-	2	-	1	191	3,465	3,414	4	55	58	42
Arizona	3	230	-	-	6	-	-	212	6,740	5,629	6	151	106	34
Utah	-	33	3	-	-	-	1	73	1,268	1,049	-	12	11	1
Nevada	1	41	-	-	2	-	-	135	2,186	1,506	4	68	147	-
PACIFIC	100	3,195	5	2	71	-	3	3,020	82,534	83,026	76	2,743	2,770	240
Washington	11	227	-	-	12	-	1	622	7,580	7,722	-	53	102	-
Oregon	3	141	1	-	-	-	2	317	7,402	7,312	2	60	45	9
California	84	2,528	4	1	55	-	-	1,989	63,975	64,515	74	2,595	2,513	223
Alaska	-	56	-	-	2	-	-	35	1,825	1,957	-	11	52	8
Hawaii	2	243	-	1	2	-	-	57	1,752	1,510	-	24	58	-
Guam *	-	27	-	-	-	-	-	-	208	268	-	2	2	-
Puerto Rico	19	371	-	-	3	-	-	70	2,108	2,894	18	579	495	41
Virgin Islands	---	3	-	---	-	---	-	---	201	157	---	31	17	-

\*Delayed reports: Tuberculosis: Ohio delete 6, N.C. delete 3  
 Tularemia: Mo. 1  
 Typhoid: Md. 3  
 RMSF: Va. delete 1, S.C. delete 1

Gonorrhea: La. delete 30, Okla. 275, Guam 9  
 Syphilis: Okla. 2  
 Rabies: N.M. delete 1

Week No.

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEKS ENDING AUGUST 31, 1974

35

(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	
<b>NEW ENGLAND</b>	684	423	178	30	24	33	<b>SOUTH ATLANTIC</b>	1,133	634	321	90	39	38
Boston, Mass.	227	116	73	16	8	17	Atlanta, Ga.	106	58	32	8	7	9
Bridgeport, Conn.	30	18	10	—	1	1	Baltimore, Md.	224	117	74	19	5	3
Cambridge, Mass.	22	19	2	1	—	2	Charlotte, N. C.	46	19	18	4	1	—
Fall River, Mass.	24	18	5	1	—	—	Jacksonville, Fla.	96	51	20	16	2	—
Hartford, Conn.	43	26	11	1	5	3	Miami, Fla.	103	57	36	4	4	—
Lowell, Mass.	34	25	6	1	2	2	Norfolk, Va.	53	27	20	1	1	3
Lynn, Mass.	28	16	10	1	1	2	Richmond, Va.	89	46	28	7	2	5
New Bedford, Mass.	21	14	4	1	—	1	Savannah, Ga.	58	36	12	3	3	4
New Haven, Conn.	43	33	5	1	3	1	St. Petersburg, Fla.	59	52	7	—	—	2
Providence, R. I.	61	40	14	2	2	4	Tampa, Fla.	81	48	18	6	5	5
Somerville, Mass.	9	6	3	—	—	—	Washington, D. C.	173	91	47	20	8	4
Springfield, Mass.	45	28	12	1	1	—	Wilmington, Del.	45	32	9	2	1	3
Waterbury, Conn.	42	31	8	1	—	—	<b>EAST SOUTH CENTRAL</b>	705	401	179	60	26	33
Worcester, Mass.	55	33	15	3	1	—	Birmingham, Ala.	105	49	34	8	7	—
<b>MIDDLE ATLANTIC</b>	2,810	1,677	756	200	71	107	Chattanooga, Tenn.	82	42	19	8	5	7
Albany, N. Y.	49	29	13	1	4	1	Knoxville, Tenn.	55	39	10	5	—	1
Allentown, Pa.	22	18	4	—	—	2	Louisville, Ky.	111	66	34	7	2	8
Buffalo, N. Y.	135	86	36	6	2	11	Memphis, Tenn.	191	123	42	12	2	4
Camden, N. J.	25	12	11	—	1	1	Mobile, Ala.	49	27	9	8	2	—
Elizabeth, N. J.	30	22	7	1	—	—	Montgomery, Ala.	28	14	6	2	3	4
Erie, Pa.	29	21	7	1	—	3	Nashville, Tenn.	84	41	25	10	5	9
Jersey City, N. J.	58	37	14	1	4	1	<b>WEST SOUTH CENTRAL</b>	988	517	291	72	59	29
Newark, N. J.	57	23	21	9	1	1	Austin, Tex.	33	17	7	2	2	2
New York City, N. Y. †	1,414	843	363	122	23	54	Baton Rouge, La. *	40	21	12	3	2	1
Paterson, N. J.	30	19	4	2	3	1	Corpus Christi, Tex.	30	14	9	3	2	—
Philadelphia, Pa.	400	216	121	35	15	6	Dallas, Tex.	159	75	56	18	5	1
Pittsburgh, Pa.	152	86	44	11	7	14	El Paso, Tex.	39	14	17	1	3	2
Reading, Pa.	40	33	6	—	1	1	Fort Worth, Tex.	66	43	13	5	3	—
Rochester, N. Y.	126	85	31	3	4	6	Houston, Tex.	157	88	42	11	11	6
Schenectady, N. Y.	28	18	7	—	1	—	Little Rock, Ark.	66	37	18	7	1	3
Scranton, Pa.	39	24	14	—	1	—	New Orleans, La.	146	73	52	6	11	2
Syracuse, N. Y.	91	54	26	6	1	2	San Antonio, Tex.	138	67	40	10	11	3
Trenton, N. J.	38	23	12	1	2	—	Shreveport, La.	58	34	16	2	3	4
Utica, N. Y.	22	14	6	—	1	1	Tulsa, Okla.	56	34	9	4	5	5
Yonkers, N. Y.	25	14	9	1	—	2	<b>MOUNTAIN</b>	453	261	99	36	34	12
<b>EAST NORTH CENTRAL</b>	2,340	1,321	647	166	108	48	Albuquerque, N. Mex.	36	20	7	6	—	2
Akron, Ohio	71	41	16	7	5	—	Colorado Springs, Colo.	26	16	8	—	2	4
Canton, Ohio	32	23	7	1	—	1	Denver, Colo.	82	57	15	3	5	2
Chicago, Ill.	587	310	174	51	28	15	Las Vegas, Nev.	33	17	10	4	1	—
Cincinnati, Ohio	160	87	49	14	4	4	Ogden, Utah	10	7	2	—	—	2
Cleveland, Ohio	159	93	40	14	5	3	Phoenix, Ariz.	124	66	29	12	9	1
Columbus, Ohio	92	55	21	8	4	1	Pueblo, Colo.	19	15	3	1	—	—
Dayton, Ohio	108	57	36	9	5	2	Salt Lake City, Utah	64	30	10	5	14	1
Detroit, Mich.	326	188	78	17	24	4	Tucson, Ariz.	59	33	15	5	3	—
Evansville, Ind.	48	26	15	5	—	2	<b>PACIFIC</b>	1,545	947	401	93	53	40
Fort Wayne, Ind.	43	29	10	1	3	1	Berkeley, Calif.	14	8	5	1	—	—
Gary, Ind.	37	10	15	4	4	1	Fresno, Calif.	67	37	23	4	—	2
Grand Rapids, Mich.	47	30	9	4	2	3	Glendale, Calif.	23	15	6	1	1	—
Indianapolis, Ind.	153	77	53	11	7	1	Honolulu, Hawaii	67	31	21	2	12	1
Madison, Wis.	20	9	3	1	5	1	Long Beach, Calif.	99	62	32	3	—	2
Milwaukee, Wis.	150	91	45	7	4	3	Los Angeles, Calif.	463	291	111	32	15	9
Peoria, Ill.	33	19	8	—	3	—	Oakland, Calif.	71	37	19	4	4	1
Rockford, Ill.	39	25	11	—	1	1	Pasadena, Calif.	17	12	5	—	—	—
South Bend, Ind.	39	28	7	—	—	2	Portland, Oreg.	111	67	31	4	5	6
Toledo, Ohio	124	85	24	9	2	1	Sacramento, Calif.	57	30	15	8	1	1
Youngstown, Ohio	72	38	26	3	2	2	San Diego, Calif.	119	74	31	7	1	1
<b>WEST NORTH CENTRAL</b>	684	436	148	42	28	16	San Francisco, Calif.	168	101	38	16	9	4
Des Moines, Iowa	48	32	7	2	4	1	San Jose, Calif.	50	38	5	3	1	4
Duluth, Minn.	23	16	5	1	—	2	Seattle, Wash.	116	74	34	3	2	3
Kansas City, Kans.	35	20	4	3	3	2	Spokane, Wash.	62	40	15	4	2	5
Kansas City, Mo.	102	59	26	9	5	—	Tacoma, Wash.	41	30	10	1	—	1
Lincoln, Nebr.	27	21	5	1	—	1	<b>Total</b>	11,342	6,617	3,020	789	442	356
Minneapolis, Minn.	61	44	11	2	1	—	<b>Expected Number</b>	11,590	6,676	3,162	806	429	333
Omaha, Nebr.	82	52	15	7	2	1							
St. Louis, Mo.	191	118	49	12	8	5							
St. Paul, Minn.	77	51	18	2	3	3							
Wichita, Kans.	38	23	8	3	2	1							

†Delayed report for week ending August 24, 1974.

\*Estimate based on average percent of divisional total.

**CHOLERA – Continued**

Administrator, Guam Environmental Protection Agency; Gunther F. Craun, M.S., Water Supply Research Laboratory, National Environmental Research Center, U.S. Environmental Protection Agency, Cincinnati; the Epidemiologic Investigations Laboratory Branch, and the Enteric Diseases Branch, Bacterial Diseases Division, Bureau of Epidemiology, CDC.)  
**Editorial Note**

The isolation from samples of sewage, storm drains, and Agana Bay (MMWR, Vol. 23, No. 32) of 2 strains of El Tor, Inaba, with different sucrose fermentation reactions on TCBS,

and of *V. cholerae*, El Tor, Ogawa, indicates that *V. cholerae* was probably present in Guam prior to the recent outbreak of 6 cases. It is possible that these 3 strains of *V. cholerae* represent 3 separate sources of introduction into Guam or, less likely, that they may reflect mutations of the same strain from a single source. Strains of *V. cholerae* that do not ferment sucrose on TCBS, although rare, can be pathogenic; the source or sources of this organism in Guam are unknown. Because of the isolation of *V. cholerae* from Agana Bay, the public has been advised through the media not to consume raw fish from this Bay.

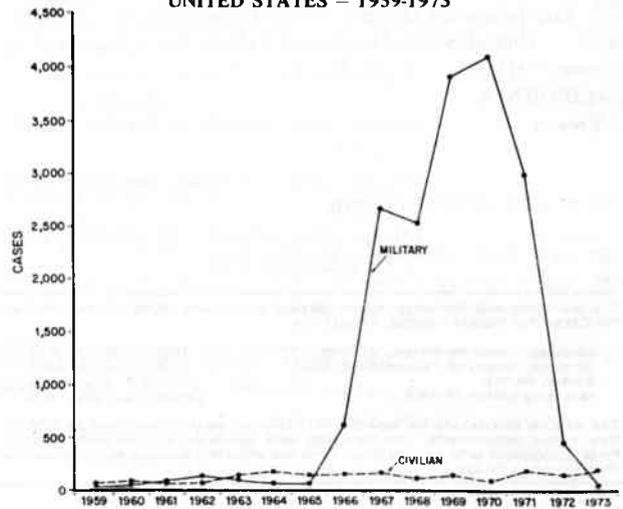
**SURVEILLANCE SUMMARY  
 MALARIA – United States, 1973**

In 1973, 216 cases of malaria were reported in the United States. This represents a 64.8% decrease, compared with the 614 cases reported for 1972. This decline was due almost entirely to decreasing numbers of military cases imported from Vietnam. In 1973, only 41 cases (19.0% of all cases reported in the United States) were reported among military personnel, and only 31 (14.3% of all cases) were acquired in Vietnam, the smallest number since 1960 (Figure 1). As in previous years imported *Plasmodium vivax* infections were more common than *Plasmodium falciparum* (53.2% versus 21.3%).

There were 175 civilian cases of malaria reported in 1973, compared with 160 cases for 1972. In 2 cases, infection was acquired in the United States, in 1 by blood transfusion, and in 1 by congenital transmission. There were 4 malaria deaths reported in 1973 compared with 1 in 1972. All 4 deaths occurred in civilians infected with *P. falciparum* malaria. The *P. falciparum* malaria case-fatality ratio of 8.6% was significantly greater than the mean fatality rate for the 10-year period 1963 to 1972 (1.4%).

Figure 2 shows the geographic distribution of the 1973

**Figure 1  
 MILITARY AND CIVILIAN CASES OF MALARIA  
 UNITED STATES – 1959-1973**



**Figure 2  
 GEOGRAPHIC DISTRIBUTION OF MALARIA CASES WITH ONSET  
 IN THE UNITED STATES – 1973**



**MALARIA – Continued**

malaria cases in the United States by the state in which the patient first developed clinical symptoms of the disease. The seasonal distribution of malaria cases has shown no distinct pattern in recent years, and no distinct trend was present in 1973.

(Reported by the Parasitology Division, Bureau of Laboratories, and the Parasitic Diseases and Veterinary Public Health Division, Bureau of Epidemiology, CDC.)

A copy of the original report from which these data were derived is available on request from

Center for Disease Control  
Attn.: Malaria Surveillance, Parasitic Diseases  
and Veterinary Public Health Division  
Bureau of Epidemiology  
Atlanta, Georgia 30333

**INTERNATIONAL NOTES  
QUARANTINE MEASURES**

The following change should be made in the "Supplement – Vaccination Certificate Requirements for International Travel," MMWR, Vol. 22, No. 17:

**IRAN – Cholera – add to the note: Europe: Portugal.**

The following changes should be made in the "Supplement – United States Designated Yellow Fever Vaccination Centers," MMWR, Vol. 22, No. 32:

**CALIFORNIA**

**Fresno** County Department of Public Health  
93702  
Change name to County Department of Health  
Change clinic hours to: By appointment,  
1-2 p.m. each week

**Sacramento** County Health Department 95816  
To address add: Suite 209  
Change clinic hours to: By appointment,  
Wed., 1-3 p.m.; Thurs., 1-3 p.m.  
**San Pedro** U.S. Public Health Service  
Outpatient Clinic 90731  
Change telephone to: 213-548-2644  
James M. Hunter, M.D.  
Change clinic hours to: By appointment

**COLORADO**

**Denver** Stapleton International Airport Clinic  
80207  
Clinic hours: Tues., 5-7 p.m.  
Telephone: 303-388-6491  
Fee Charged (New Center)

The Morbidity and Mortality Weekly Report, circulation 39,000, is published by the Center for Disease Control, Atlanta, Ga.

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Director, Bureau of Epidemiology, 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.

Address all correspondence to: Center for Disease Control  
Attn: Editor  
Morbidity and Mortality Weekly Report  
Atlanta, Georgia 30333

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