

Morbidity and Mortality



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EPIDEMIOLOGIC NOTES AND REPORTS

HUMAN BUBONIC PLAGUE - Coconino County, Arizona

On Feb. 23, 1972, a 19-year-old male college student in Flagstaff, Arizona, had onset of fever, headache, and pain in his right arm. He was seen at the Student Health Center on February 24 and started on penicillin and tetracycline. He subsequently experienced right epitrochlear and axillary lymphadenopathy and was hospitalized late the next day with a tentative diagnosis of tularemia. A right epitrochlear lymph node aspirate was obtained on February 26, and the patient's therapy was changed to tetracycline and streptomycin. Cultures of the biopsy material showed growth of gram-negative, bipolar rods which were identified as *Yersinia pestis* by the Zoonoses Section, Ecological Investigations Program, CDC, Fort Collins, Colorado, on March 9. The patient made an uneventful recovery.

On February 21, the patient and two other students had skinned a bobcat which they had shot that day about 18

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miles south of Flagstaff. The animal appeared ill at the time it was shot. The other students have remained well without therapy.

The bobcat's head was sent to the Arizona State Health Department laboratory for rabies examination; the results were negative. The head, along with the carcass (minus the viscera), were forwarded to Fort Collins for further laboratory studies to confirm *Y. pestis* infection.

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

DISEASE	10th WEEK ENDED		MEDIAN 1967-1971	CUMULATIVE, FIRST 10 WEEKS		
	March 11, 1972	March 13, 1971		1972	1971	MEDIAN 1967-1971
Aseptic meningitis	31	42	28	349	544	284
Brucellosis	-	4	2	16	16	16
Chickenpox	4,243	---	---	29,764	---	---
Diphtheria	3	5	3	24	41	28
Encephalitis, primary:						
Arthropod-borne & unspecified	11	23	22	151	218	200
Encephalitis, post-infectious	4	2	5	44	56	69
Hepatitis, serum	174	145	101	1,879	1,611	982
Hepatitis, infectious	1,079	1,174	993	10,939	12,293	8,809
Malaria	19	135	59	319	769	465
Measles (rubeola)	939	3,446	1,361	6,892	17,856	10,372
Meningococcal infections, total	24	104	77	355	647	679
Civilian	21	85	72	343	555	634
Military	3	19	7	12	92	51
Mumps	2,288	4,157	---	20,978	34,051	---
Rubella (German measles)	849	1,801	1,655	5,676	10,377	9,055
Tetanus	3	---	3	14	11	18
Tuberculosis, new active	679	---	---	5,615	---	---
Tularemia	3	2	1	22	22	22
Typhoid fever	3	1	2	48	49	43
Typhus, tick-borne (Rky. Mt. spotted fever)	1	---	---	10	3	3
Venereal Diseases:						
Gonorrhea	14,216	---	---	128,093	---	---
Syphilis, primary and secondary	466	---	---	4,269	---	---
Rabies in animals	80	86	86	678	758	741

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	-	Poliomyelitis, total: Fla. - 1	5
Botulism:	-	Paralytic: Fla. - 1	5
Congenital rubella syndrome: Calif. - 1	7	Psittacosis:	4
Leprosy: Hawaii - 2	20	Rabies in man:	1
Leptospirosis: *	2	Trichinosis:	17
Plague:	-	Typhus, murine: Tex. - 1	5

*Delayed reports: Leptospirosis: Okla. 1 (1971)

PLAGUE -- Continued

The bobcat was killed in an area remote from residences, and initial investigation by health authorities of Coconino County indicate that there is no significant public health hazard. Additional field studies are being conducted to determine the source of infection to the bobcat.

(Reported by Jack J. Herman, M.D., Student Health Center, Northern Arizona University, Flagstaff, Arizona; William J. Thomas, M.D., Director, Coconino County Department of Health, Flagstaff, Arizona; Frank Reider, M.D., Assistant Commissioner, Epidemiology and Program Design, Arizona State Health Department; and the Zoonoses Section, Ecological Investigations Program, CDC, Fort Collins, Colorado.)

**RECOMMENDED TREATMENT SCHEDULES
FOR GONORRHEA -- March 1972**

The following represents the recommended treatment schedules for gonorrhea as set forth by the Venereal Diseases Branch, State and Community Services Division, CDC.

For *Neisseria gonorrhoeae* infection, the preferred drug is penicillin or ampicillin. Physicians are cautioned to use no less than the recommended doses of antibiotics.

FOR TREATMENT OF UNCOMPLICATED GONORRHEA
(Urethral, Cervical, Pharyngeal, or Rectal)

Parenteral -- Men or Women: Aqueous procaine penicillin G, 4.8 million units intramuscularly divided into at least two doses and injected at different sites at one visit, together with 1 gram of oral probenecid, preferably given at least 30 minutes prior to the injection.

or

Oral -- Men or Women: Ampicillin, 3.5 grams, with probenecid, 1 gram, administered simultaneously.

Treatment of contacts: Patients with known exposure to gonorrhea should receive the same treatment as those known to have gonorrhea.

**WHEN PENICILLIN OR AMPICILLIN IS CONTRAINDICATED,*
OR WHEN THE ABOVE SCHEDULES ARE INEFFECTIVE**

Parenteral -- Men: Spectinomycin, 2 grams, in one intramuscular injection.

Women: Spectinomycin, 4 grams, in one intramuscular injection.

or

Oral -- Men or Women: Tetracycline HCl, 1.5 grams initially, followed by 0.5 gram four times a day for 4 days, a total dosage of 9 grams. Other tetracyclines are not more effective.

*Allergy to penicillin, ampicillin, probenecid, or previous anaphylactic reaction.

FOLLOW-UP

Follow-up urethral specimens should be obtained from men 7 days after completion of treatment; cervical and rectal specimens should be obtained from women at 7-14 days after completion of treatment.

COMPLICATIONS

Although treatment of complications (gonococcal salpingitis, bacteremia, arthritis, etc.) must be individualized, repeated large parenteral doses of aqueous crystalline penicillin G have been shown to be effective. The efficacy of alternate antibiotic regimens is unproven. Post-gonococcal urethritis can be treated with tetracycline, 0.5 gram, orally four times a day for at least 7 days.

SYPHILIS

All gonorrhea patients should have a serologic test for syphilis at the time of diagnosis. Patients receiving the recommended parenteral penicillin schedule need not have follow-up serologic tests for syphilis. Patients treated with ampicillin, spectinomycin, or tetracycline should have a follow-up serologic test for syphilis each month for 4 months to detect syphilis that may have been masked by treatment for gonorrhea.

Patients with gonorrhea who also have syphilis should be given additional treatment appropriate to the stage of syphilis.

While long-acting forms of penicillin (such as benzathine penicillin G) are effective in syphilotherapy, they have no place in the treatment of gonorrhea.

**EPIDEMIOLOGIC NOTES AND REPORTS
MALARIA -- Florida, Colorado, and Tennessee**

Between July and October 1971, three unrelated cases of transfusion-induced malaria occurred in Florida, Colorado, and Tennessee. The case reports are summarized below.

Case 1: On July 21, 1971, a 52-year-old truck driver underwent coronary artery by-pass surgery in a Gainesville, Florida, hospital; he subsequently received 14 units of blood. He did well postoperatively and was discharged on August 2.

On August 8, the patient had onset of fever and chills occurring every other day; he was hospitalized on August 22.

Physical examination revealed a temperature of 104° F. and hepatosplenomegaly. The hematocrit was 30, and the white blood cell count was 8,600. A peripheral blood smear demonstrated *Plasmodium vivax* parasitemia. Treatment with chloroquine and primaquine resulted in prompt recovery.

The patient had no previous history of malaria, recent travel to malarious areas, or parenteral drug use. Eleven of the 14 blood donors were civilians without prior history of malaria or travel to endemic areas; peripheral blood smears

from five of these persons and serum samples from seven tested by the indirect fluorescent antibody (IFA) technique were negative for malaria.

The other three donors were soldiers stationed in Georgia; they had donated blood at a nearby commercial blood bank. Two of these men had not been to Vietnam; one denied having had malaria or using parenteral drugs. He had a negative IFA test for malaria. The other man was lost to follow-up. The third soldier had been treated for malaria when serving in Vietnam from January to November 1970. Thick and thin peripheral blood smears were negative for malaria, but his serum showed IFA titers of 1:1,024 to *P. vivax*, 1:256 to *P. malariae*, and 1:64 to *P. falciparum*.

(Reported by Baiba Ausinsch, M.D., Department of Anesthesiology, University of Florida Hospital, Gainesville, Florida; Ralph B. Hogan, M.D., Administrator, Epidemiology Section, Florida Division of Health; and an EIS Officer.)

Case 2: On Sept. 26, 1971, coronary artery by-pass surgery was performed on a 46-year-old man in Denver, Colorado. From September 26 to 29, he received 11 units of blood. On October 6, he had onset of recurrent chills and fever. A peripheral blood smear obtained on October 28 demonstrated infection with *P. malariae*. The patient was treated with chloroquine and primaquine and recovered.

Epidemiologic investigation revealed that the patient had never previously had malaria, traveled outside the United States, or used parenteral drugs. Of the 11 donors, one had served in the Philippines in World War II. He denied having had malaria but did admit to having had several undiagnosed febrile illnesses in the past 3-4 years. This man had donated blood on several previous occasions, apparently without incident. Thick and thin blood smears were negative for malaria parasites. His serum, however, when tested for malaria antibodies by the IFA technique, gave the following end-point dilution titers: *P. malariae* 1:1,024, *P. vivax* 1:1,024, and *P. falciparum* 1:256.

(Reported by Jordan Gulinson, M.D., private physician, Denver, Colorado; C. S. Mollohan, M.D., Chief, Office of Epidemiology, Colorado State Department of Health; and an EIS Officer.)

Case 3: On Sept. 25, 1971, a 55-year-old Cuban-born accountant was admitted to a Memphis, Tennessee, hospital with a laceration of his right arm. He received three units of blood and underwent a tendon repair procedure. He was discharged on September 30.

The patient was readmitted on October 11 with acute hemolytic anemia. He was afebrile except for a temperature of 100° F. on the first day of his hospitalization. Extensive hematologic studies could not determine the etiology of the anemia. He received steroids and three units of blood. The steroids were discontinued before his discharge on October 20.

On November 4, the patient was again hospitalized with fever and chills. Physical examination showed a temperature of 102° F. and hepatomegaly. Laboratory studies revealed a hematocrit of 22, and acute hemolysis was again confirmed. He received steroids and two units of blood. His hospital course was marked by daily temperatures up to 106° F. which dropped to below 97° F. between peaks. On November 7, he had a cardiac arrest but was successfully resuscitated. A blood smear obtained on November 9 revealed heavy infection with malaria parasites which were initially identified as *P. falciparum*. Intravenous quinine sulfate was started immedi-

ately. The patient had another cardiac arrest on November 11 and died shortly thereafter. Final postmortem results are pending.

The patient's blood smears were reviewed at CDC, where the parasites were identified as *P. vivax*. Malaria antibody titers of the patient's serum by IFA showed *P. vivax* 1:1,024, *P. falciparum* 1:256, and *P. malariae* 1:256.

The patient had immigrated to the United States in 1959 and had not traveled outside this country since then. He had never had malaria or used parenteral drugs. As a child, he received a gunshot wound which necessitated a splenectomy. In 1969, he suffered a myocardial infarction but had otherwise been in good health until October 1971.

In the course of his three hospital stays, the patient had received eight units of blood. Seven of the donors denied having had malaria, traveling to malarious areas, or using parenteral drugs. Examination of thick and thin peripheral blood smears and serum tested by the IFA technique from six of these persons were negative for malaria.

The eighth donor, a 26-year-old man, had served in the Army in Vietnam from approximately February 1969 to February 1970. He had donated blood on several other occasions since his return. He was treated by a private physician for malaria of unknown type in March 1970 and again at two veterans hospitals for two episodes of *P. vivax* infection in June and September 1970. Peripheral blood smears obtained from one of these hospitals were examined at CDC; *P. vivax* parasites were identified. He denied the use of parenteral drugs. Although thick and thin blood smears obtained at the time of the epidemiologic investigation were negative for malaria parasites, serum tested by the IFA technique gave titers of 1:1,024 to *P. vivax*, 1:256 to *P. malariae*, and 1:64 to *P. falciparum*. The patient had received this donor's blood on October 14, approximately 2 weeks before the onset of fever.

(Reported by Robert H. Hutcheson, Jr., M.D., State Epidemiologist, Tennessee State Department of Health; Robert C. Rendtorff, M.D., Director, Communicable Diseases, Shelby County Health Department, Memphis, Tennessee; and an EIS Officer.)

Editorial Note

From 1900 to 1950, 350 cases of transfusion-induced malaria were reported in the world medical literature. From 1950 to 1970, over 1,000 cases were reported (1). Many more cases have undoubtedly occurred that have not been reported.

An increase in the number of cases of transfusion-induced malaria has also been occurring in the United States. In the 9-year period from 1958 to 1966, only 10 cases were reported, whereas in the 5-year period from 1967 to 1971, 30 cases were reported (2). This increase in transfusion-induced malaria is related to the marked increase in imported malaria in the United States (3).

The infecting species in the 40 cases reported in the United States since 1958 were *P. vivax* (13 cases), *P. falciparum* (12), *P. malariae* (12), *P. ovale* (2), and mixed *P. falciparum* and *P. malariae* (1). Three cases were fatal; two were due to *P. falciparum*, and one was due to *P. vivax* (this patient had had a prior splenectomy).

The infective donor was identified in 24 of the 40 cases. Fifteen donors were Americans who had recently returned from Vietnam, three were from Nigeria, two were from Ghana, one was from Mexico, one was from Puerto Rico,

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING MARCH 11, 1972 AND MARCH 13, 1971 (10th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unspec. cases		Post In- fectious	Serum	Infectious	
						1972	1971	1972	1972	1972	1971
UNITED STATES	31	-	4,243	3	24	11	23	4	174	1,079	1,174
NEW ENGLAND	2	-	842	-	-	1	1	1	8	73	128
Maine	-	-	91	-	-	-	-	-	1	4	17
New Hampshire	-	-	24	-	-	-	-	-	2	2	6
Vermont	-	-	3	-	-	-	-	-	-	3	9
Massachusetts	-	-	349	-	-	-	-	-	1	42	49
Rhode Island	1	-	125	-	-	-	-	-	1	8	22
Connecticut	1	-	250	-	-	1	1	1	3	14	25
MIDDLE ATLANTIC	5	-	451	-	-	3	4	-	42	145	191
Upstate New York	-	-	5	-	-	-	-	-	-	-	26
New York City	1	-	121	-	-	-	3	-	28	38	30
New Jersey *	2	-	NN	-	-	1	-	-	12	68	63
Pennsylvania	2	-	325	-	-	2	1	-	2	39	72
EAST NORTH CENTRAL	4	-	1,483	-	-	1	6	-	41	221	183
Ohio	-	-	382	-	-	-	2	-	12	50	45
Indiana	-	-	290	-	-	1	-	-	8	22	17
Illinois	-	-	-	-	-	-	2	-	3	55	61
Michigan	4	-	811	-	-	-	2	-	18	88	49
Wisconsin	-	-	-	-	-	-	-	-	-	6	11
WEST NORTH CENTRAL	-	-	443	-	3	-	2	1	10	28	51
Minnesota	-	-	86	-	-	-	-	1	2	5	3
Iowa	-	-	253	-	-	-	-	-	-	2	7
Missouri	-	-	15	-	-	-	-	-	3	7	21
North Dakota	-	-	-	-	-	-	-	-	-	2	2
South Dakota	-	-	8	-	3	-	1	-	-	-	1
Nebraska	-	-	3	-	-	-	-	-	-	2	5
Kansas	-	-	78	-	-	-	1	-	5	10	12
SOUTH ATLANTIC	6	-	383	1	6	3	3	-	32	176	155
Delaware	-	-	2	-	-	-	-	-	1	1	7
Maryland *	1	-	43	-	-	2	-	-	7	24	23
District of Columbia	-	-	22	-	-	-	-	-	3	3	-
Virginia	-	-	17	-	-	-	1	-	9	21	28
West Virginia	1	-	262	-	-	-	1	-	-	6	6
North Carolina	-	-	-	-	-	-	-	-	4	48	18
South Carolina	1	-	37	-	-	-	1	-	1	13	4
Georgia	1	-	-	1	2	-	-	-	-	15	28
Florida	2	-	-	-	4	1	-	-	7	45	41
EAST SOUTH CENTRAL	-	-	111	-	1	-	3	1	3	56	62
Kentucky	-	-	74	-	-	-	1	-	1	18	21
Tennessee	-	-	NN	-	-	-	2	-	1	32	23
Alabama	-	-	34	-	1	-	-	1	-	-	10
Mississippi	-	-	3	-	-	-	-	-	1	6	8
WEST SOUTH CENTRAL	4	-	26	2	13	-	2	-	5	83	92
Arkansas	-	-	4	-	-	-	-	-	1	12	-
Louisiana	1	-	-	1	4	-	-	-	-	4	14
Oklahoma	-	-	3	-	-	-	1	-	-	9	15
Texas	3	-	19	1	9	-	1	-	4	58	63
MOUNTAIN	-	-	192	-	1	-	-	1	7	82	73
Montana	-	-	26	-	-	-	-	1	-	5	1
Idaho	-	-	-	-	-	-	-	-	-	9	7
Wyoming	-	-	15	-	-	-	-	-	-	-	-
Colorado	-	-	41	-	-	-	-	-	6	27	31
New Mexico	-	-	26	-	1	-	-	-	-	4	11
Arizona *	-	-	63	-	-	-	-	-	1	11	17
Utah	-	-	21	-	-	-	-	-	-	9	6
Nevada	-	-	-	-	-	-	-	-	-	17	-
PACIFIC	10	-	312	-	-	3	2	-	26	215	239
Washington	-	-	312	-	-	-	-	-	-	31	15
Oregon	-	-	-	-	-	-	-	-	1	38	22
California	10	-	-	-	-	2	2	-	25	142	186
Alaska	-	-	-	-	-	-	-	-	-	2	3
Hawaii	-	-	-	-	-	1	-	-	-	2	13
Guam *	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	9	-	-	-	-	-	-	10	26
Virgin Islands	-	-	2	-	-	-	-	-	-	-	-

*Delayed reports: Aseptic meningitis: Ariz. 2, Guam 1
Chickenpox: Md. 1Hepatitis, serum: N.J. delete 1, Md. 4
Hepatitis, infectious: Md. 25, Guam 2

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**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING MARCH 11, 1972 AND MARCH 13, 1971 (10th WEEK) - Continued**

AREA	MALARIA		MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		RUBELLA	
	1972	Cum. 1972	1972	Cumulative		1972	Cumulative		1972	Cum. 1972	1972	Cum. 1972
				1972	1971		1972	1971				
UNITED STATES	19	319	939	6,892	17,856	24	355	647	2,288	20,978	849	5,676
NEW ENGLAND	1	7	69	463	508	2	14	31	87	888	44	237
Maine	-	-	4	110	300	-	2	5	3	69	-	7
New Hampshire	-	1	-	22	19	-	-	2	-	56	-	16
Vermont	-	-	-	17	4	-	-	-	-	69	1	8
Massachusetts	1	4	22	70	108	2	7	13	25	224	30	119
Rhode Island	-	-	9	83	22	-	5	2	7	173	1	26
Connecticut	-	2	34	161	55	-	-	9	52	297	12	61
MIDDLE ATLANTIC	4	24	28	411	1,985	3	38	89	74	877	22	217
Upstate New York	-	1	-	36	181	-	10	26	NN	NN	3	31
New York City	-	5	8	74	1,215	1	8	14	36	377	8	57
New Jersey	1	8	20	286	107	1	10	26	20	303	7	87
Pennsylvania	3	10	-	15	482	1	10	23	18	197	4	42
EAST NORTH CENTRAL	1	24	331	2,670	3,389	2	37	74	736	5,850	239	1,482
Ohio	-	2	12	78	1,379	1	15	21	92	912	11	118
Indiana	-	-	64	583	228	-	7	2	66	425	26	217
Illinois	1	8	118	850	933	1	5	30	179	1,126	19	230
Michigan	-	14	80	478	212	-	9	18	102	928	55	357
Wisconsin	-	-	57	681	637	-	1	3	297	2,459	128	560
WEST NORTH CENTRAL	2	17	17	269	1,384	5	31	63	428	4,011	61	282
Minnesota	-	2	1	10	22	2	7	8	44	402	4	21
Iowa	-	1	9	154	338	-	-	5	321	2,818	14	127
Missouri	-	3	3	69	448	1	5	25	19	124	1	43
North Dakota	-	1	-	20	82	-	-	1	8	186	-	9
South Dakota	-	-	-	2	71	-	1	3	3	28	-	6
Nebraska	-	3	-	6	8	-	5	7	4	119	9	27
Kansas	2	7	4	8	415	2	13	14	29	334	33	49
SOUTH ATLANTIC	4	30	108	685	1,995	5	80	86	174	1,777	24	506
Delaware	-	-	-	3	9	-	1	-	1	9	-	1
Maryland *	-	-	1	6	22	1	9	10	4	85	1	14
District of Columbia	-	1	-	-	3	-	2	3	-	2	-	-
Virginia	-	2	6	16	673	-	16	10	28	217	-	28
West Virginia	-	1	6	41	112	-	8	2	94	1,031	12	152
North Carolina	1	11	-	16	633	1	15	12	NN	NN	-	2
South Carolina	-	4	17	108	232	-	7	9	4	80	-	19
Georgia	3	6	24	44	37	-	-	10	-	-	-	16
Florida	-	5	54	451	274	3	22	30	43	353	11	274
EAST SOUTH CENTRAL	-	113	36	321	2,718	1	27	43	83	1,090	23	339
Kentucky	-	111	14	141	1,139	-	6	8	4	166	1	127
Tennessee	-	-	9	41	226	-	12	19	65	672	13	138
Alabama	-	2	5	83	583	-	6	11	9	201	1	16
Mississippi	-	-	8	56	770	1	3	5	5	51	8	58
WEST SOUTH CENTRAL	-	33	57	421	4,403	1	49	54	156	1,735	74	496
Arkansas	-	2	-	6	46	-	6	1	16	34	-	12
Louisiana	-	-	7	19	563	1	16	19	5	66	3	11
Oklahoma	-	1	-	2	444	-	2	6	1	86	-	1
Texas	-	30	50	394	3,350	-	25	28	134	1,549	71	472
MOUNTAIN	1	25	81	555	697	1	6	22	145	1,134	51	317
Montana	-	1	-	11	243	-	-	-	6	94	1	16
Idaho	-	1	-	3	81	-	2	2	4	43	-	4
Wyoming	-	-	-	-	10	-	1	-	11	119	-	-
Colorado	1	18	28	236	139	-	-	4	27	302	39	159
New Mexico	-	1	11	45	130	-	1	2	68	289	4	34
Arizona	-	4	29	154	70	1	1	8	22	270	4	95
Utah	-	-	13	106	24	-	1	5	7	17	3	9
Nevada	-	-	-	-	-	-	-	1	-	-	-	-
PACIFIC	6	46	212	1,097	777	4	73	185	405	3,616	311	1,800
Washington	-	-	46	276	195	-	8	7	142	1,266	31	309
Oregon	-	4	-	9	68	1	5	12	53	468	9	152
California	6	38	161	772	492	3	59	164	199	1,804	262	1,305
Alaska	-	-	-	5	8	-	-	-	9	49	8	11
Hawaii	-	4	5	35	14	-	1	2	2	29	1	23
Guam *	-	-	-	-	-	-	2	-	-	-	-	3
Puerto Rico	-	-	26	105	47	-	-	-	14	168	1	1
Virgin Islands	-	-	-	-	2	-	2	-	8	84	-	2

*Delayed reports: Measles: Md. 1
Meningococcal infections: Md. 1

Mumps: Md. 6
Rubella: Guam 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING MARCH 11, 1972 AND MARCH 13, 1971 (10th WEEK) - Continued

AREA	TETANUS	TB (New Active)	TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES		RABIES IN ANIMALS	
									GONOR- RHEA	SYPHILIS (Pri. & Sec.)	1972	Cum. 1972
UNITED STATES	3	679	3	22	3	48	1	10	14,216	466	80	678
NEW ENGLAND	-	43	-	-	1	3	-	-	354	11	5	31
Maine *	-	3	-	-	-	-	-	-	9	-	5	28
New Hampshire	-	-	-	-	-	-	-	-	11	1	-	-
Vermont	-	3	-	-	-	-	-	-	12	-	-	3
Massachusetts	-	28	-	-	1	3	-	-	174	-	-	-
Rhode Island	-	3	-	-	-	-	-	-	15	-	-	-
Connecticut	-	6	-	-	-	-	-	-	133	10	-	-
MIDDLE ATLANTIC	-	126	-	-	-	14	-	3	1,793	98	1	12
Upstate New York	-	25	-	-	-	3	-	-	451	3	1	9
New York City	-	51	-	-	-	8	-	-	1,020	83	-	-
New Jersey	-	21	-	-	-	3	-	1	322	12	-	-
Pennsylvania	-	29	-	-	-	-	-	2	-	-	-	3
EAST NORTH CENTRAL	-	143	-	1	-	2	-	-	1,608	45	11	67
Ohio *	-	32	-	1	-	1	-	-	607	13	4	22
Indiana	-	33	-	-	-	-	-	-	148	7	6	19
Illinois *	-	29	-	-	-	-	-	-	228	3	-	9
Michigan	-	46	-	-	-	1	-	-	479	21	-	1
Wisconsin	-	3	-	-	-	-	-	-	146	1	1	16
WEST NORTH CENTRAL	-	24	1	6	-	1	-	1	961	4	9	160
Minnesota	-	10	-	-	-	-	-	-	142	-	3	49
Iowa	-	1	-	-	-	-	-	-	169	1	1	41
Missouri	-	6	1	6	-	1	-	-	292	1	1	14
North Dakota	-	-	-	-	-	-	-	-	25	-	1	43
South Dakota	-	-	-	-	-	-	-	-	47	-	-	1
Nebraska	-	2	-	-	-	-	-	-	94	-	-	-
Kansas	-	5	-	-	-	-	-	1	192	2	3	12
SOUTH ATLANTIC	1	122	1	4	-	5	-	2	3,985	162	12	82
Delaware	-	1	-	-	-	-	-	-	35	2	-	-
Maryland *	-	18	-	-	-	-	-	-	458	14	-	1
District of Columbia *	-	14	-	-	-	-	-	-	250	19	-	-
Virginia	1	14	1	4	-	3	-	1	394	41	6	30
West Virginia	-	3	-	-	-	-	-	-	36	-	1	15
North Carolina	-	32	-	-	-	-	-	1	956	6	-	-
South Carolina	-	-	-	-	-	-	-	-	334	19	-	-
Georgia	-	12	-	-	-	-	-	-	567	29	2	22
Florida	-	28	-	-	-	2	-	-	955	32	3	14
EAST SOUTH CENTRAL	-	76	-	1	-	4	1	1	1,106	25	30	191
Kentucky	-	16	-	-	-	1	-	-	137	5	7	75
Tennessee	-	18	-	-	-	1	1	1	439	8	18	96
Alabama	-	38	-	1	-	-	-	-	306	5	5	20
Mississippi	-	4	-	-	-	2	-	-	224	7	-	-
WEST SOUTH CENTRAL	1	48	1	7	-	1	-	3	1,678	58	9	97
Arkansas	-	9	1	7	-	1	-	-	98	4	-	17
Louisiana *	-	-	-	-	-	-	-	-	369	18	-	7
Oklahoma	-	5	-	-	-	-	-	1	158	3	5	35
Texas	1	34	-	-	-	-	-	2	1,053	33	4	38
MOUNTAIN	-	16	-	2	-	3	-	-	353	12	1	7
Montana	-	-	-	-	-	-	-	-	16	-	-	-
Idaho	-	2	-	-	-	-	-	-	34	-	-	-
Wyoming	-	-	-	-	-	-	-	-	1	-	-	-
Colorado	-	14	-	1	-	-	-	-	164	3	-	-
New Mexico	-	-	-	-	-	1	-	-	10	4	-	1
Arizona	-	-	-	1	-	1	-	-	93	5	1	6
Utah	-	-	-	-	-	1	-	-	35	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC	1	81	-	1	2	15	-	-	2,378	51	2	31
Washington	-	3	-	-	-	-	-	-	188	-	-	-
Oregon	1	6	-	-	-	-	-	-	167	1	-	-
California	-	65	-	-	2	12	-	-	1,975	50	2	27
Alaska	-	-	-	1	-	-	-	-	48	-	-	4
Hawaii	-	7	-	-	-	3	-	-	-	-	-	-
Guam *	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	1	-	-	42	14	1	14
Virgin Islands	-	-	-	-	-	-	-	-	4	2	-	-

*Delayed reports: Tuberculosis: Ohio delete 1, Ill. 6, Md. 34
Gonorrhea: Md. 221, D.C. 240, La. delete 3, Guam 3

Syphilis: Md. 10
Rabies in animals: Me. 3

Morbidity and Mortality Weekly Report

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDING MARCH 11, 1972

Week No.

10

(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	Under 1 year			All Ages	65 years and over	Under 1 year	
NEW ENGLAND	681	455	24	40	SOUTH ATLANTIC	1,391	741	80	69
Boston, Mass.	214	133	7	19	Atlanta, Ga.	165	86	8	9
Bridgeport, Conn.	30	21	1	2	Baltimore, Md.	223	111	6	7
Cambridge, Mass.	26	19	—	8	Charlotte, N. C.	68	31	3	—
Fall River, Mass.	34	22	1	—	Jacksonville, Fla.	82	50	3	2
Hartford, Conn.	60	39	1	1	Miami, Fla.	120	63	12	4
Lowell, Mass.	23	16	—	—	Norfolk, Va.	61	28	2	10
Lynn, Mass.	20	16	—	—	Richmond, Va.	121	74	2	11
New Bedford, Mass.	25	20	1	1	Savannah, Ga.	45	22	1	5
New Haven, Conn.	51	32	5	2	St. Petersburg, Fla.	124	101	3	5
Providence, R. I.	54	37	4	2	Tampa, Fla.	101	53	6	7
Somerville, Mass.	14	10	—	2	Washington, D. C.	207	88	32	8
Springfield, Mass.	38	23	—	1	Wilmington, Del.	74	34	2	1
Waterbury, Conn.	32	22	2	—	EAST SOUTH CENTRAL	688	398	20	40
Worcester, Mass.	60	45	2	1	Birmingham, Ala.	100	54	1	4
MIDDLE ATLANTIC	3,532	2,154	129	175	Chattanooga, Tenn.	60	33	1	6
Albany, N. Y.	63	31	1	3	Knoxville, Tenn.	35	23	1	1
Allentown, Pa.	35	26	1	5	Louisville, Ky.	101	66	3	9
Buffalo, N. Y.	136	88	4	5	Memphis, Tenn.	173	99	2	8
Camden, N. J.	41	21	2	—	Mobile, Ala.	79	42	6	3
Elizabeth, N. J.	27	20	—	—	Montgomery, Ala.	40	26	1	5
Erie, Pa.	32	15	2	3	Nashville, Tenn.	100	55	5	4
Jersey City, N. J.	61	38	3	4	WEST SOUTH CENTRAL	1,222	661	64	44
Newark, N. J.	95	33	4	7	Austin, Tex.	36	16	2	5
New York City, N. Y. †	1,819	1,113	67	89	Baton Rouge, La.	24	11	—	2
Paterson, N. J.	50	34	1	3	Corpus Christi, Tex.	28	17	1	1
Philadelphia, Pa.	501	301	16	11	Dallas, Tex.	162	92	6	6
Pittsburgh, Pa.	237	138	8	19	El Paso, Tex.	45	18	5	2
Reading, Pa.	51	40	—	4	Fort Worth, Tex.	73	45	3	4
Rochester, N. Y.	125	83	8	11	Houston, Tex.	265	124	19	9
Schenectady, N. Y.	22	16	1	1	Little Rock, Ark.	61	32	6	—
Scranton, Pa.	29	17	—	1	New Orleans, La.	191	122	8	3
Syracuse, N. Y.	102	67	8	2	Oklahoma City, Okla.	81	52	1	1
Trenton, N. J.	46	27	2	4	San Antonio, Tex.	127	63	6	4
Utica, N. Y.	30	26	1	3	Shreveport, La.	70	38	2	2
Yonkers, N. Y.	30	20	—	—	Tulsa, Okla.	59	31	5	5
EAST NORTH CENTRAL	2,637	1,490	139	81	MOUNTAIN	498	286	17	24
Akron, Ohio	60	35	1	1	Albuquerque, N. Mex.	52	24	—	4
Canton, Ohio	35	23	1	1	Colorado Springs, Colo.	30	18	1	7
Chicago, Ill.	651	352	50	16	Denver, Colo.	106	64	2	3
Cincinnati, Ohio	178	114	4	8	Ogden, Utah	28	21	1	1
Cleveland, Ohio	227	119	11	2	Phoenix, Ariz.	125	69	6	5
Columbus, Ohio	134	71	12	6	Pueblo, Colo.	12	9	—	2
Dayton, Ohio	101	59	2	2	Salt Lake City, Utah	70	39	4	1
Detroit, Mich.	347	193	12	11	Tucson, Ariz.	75	42	3	1
Evansville, Ind.	53	37	1	3	PACIFIC	1,779	1,148	55	48
Flint, Mich. **	53	28	4	2	Berkeley, Calif.	19	13	1	—
Fort Wayne, Ind.	50	29	3	3	Fresno, Calif.	45	30	1	1
Gary, Ind.	48	22	2	6	Glendale, Calif.	31	24	1	3
Grand Rapids, Mich.	68	44	4	4	Honolulu, Hawaii	54	30	4	—
Indianapolis, Ind.	162	77	10	2	Long Beach, Calif.	125	79	1	5
Madison, Wis.	39	19	5	3	Los Angeles, Calif.	614	401	16	13
Milwaukee, Wis.	133	85	3	1	Oakland, Calif.	88	53	3	2
Peoria, Ill.	33	19	3	—	Pasadena, Calif.	39	21	—	3
Rockford, Ill.	45	29	3	2	Portland, Oreg.	142	97	5	1
South Bend, Ind.	53	30	1	3	Sacramento, Calif.	63	38	5	—
Toledo, Ohio	119	68	5	5	San Diego, Calif.	112	67	5	1
Youngstown, Ohio	48	37	2	—	San Francisco, Calif.	183	117	3	5
WEST NORTH CENTRAL	817	526	33	35	San Jose, Calif.	37	22	—	2
Des Moines, Iowa	48	34	—	1	Seattle, Wash.	133	86	6	5
Duluth, Minn.	18	7	1	—	Spokane, Wash.	56	43	3	6
Kansas City, Kans.	28	18	2	1	Tacoma, Wash.	38	27	1	1
Kansas City, Mo.	162	104	9	4	Total	13,245	7,859	561	556
Lincoln, Nebr.	28	20	1	3	Expected Number	13,338	7,753	568	573
Minneapolis, Minn.	88	59	3	3	Cumulative Total	142,841	84,929	5,214	7,823
Omaha, Nebr.	83	51	2	10	(includes reported corrections for previous weeks)				
St. Louis, Mo.	242	152	8	5					
St. Paul, Minn.	69	50	1	7					
Wichita, Kans.	51	31	6	—					
Las Vegas, Nev. *	15	3	—	—					

*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.

†Delayed report for week ended March 4, 1972
 **Estimate based on average percent of divisional total

MALARIA - Continued

one was an American who had been in Nigeria, and one was an American who had been in the Philippines. Of the 24 known infective donors, only three, each of whom had P. malariae infection, donated the infective blood 3 or more years after they left a malarious area (6, 11, and 26 years). The average interval from return to the United States to the

donation of infective blood for donors with P. falciparum, P. vivax, and P. ovale infections was 11.9 months.

References

1. Bruce-Chwatt LJ: Letter to Schultz MG, 28 Feb 1972
2. Dover AS, Schultz MG: Transfusion-induced malaria. Transfusion 11:353, 1971
3. Center for Disease Control: Malaria Surveillance - Annual Summary, 1970. May 1971

INTERNATIONAL NOTES
QUARANTINE MEASURES

Changes in the "Supplement - United States Designated Yellow Fever Vaccination Centers," MMWR, Vol. 20, No. 9

The following change should be made in the list of United States Designated Yellow Fever Vaccination Centers:

WEST VIRGINIA

Morgantown West Virginia University Health Services,
26506
Add to address: Station 42,

University Hospital, Medical Center
Campus

The following should be deleted from the list of United States Designated Yellow Fever Vaccination Centers:

OKLAHOMA

Duncan Stephens County Health Dept., 73533

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In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting outbreaks or case investigations of current interest to health officials.

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

The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

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