



# Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE - PUBLIC HEALTH SERVICE - HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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**EPIDEMIOLOGIC NOTES AND REPORTS**  
**PROBABLE HUMAN RABIES - Lima, Ohio**

On Oct. 10, 1970, a 6-year-old boy in Lima, Ohio, was bitten on his left thumb by a bat while he was asleep. The bat was captured by the child's father and submitted to the Ohio Health Department. There, rabies was confirmed on examination of the brain by the fluorescent antibody (FA) technique. On October 14, the boy was started on a 14-day course of duck embryo vaccine (DEV).

The child was asymptomatic until October 30 when he complained of neck pain, and, over the next several days, experienced lethargy, malaise, and anorexia. His condition became worse, and on November 4, he was admitted to a local hospital with a temperature of 104°F. Over the next 10 days, the child's temperature decreased, but he became more lethargic. On November 13, stiffness of the neck developed, and lumbar puncture revealed 125 white cells. Over the next several days, the patient's condition deteriorated; he developed total aphasia, weakness of the left arm, bilateral

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positive Babinski reflexes, and coma. He began having difficulty with respiration, developing tachypnea and increased pharyngeal secretions, and a tracheostomy was performed. The patient was in and out of coma for a week and then gradually began to improve. His condition has continued to improve, and he is now able to walk with assistance and speak in short sentences.

Studies to establish the diagnosis have included a brain biopsy which was negative for rabies by culture and FA test. There were no detectable serum antibodies against St. Louis Encephalitis, Eastern or Western Equine Enceph-

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

DISEASE	50th WEEK ENDED		MEDIAN 1965 - 1969	CUMULATIVE, FIRST 50 WEEKS		
	December 19, 1970	December 13, 1969		1970	1969	MEDIAN 1965 - 1969
Aseptic meningitis . . . . .	87	49	38	6,033	3,409	2,936
Brucellosis . . . . .	5	3	4	203	223	239
Diphtheria . . . . .	6	5	5	432	191	191
Encephalitis, primary: Arthropod-borne & unspecified . . . . .	25	31	31	1,524	1,275	1,541
Encephalitis, post-infectious . . . . .	6	10	10	363	296	634
Hepatitis, serum . . . . .	144	125	799	7,072	5,148	39,524
Hepatitis, infectious . . . . .	1,314	1,138		54,800	46,397	
Malaria . . . . .	58	43	36	3,344	3,101	2,023
Measles (rubeola) . . . . .	957	665	665	45,743	24,277	61,513
Meningococcal infections, total . . . . .	49	58	58	2,377	2,819	2,819
Civilian . . . . .	40	53	52	2,093	2,577	2,577
Military . . . . .	9	5	5	284	242	211
Mumps . . . . .	2,739	2,427	---	98,421	84,681	---
Poliomyelitis, total . . . . .	1	---	---	30	18	57
Paralytic . . . . .	---	---	---	28	17	46
Rubella (German measles) . . . . .	425	549	---	54,599	54,110	---
Tetanus . . . . .	2	8	4	134	164	191
Tularemia . . . . .	4	4	4	153	140	169
Typhoid fever . . . . .	7	10	4	350	328	392
Typhus, tick-borne (Rky. Mt. spotted fever) . . . . .	1	1	---	337	450	277
Rabies in animals . . . . .	53	66	64	2,897	3,208	3,867

**TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY**

	Cum.		Cum.
Anthrax: . . . . .	2	Psittacosis: . . . . .	36
Botulism: . . . . .	12	Rabies in Man: . . . . .	2
Leprosy: Ill.-1, Tex.-4 . . . . .	121	Rubella congenital syndrome: . . . . .	65
Leptospirosis: Calif.-1, Ga.-1 . . . . .	44	Trichinosis: Ill.-2, N. J.-1 . . . . .	108
Plague: . . . . .	12	Typhus, murine: Hawaii-1, Ohio-1 . . . . .	34

### RABIES — (Continued from front page)

alomyelitis, or leptospirosis. Serum complement fixing antibodies against California Encephalitis were 1:8 on October 13, and bi-weekly determinations through December 3 have remained the same. Serum neutralizing antibody titer against rabies was 1:5,900 on November 13. Subsequent titers were 1:17,500 on November 20 and 1:78,000 on December 4.

(Reported by Thomas Weis, M.D., and John Stechshulte, M.D., Lima Pediatricians; Robert S. Oyer, M.D., Allen County Health Commissioner; Howard W. Stegmüller, Ph.D., Principle Virologist, Bureau of Laboratories; Jack Russell, D.V.M., Chief, Public Health Veterinarian, and John H. Ackerman, M.D., Chief of the Bureau of Preventive Medicine, Ohio Department of Health; and an EIS Officer.)

#### Editorial Note:

The combined clinical, laboratory, and epidemiologic features of this case support the diagnosis of rabies. The difficulty of demonstrating the presence of rabies virus in human and animal CNS tissue after rabies encephalitis has been described (1). In such cases, as in this one, a definite diagnosis requires exhaustive investigation of all possible alternative diagnoses as well as efforts to confirm the presence of rabies virus by serological, histological, and cultural

techniques. Rabies antibody titers after a 14-day course of DEV rarely exceed 1:500 (2), and rabies titers of this magnitude seen here strongly support the diagnosis of rabies.

If this boy's illness was rabies, the clinical improvement noted is significant. Although humans have been known to survive with rabies for up to 133 days, there has been no case proven by culture in which the neurological status improved after the first month of illness. If this child continues to improve, this can be considered the first documented case of recovery from rabies.

Clinical management of this case included the continuous monitoring of cardiac and pulmonary function and the prevention of hypoxia by prophylactic tracheostomy and intensive pulmonary nursing. Hypoxia is a common complication of clinical rabies and may be a cause of death in some cases (1). Prevention of hypoxia in this case may have contributed to the arrest of his clinical illness.

#### References:

1. Rubin RH, Sullivan L, Summers R, et al: A case of human rabies in Kansas: epidemiologic, clinical, and laboratory considerations. *J Infect Dis* 122:318-322, 1970
2. Greenberg M, Childress J: Vaccination against rabies with duck-embryo and semple vaccines. *JAMA* 173:333-337, 1960

### TRANSFUSION-INDUCED MALARIA

#### New York and West Virginia

Two unrelated cases of transfusion-induced malaria were recently reported to the Parasitic Diseases Branch, CDC: one from New York and one from West Virginia.

**Case 1:** On Oct. 29, 1970, one unit of whole blood was administered to a 34-year-old man who had had his kidneys removed and was a patient on the hemodialysis unit of a New York City hospital. On November 6, he had a temperature of 105° F., chills, headache, malaise, and cough. His fever spikes occurred every 2 days, and on November 13, trophozoites of *Plasmodium falciparum* were seen on a peripheral blood smear. He was treated with standard doses of chloroquine phosphate and responded promptly. The patient denied recent foreign travel, history of malaria, and the use of commonly-shared syringes.

The unit of blood was donated to a New York hospital blood program in late October by a 34-year-old man who was originally from Ghana. The donor entered the United States from Ghana in October 1969 and denied any subsequent travel to malarious areas and use of shared syringes. He stated that, to the best of his knowledge, he had never had malaria or malaria-like illnesses and had not taken any anti-malaria drugs since receiving quinine as a child. Several peripheral blood smears were negative for malaria parasites; serum will be tested by the indirect fluorescent antibody (IFA) technique.

**Case 2:** On Oct. 21, 1970, a 40-year-old woman was admitted to a West Virginia hospital for treatment of alcoholic gastritis. Because she had suffered acute loss of blood, she received 2 units of whole blood. On November 19, she experienced a temperature of 103° F., chills, and muscle cramps. The next day, she became afebrile, but the symptoms recurred intermittently until December 7, when she

was admitted to another hospital for investigation of "fever of unknown origin." Parasites of *P. vivax* were seen on peripheral blood smears.

The 2 units of blood were obtained locally by the first hospital on the day the transfusions were given. One unit was donated by a West Virginia resident who had never traveled outside his home state and who stated that he had never had malaria. The other donor was a 20-year-old ex-Marine who had returned from Vietnam on July 18, 1969. He had a confirmed malaria attack while in Vietnam in November 1968, but he stated that he had not had any recurrences or malaria-like illnesses since his return. It is not known if he took any chloroquine-primaquine tablets after his return to the United States. A thick peripheral blood smear obtained on Dec. 9, 1970, contained a few ring stages of *Plasmodia*, but species identification was not possible; IFA test results are pending.

(Reported by Stephen J. Seligman, M.D., Associate Professor of Medicine, and Margaret Choa, M.D., Fellow in Infectious Diseases, Downstate Medical Center, Brooklyn; Howard B. Shookhoff, M.D., Division of Tropical Diseases, and Vincent F. Guinee, M.D., Director, Bureau of Preventable Diseases, New York City Health Dept.; W. Guy Fiscus, M.D., Attending Physician, Tucker County Hospital (W. Va.); John Hall, Professor of Microbiology, University of West Virginia Medical Center, Morgantown, and Eugene J. Powell, Administrative Assistant, Division of Disease Control, State of West Virginia Dept. of Health.)

#### Editorial Note:

These are the sixth and seventh cases of transfusion-induced malaria reported to the Malaria Surveillance, Epidemiology Program, CDC, in 1970.

**SURVEILLANCE SUMMARY**  
**PSITTACOSIS - United States 1969**

In 1969, 57 cases of human psittacosis were reported, compared with 45 cases in 1968. Epidemiologic case histories were submitted to CDC for 47 (82 percent) of these cases. Of the 16 states reporting, California, Connecticut, Maryland, and Pennsylvania accounted for 54 percent of the 1969 cases, with California reporting the largest number of cases for the third consecutive year. Eleven states reported an increase in cases over those reported in 1968, nine states recorded a decrease, and three states reported the same number of cases for 1968-1969. Human psittacosis was reported from six states that had had none the previous year; seven states reported cases in 1968, but none in 1969. Nine states have not recorded any cases in the past 10 years, and 19 states have not reported any human psittacosis since 1964.

Of the 46 cases in which the month of onset was known, 28 (61 percent) occurred from March through July. More cases occurred in June than in any other month; the second highest number of cases occurred in March (Figure 1). In 1968, more cases were reported in April and May.

As in 1968, there was no outstanding difference in the age or sex distribution (Table 1). The greatest change was noted in the 0-9 year age group, which involved only one case in 1969 (2.1 percent), but included five cases in 1968 (13.5 percent).

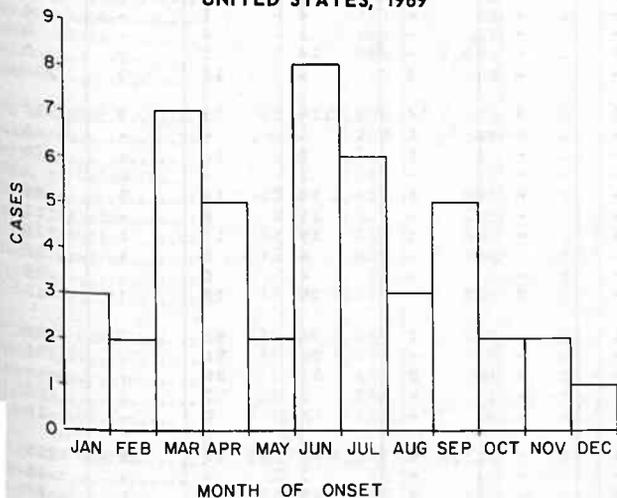
Parakeets were the probable source of infection in 13 of the 47 cases (28 percent), compared with 17 cases (46 percent) in 1968 (Table 2). Parrots were associated with eight cases (17 percent) in 1969, compared with five (14 percent) in 1968. In 1968, 16 percent of the cases were related to pigeons, and in 1969, 17 percent were associated with pigeons. In 1969, however, five cases (11 percent) were most likely due to chickens or turkeys, whereas only one case (3 percent) was related to poultry in 1968. The majority of the patients were exposed in their homes. In 22 of the 47 cases (47 percent), the associated bird or birds were sick or had died.

**Table 1**  
**Human Psittacosis Cases by Age and Sex**

Age (Years)	Sex		Total	Percent of Total
	Male	Female		
0-9	0	1	1	2.1
10-19	4	2	6	12.8
20-29	3	6	9	19.1
30-39	3	3	6	12.8
40-49	3	4	7	14.9
50-59	3	3	6	12.8
60-69	3	4	7	14.9
70+	1	3	4	8.5
Unknown	1	0	1	2.1
<b>Total</b>	<b>21</b>	<b>26</b>	<b>47</b>	<b>100.0</b>
<b>Percent of Total</b>	<b>44.7</b>	<b>55.3</b>	<b>100.0</b>	

(Reported by Office of Veterinary Public Health Activities, Epidemiology Program, CDC.)

**Figure 1**  
**CASES OF HUMAN PSITTACOSIS, BY MONTH OF ONSET**  
**UNITED STATES, 1969**



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

Center for Disease Control  
Attn: Chief, Veterinary Public Health Activities  
Epidemiology Program  
Atlanta, Georgia 30333

**Table 2**  
**Human Psittacosis Cases by Exposure Categories and Most Probable Source of Infection - 1969**

Exposure Category	Most Probable Source of Infection										Total	Percent of Total
	Para-keet	Pigeon	Canary	Parrot	Chicken	Turkey	Birds, Variety or Unspecified	Cockatiel	Love-bird	Unknown		
Pet Bird Owner	11	3	1	8				3	1		27	57.4
Pet Bird Dealer	1						3				4	8.5
Pet Bird Breeder		3	1								4	8.5
Poultry Related					3	2					5	10.6
Other	1	2									3	6.4
Unknown										4	4	8.5
<b>Total</b>	<b>13</b>	<b>8</b>	<b>2</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>47</b>	<b>100.0</b>
<b>Percent of Total</b>	<b>27.7</b>	<b>17.0</b>	<b>4.2</b>	<b>17.0</b>	<b>6.4</b>	<b>4.2</b>	<b>6.4</b>	<b>6.4</b>	<b>2.1</b>	<b>8.5</b>	<b>100.0</b>	

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPH- THERIA	ENCEPHALITIS		HEPATITIS				MALARIA	
				Primary including unsp. cases		Post In- fectious	Serum	Infectious		1970	Cum. 1970
				1970	1969			1970	1970		
UNITED STATES.....	87	5	6	25	31	6	144	1,314	1,138	58	3,344
NEW ENGLAND.....	2	-	-	-	1	-	4	143	111	1	88
Maine.....	-	-	-	-	-	-	-	12	18	-	11
New Hampshire.....	-	-	-	-	-	-	-	5	4	-	6
Vermont.....	-	-	-	-	-	-	-	37	4	-	5
Massachusetts.....	1	-	-	-	-	-	2	46	67	-	42
Rhode Island.....	1	-	-	-	1	-	-	15	8	-	9
Connecticut.....	-	-	-	-	-	-	2	28	10	1	15
MIDDLE ATLANTIC.....	18	-	-	5	5	-	56	269	172	6	322
New York City.....	-	-	-	-	1	-	34	91	52	-	42
New York, Up-State...	6	-	-	1	-	-	5	53	32	3	94
New Jersey.*.....	6	-	-	-	-	-	11	74	37	2	83
Pennsylvania.....	6	-	-	4	4	-	6	51	51	1	103
EAST NORTH CENTRAL.....	4	-	-	8	10	-	27	205	245	4	204
Ohio.....	1	-	-	4	7	-	4	53	57	1	32
Indiana.*.....	-	-	-	1	-	-	2	8	22	-	24
Illinois.....	1	-	-	-	2	-	7	56	67	1	61
Michigan.....	2	-	-	2	1	-	14	81	89	2	87
Wisconsin.....	-	-	-	1	-	-	-	7	10	-	-
WEST NORTH CENTRAL.....	2	2	-	1	4	2	5	50	34	3	353
Minnesota.*.....	2	-	-	-	1	2	2	9	5	-	46
Iowa.....	-	1	-	1	1	-	-	8	12	-	27
Missouri.....	-	1	-	-	-	-	-	9	2	-	34
North Dakota.....	-	-	-	-	-	-	-	4	1	-	4
South Dakota.....	-	-	-	-	-	-	-	1	-	-	2
Nebraska.....	-	-	-	-	2	-	-	14	2	-	9
Kansas.....	-	-	-	-	-	-	3	5	12	3	231
SOUTH ATLANTIC.....	12	1	2	6	1	2	14	118	75	8	597
Delaware.....	-	-	-	-	-	-	1	1	-	-	2
Maryland.....	-	-	-	-	-	-	1	8	12	-	76
Dist. of Columbia...	1	-	-	-	-	-	-	2	-	-	2
Virginia.....	2	-	-	1	-	-	2	28	13	3	82
West Virginia.....	-	-	-	1	-	-	-	15	9	-	12
North Carolina.....	-	-	-	-	1	-	3	15	15	1	221
South Carolina.....	1	1	-	-	-	-	-	6	5	1	53
Georgia.....	-	-	1	-	-	-	-	4	6	-	94
Florida.....	8	-	1	4	-	2	7	39	15	3	55
EAST SOUTH CENTRAL.....	7	-	-	-	1	-	2	86	98	3	196
Kentucky.....	4	-	-	-	-	-	-	26	56	1	158
Tennessee.....	1	-	-	-	-	-	2	51	26	-	-
Alabama.....	2	-	-	-	-	-	-	3	7	2	26
Mississippi.....	-	-	-	-	1	-	-	6	9	-	12
WEST SOUTH CENTRAL.....	1	-	4	-	1	-	6	91	58	9	605
Arkansas.....	-	-	-	-	-	-	-	3	-	-	15
Louisiana.....	1	-	2	-	1	-	2	19	12	1	48
Oklahoma.....	-	-	-	-	-	-	-	8	7	7	106
Texas.....	-	-	2	-	-	-	4	61	39	1	436
MOUNTAIN.....	5	-	-	-	1	-	3	99	68	16	364
Montana.....	-	-	-	-	-	-	-	5	1	-	10
Idaho.....	-	-	-	-	-	-	1	3	3	-	8
Wyoming.....	-	-	-	-	-	-	-	1	3	-	-
Colorado.....	4	-	-	-	1	-	1	37	12	16	322
New Mexico.....	-	-	-	-	-	-	-	19	11	-	10
Arizona.....	1	-	-	-	-	-	-	13	33	-	10
Utah.*.....	-	-	-	-	-	-	1	20	4	-	4
Nevada.....	-	-	-	-	-	-	-	1	1	-	-
PACIFIC.....	36	2	-	5	7	2	27	253	277	8	615
Washington.*.....	-	-	-	-	-	-	1	30	56	1	50
Oregon.....	2	-	-	-	1	-	1	32	18	-	25
California.....	34	2	-	4	6	2	25	182	201	7	397
Alaska.....	-	-	-	-	-	-	-	2	1	-	2
Hawaii.....	-	-	-	1	-	-	-	7	1	-	141
Puerto Rico.*.....	-	-	-	-	-	-	-	9	21	-	28
Virgin Islands.....	-	-	-	-	-	-	-	-	-	-	-

\* Delayed reports: Aseptic meningitis: Minn. 3, Wash. 1  
Hepatitis, serum: Utah 1  
Hepatitis, infectious: N.J. delete 2, Ind. delete 5, Utah 10, P.R. 2  
Malaria: Minn. 13, P.R. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
DECEMBER 19, 1970 AND DECEMBER 13, 1969 (50th Week) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		POLIOMYELITIS		
	1970	Cumulative		1970	Cumulative		1970	Cum. 1970	Total	Paralytic	
		1970	1969		1970	1969			1970	1970	Cum. 1970
UNITED STATES.....	957	45,743	24,277	49	2,377	2,819	2,739	98,421	1	-	28
NEW ENGLAND.....	51	1,209	1,187	2	102	108	239	11,223	-	-	-
Maine.....	32	423	9	-	5	8	28	857	-	-	-
New Hampshire.....	-	61	245	-	9	5	18	436	-	-	-
Vermont.....	1	9	3	-	8	-	20	725	-	-	-
Massachusetts.....	11	481	248	1	40	41	42	3,373	-	-	-
Rhode Island.....	-	120	27	1	7	14	59	2,224	-	-	-
Connecticut.....	7	115	655	-	33	40	72	3,608	-	-	-
MIDDLE ATLANTIC.....	125	5,326	7,981	6	438	468	367	9,269	-	-	-
New York City.....	34	1,097	5,016	-	90	89	31	3,056	-	-	-
New York, Up-State...	71	418	625	3	84	91	NN	NN	-	-	-
New Jersey.....	-	1,727	1,145	1	179	183	170	2,713	-	-	-
Pennsylvania.....	20	2,084	1,195	2	85	105	166	3,500	-	-	-
EAST NORTH CENTRAL.....	198	10,697	2,950	6	276	382	922	27,668	1	-	2
Ohio.....	95	3,994	525	4	101	138	169	4,785	1	-	-
Indiana.....	-	280	483	-	26	52	77	2,379	-	-	-
Illinois.....	44	3,268	884	1	68	54	121	2,182	-	-	-
Michigan.....	5	1,842	394	1	68	111	135	7,211	-	-	1
Wisconsin.....	54	1,313	664	-	13	27	420	11,111	-	-	1
WEST NORTH CENTRAL.....	5	3,935	1,552	2	123	139	74	5,285	-	-	1
Minnesota.....	-	40	11	1	22	29	17	581	-	-	-
Iowa.....	2	1,175	338	-	14	21	39	3,313	-	-	-
Missouri.....	-	1,279	32	1	64	56	5	410	-	-	1
North Dakota.....	-	321	77	-	5	2	8	373	-	-	-
South Dakota.....	-	104	51	-	1	1	4	52	-	-	-
Nebraska.....	2	945	1,034	-	8	13	1	401	-	-	-
Kansas.....	1	71	9	-	9	17	-	155	-	-	-
SOUTH ATLANTIC.....	82	7,607	2,979	9	464	482	195	10,364	-	-	-
Delaware.....	-	269	508	-	3	17	7	373	-	-	-
Maryland.....	-	1,387	93	-	47	41	38	1,119	-	-	-
Dist. of Columbia....	-	345	68	-	3	9	1	216	-	-	-
Virginia.....	43	2,156	991	1	48	58	16	2,215	-	-	-
West Virginia.....	5	338	225	-	13	24	45	2,558	-	-	-
North Carolina.....	11	946	354	2	99	90	NN	NN	-	-	-
South Carolina.....	12	638	134	1	48	63	36	1,003	-	-	-
Georgia.....	-	18	2	2	45	78	-	3	-	-	-
Florida.....	11	1,510	604	3	158	102	52	2,877	-	-	-
EAST SOUTH CENTRAL.....	113	2,040	131	2	167	204	209	5,946	-	-	-
Kentucky.....	46	1,077	75	-	60	81	91	2,201	-	-	-
Tennessee.....	6	471	21	1	70	75	86	3,275	-	-	-
Alabama.....	56	378	11	1	25	28	19	401	-	-	-
Mississippi.....	5	114	24	-	12	20	13	69	-	-	-
WEST SOUTH CENTRAL.....	248	9,307	5,123	5	292	372	160	8,867	-	-	22
Arkansas.....	2	32	16	-	25	33	-	160	-	-	-
Louisiana.....	27	242	125	1	72	100	3	50	-	-	-
Oklahoma.....	67	940	143	-	23	36	3	2,703	-	-	-
Texas.....	152	8,093	4,839	4	172	203	154	5,954	-	-	22
MOUNTAIN.....	33	2,167	1,159	-	52	59	69	4,360	-	-	1
Montana.....	4	114	122	-	1	8	3	806	-	-	-
Idaho*.....	1	481	90	-	7	13	1	105	-	-	-
Wyoming.....	-	11	-	-	2	-	-	42	-	-	-
Colorado.....	6	198	141	-	17	13	15	1,519	-	-	1
New Mexico.....	16	302	286	-	2	8	8	787	-	-	-
Arizona.....	6	1,004	508	-	16	10	42	969	-	-	-
Utah*.....	-	36	11	-	6	5	-	132	-	-	-
Nevada.....	-	21	1	-	1	2	-	-	-	-	-
PACIFIC.....	102	3,455	1,215	17	463	605	504	15,439	-	-	2
Washington*.....	22	729	68	2	49	59	233	5,974	-	-	-
Oregon.....	27	448	201	1	32	22	24	1,314	-	-	-
California.....	51	1,945	880	14	377	503	191	6,163	-	-	2
Alaska.....	-	141	14	-	-	11	2	399	-	-	-
Hawaii.....	2	192	52	-	5	10	54	1,589	-	-	-
Puerto Rico.....	5	984	2,096	-	5	19	24	925	-	-	-
Virgin Islands.....	-	8	58	-	3	-	-	3	-	-	-

\*Delayed reports: Measles: Ida. 100, Wash. 9  
Meningococcal infections: Utah 1  
Mumps: Utah 3, Wash. 43

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
DECEMBER 19, 1970 AND DECEMBER 13, 1969 (50th WEEK)

AREA	RUBELLA		TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970
UNITED STATES.....	425	54,599	2	134	4	153	7	350	1	337	53	2,897
NEW ENGLAND.....	19	2,781	-	4	-	1	2	14	-	-	2	112
Maine.....	5	530	-	-	-	-	-	-	-	-	-	48
New Hampshire.....	1	155	-	-	-	-	-	-	-	-	-	1
Vermont.....	3	68	-	-	-	-	-	-	-	-	2	54
Massachusetts.....	4	1,279	-	2	-	1	1	10	-	-	-	4
Rhode Island.....	-	128	-	-	-	-	-	-	-	-	-	1
Connecticut.....	6	621	-	2	-	-	1	4	-	-	-	4
MIDDLE ATLANTIC.....	30	4,231	1	21	-	2	-	64	-	14	1	258
New York City.....	5	675	-	13	-	-	-	24	-	-	-	-
New York, Up-State..	4	475	1	4	-	1	-	20	-	6	1	242
New Jersey.....	5	894	-	3	-	-	-	10	-	4	-	-
Pennsylvania.....	16	2,187	-	1	-	1	-	10	-	4	-	16
EAST NORTH CENTRAL....	83	11,247	1	26	-	22	4	50	-	10	2	228
Ohio.....	19	2,151	-	2	-	4	1	18	-	9	-	58
Indiana.....	9	2,050	-	8	-	13	-	4	-	-	-	25
Illinois.....	13	1,787	-	7	-	3	-	10	-	1	2	63
Michigan.....	24	2,969	-	8	-	-	-	13	-	-	-	26
Wisconsin.....	18	2,290	1	1	-	2	3	5	-	-	-	56
WEST NORTH CENTRAL....	5	3,440	-	5	-	31	-	11	-	4	20	627
Minnesota.....	-	127	-	1	-	1	-	1	-	-	2	125
Iowa.....	2	2,078	-	2	-	-	-	1	-	1	8	132
Missouri.....	-	443	-	1	-	27	-	3	-	3	5	118
North Dakota.....	-	156	-	-	-	1	-	2	-	-	2	53
South Dakota.....	2	3	-	1	-	1	-	-	-	-	-	85
Nebraska.....	-	580	-	-	-	-	-	2	-	-	-	7
Kansas.....	1	53	-	-	-	1	-	2	-	-	3	107
SOUTH ATLANTIC.....	15	6,828	-	31	3	19	-	48	-	224	15	578
Delaware.....	-	46	-	-	-	-	-	-	-	5	-	-
Maryland.....	2	335	-	1	-	-	-	14	-	24	-	3
Dist. of Columbia..	-	23	-	1	-	-	-	1	-	-	-	-
Virginia.....	-	770	-	2	2	8	-	9	-	57	2	213
West Virginia.....	1	1,423	-	-	-	2	-	-	-	5	4	150
North Carolina.....	1	47	-	3	1	5	-	3	-	88	-	3
South Carolina.....	6	675	-	2	-	-	-	3	-	35	-	-
Georgia.....	-	-	-	6	-	3	-	8	-	9	4	115
Florida.....	5	3,509	-	16	-	1	-	10	-	1	5	94
EAST SOUTH CENTRAL....	27	2,996	-	16	-	14	1	42	1	39	4	230
Kentucky.....	3	972	-	2	-	2	1	12	-	3	2	127
Tennessee.....	18	1,531	-	6	-	11	-	20	-	22	2	63
Alabama.....	6	395	-	6	-	-	-	8	1	11	-	37
Mississippi.....	-	98	-	2	-	1	-	2	-	3	-	3
WEST SOUTH CENTRAL....	75	9,343	-	16	1	39	-	34	-	38	7	449
Arkansas.....	-	36	-	4	-	18	-	10	-	6	-	73
Louisiana.....	1	157	-	4	1	6	-	10	-	1	1	68
Oklahoma.....	-	824	-	-	-	6	-	1	-	24	3	94
Texas.....	74	8,326	-	8	-	9	-	13	-	7	3	214
MOUNTAIN.....	21	2,142	-	-	-	15	-	17	-	6	-	84
Montana.....	3	341	-	-	-	3	-	1	-	1	-	1
Idaho.....	5	206	-	-	-	-	-	-	-	2	-	3
Wyoming.....	1	136	-	-	-	-	-	2	-	1	-	-
Colorado.....	3	430	-	-	-	-	-	4	-	2	-	34
New Mexico.....	3	237	-	-	-	-	-	6	-	-	-	16
Arizona.....	6	620	-	-	-	-	-	2	-	-	-	14
Utah.....	-	172	-	-	-	12	-	2	-	-	-	2
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	14
PACIFIC.....	150	11,591	-	15	-	10	-	70	-	2	2	331
Washington.....	34	4,965	-	2	-	2	-	4	-	-	-	9
Oregon.....	12	990	-	3	-	2	-	1	-	-	-	4
California.....	103	5,298	-	10	-	6	-	61	-	2	2	307
Alaska.....	1	112	-	-	-	-	-	3	-	-	-	11
Hawaii.....	-	226	-	-	-	-	-	1	-	-	-	-
Puerto Rico.....	-	27	-	16	-	-	-	5	-	-	-	48
Virgin Islands.....	-	1	-	-	-	-	-	1	-	-	-	-

\* Delayed reports: Rubella: Wash. 2  
Tularemia: Utah 1

Week No. 50 TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED DECEMBER 19, 1970

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

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
<b>NEW ENGLAND:</b>	751	439	53	28	<b>SOUTH ATLANTIC:</b>	1,264	644	52	58
Boston, Mass.-----	238	133	15	6	Atlanta, Ga.-----	150	59	9	12
Bridgeport, Conn.-----	55	33	2	2	Baltimore, Md.-----	285	125	7	9
Cambridge, Mass.-----	36	27	11	—	Charlotte, N. C.-----	44	28	—	—
Fall River, Mass.-----	26	14	—	3	Jacksonville, Fla.-----	75	34	2	7
Hartford, Conn.-----	54	24	2	7	Miami, Fla.-----	107	62	1	2
Lowell, Mass.-----	21	14	3	1	Norfolk, Va.-----	52	20	4	4
Lynn, Mass.-----	18	11	1	1	Richmond, Va.-----	106	57	7	5
New Bedford, Mass.-----	23	13	1	1	Savannah, Ga.-----	46	23	3	4
New Haven, Conn.-----	64	37	1	5	St. Petersburg, Fla.-----	98	83	5	1
Providence, R. I.-----	64	38	7	1	Tampa, Fla.-----	91	56	8	6
Somerville, Mass.-----	9	8	3	—	Washington, D. C.-----	164	76	5	7
Springfield, Mass.-----	52	30	2	—	Wilmington, Del.-----	46	21	1	1
Waterbury, Conn.-----	32	20	—	—					
Worcester, Mass.-----	59	37	5	1	<b>EAST SOUTH CENTRAL:</b>	666	337	26	41
<b>MIDDLE ATLANTIC:</b>	3,447	2,089	137	134	Birmingham, Ala.-----	106	53	3	6
Albany, N. Y.-----	57	33	1	5	Chattanooga, Tenn.-----	54	30	1	4
Allentown, Pa.-----	44	34	4	—	Knoxville, Tenn.-----	50	29	2	—
Buffalo, N. Y.-----	162	101	4	8	Louisville, Ky.-----	136	67	11	11
Camden, N. J.-----	41	32	5	—	Memphis, Tenn.-----	109	58	2	10
Elizabeth, N. J.-----	21	12	2	—	Mobile, Ala.-----	60	33	1	2
Erie, Pa.-----	45	28	3	3	Montgomery, Ala.-----	38	15	5	1
Jersey City, N. J.-----	61	40	3	1	Nashville, Tenn.-----	113	52	1	7
Newark, N. J.-----	79	40	6	5	<b>WEST SOUTH CENTRAL:</b>	1,187	661	46	64
New York City, N. Y.-----	1,808	1,047	60	64	Austin, Tex.-----	33	22	7	—
Paterson, N. J.-----	34	29	2	—	Baton Rouge, La.-----	30	15	—	1
Philadelphia, Pa.-----	487	295	11	30	Corpus Christi, Tex.-----	23	14	—	—
Pittsburgh, Pa.-----	187	119	13	9	Dallas, Tex.-----	175	88	4	10
Reading, Pa.-----	42	26	2	—	El Paso, Tex.-----	27	7	—	7
Rochester, N. Y.-----	137	93	8	2	Fort Worth, Tex.-----	95	67	9	4
Schenectady, N. Y.-----	22	13	1	1	Houston, Tex.-----	251	126	4	20
Scranton, Pa.-----	40	29	2	2	Little Rock, Ark.-----	49	27	1	1
Syracuse, N. Y.-----	70	45	3	—	New Orleans, La.-----	160	87	2	2
Trenton, N. J.-----	43	30	4	2	Oklahoma City, Okla.-----	69	43	3	6
Utica, N. Y.-----	31	20	—	1	San Antonio, Tex.-----	123	75	3	6
Yonkers, N. Y.-----	36	23	3	1	Shreveport, La.-----	70	33	1	6
					Tulsa, Okla.-----	82	57	11	1
<b>EAST NORTH CENTRAL:</b>	2,711	1,541	91	134	<b>MOUNTAIN:</b>	479	283	16	31
Akron, Ohio-----	60	39	1	3	Albuquerque, N. Mex.-----	43	19	5	3
Canton, Ohio-----	45	33	2	1	Colorado Springs, Colo.-----	26	15	5	3
Chicago, Ill.-----	802	421	25	55	Denver, Colo.-----	134	76	3	7
Cincinnati, Ohio-----	121	64	3	4	Ogden, Utah-----	19	9	1	1
Cleveland, Ohio-----	210	118	4	11	Phoenix, Ariz.-----	114	68	—	8
Columbus, Ohio-----	128	75	—	5	Pueblo, Colo.-----	26	20	1	—
Dayton, Ohio-----	79	44	3	4	Salt Lake City, Utah-----	60	43	1	6
Detroit, Mich.-----	410	227	14	14	Tucson, Ariz.-----	57	33	—	3
Evansville, Ind.-----	44	29	3	3	<b>PACIFIC:</b>	1,768	1,087	51	110
Flint, Mich.-----	58	27	2	8	Berkeley, Calif.-----	30	22	—	—
Fort Wayne, Ind.-----	54	31	3	5	Fresno, Calif.-----	53	34	2	4
Gary, Ind.-----	40	19	6	2	Glendale, Calif.-----	38	27	1	1
Grand Rapids, Mich.-----	62	39	8	2	Honolulu, Hawaii-----	12	50	25	6
Indianapolis, Ind.-----	170	100	4	3	Long Beach, Calif.-----	92	59	4	2
Madison, Wis.-----	25	12	3	1	Los Angeles, Calif.-----	606	333	17	60
Milwaukee, Wis.-----	128	86	2	3	Oakland, Calif.-----	80	45	3	4
Peoria, Ill.-----	37	23	—	4	Pasadena, Calif.-----	48	39	1	—
Rockford, Ill.-----	46	30	3	—	Portland, Oreg.-----	130	91	5	6
South Bend, Ind.-----	34	21	3	1	Sacramento, Calif.-----	65	41	3	4
Toledo, Ohio-----	101	64	1	5	San Diego, Calif.-----	110	75	4	7
Youngstown, Ohio-----	57	39	1	—	San Francisco, Calif.-----	213	126	6	3
					San Jose, Calif.-----	50	35	1	2
<b>WEST NORTH CENTRAL:</b>	869	558	31	42	Seattle, Wash.-----	119	78	2	7
Des Moines, Iowa-----	61	44	4	1	Spokane, Wash.-----	42	28	—	3
Duluth, Minn.-----	23	16	5	—	Tacoma, Wash.-----	42	29	1	1
Kansas City, Kans.-----	43	19	5	10					
Kansas City, Mo.-----	163	108	—	8	<b>Total</b>	<b>13,142</b>	<b>7,639</b>	<b>503</b>	<b>642</b>
Lincoln, Nebr.-----	31	19	2	—	<b>Expected Number</b>	<b>13,366</b>	<b>7,762</b>	<b>522</b>	<b>568</b>
Minneapolis, Minn.-----	108	72	1	7	<b>Cumulative Total</b>	<b>641,780</b>	<b>366,446</b>	<b>24,697</b>	<b>30,544</b>
Omaha, Nebr.-----	69	48	—	5	(includes reported corrections for previous weeks)				
St. Louis, Mo.-----	229	142	9	7					
St. Paul, Minn.-----	70	45	2	1					
Wichita, Kans.-----	72	45	3	3					
Las Vegas, Nev.*	16	11	1	1					

\*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 December 12, 1970

INTERNATIONAL NOTES  
QUARANTINE MEASURES

*Changes in the "Supplement - Vaccination Certificate Requirements for International Travel,"  
MMWR, Vol. 19, No. 21*

The following changes should be made in the Vaccination Certificate Requirements for International Travel:

**Czechoslovakia**

In the note concerning cholera, delete: Turkey.

**Ethiopia**

Delete all information and insert: Cholera, Yellow Fever, Smallpox - I.

**Gabon**

Delete all information concerning Cholera and insert: II. And from all countries any parts of which are infected.

**Hungary**

Insert: Cholera - Certificate required from travelers over six months of age arriving from all countries, any parts of which are infected.

**Italy**

In the note concerning cholera, delete: Iraq, Israel, Jordan, Lebanon, Tunisia, and insert: Ivory Coast (by air), Liberia, Saudi Arabia, Sierra Leone, Turkey.

**Papua and New Guinea**

Delete the note concerning cholera and insert: Cholera - And from all countries in Africa, Asia and Europe.

**Qatar**

Delete the note concerning cholera and insert: Cholera - And from all countries in Africa, Asia and in the Middle East.

**Switzerland**

Insert under Cholera - II.

**Turkey**

In the note concerning cholera, delete: Jordan, Lebanon, Libya, USSR, and insert: Tunisia.

**Upper Volta**

Insert: Cholera - I.

**Union of Soviet Socialist Republics**

In the note concerning cholera, delete: Turkey, and insert: Mali.

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 21,000 IS PUBLISHED AT THE CENTER FOR DISEASE CONTROL, ATLANTA, GEORGIA.

DIRECTOR, CENTER FOR DISEASE CONTROL  
DIRECTOR, EPIDEMIOLOGY PROGRAM

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IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE CENTER FOR DISEASE CONTROL WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CENTER FOR DISEASE CONTROL. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

CENTER FOR DISEASE CONTROL  
ATTN: THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT  
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL 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.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION  
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