



Morbidity and Mortality

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

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INTERNATIONAL NOTES
CHANGE IN

YELLOW FEVER VACCINATION REQUIREMENT

On Nov. 9, 1972, the Public Health Service (PHS) announced the elimination of yellow fever vaccination requirements for travelers entering the United States. However, the PHS continues to recommend yellow fever vaccination for the protection of all U.S. travelers going to areas reporting cases.

Yellow fever is endemic in South America and Africa in areas approximately 15° above and below the equator. In South America, the disease is primarily Jungle Yellow Fever. A total of 22 cases have been reported from the deep interior of Venezuela since late June 1972, after a 5-year period with no reported cases. Brazil, Colombia, Bolivia, and Peru continue to report a few cases each year. In Africa, the only two countries that reported yellow fever in 1971 were Angola and Zaire. Angola reported 65 cases with 42 deaths, after at least 20 years with no reported cases, and Zaire reported two fatal

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cases after quiescence for approximately 10 years.

The elimination of the yellow fever vaccination requirement by the United States follows the elimination of vaccination against cholera on Dec. 12, 1970, and the restricted requirement of vaccination against smallpox on Nov. 19, 1971. The only vaccination now required by the United States from persons arriving from international travel is that of smallpox, and this only when the traveler has been in a country reporting smallpox within the preceding 14 days.

(Reported by the Foreign Quarantine Program, CDC.)

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

DISEASE	45th WEEK ENDING		MEDIAN 1967-1971	CUMULATIVE, FIRST 45 WEEKS		
	November 11, 1972	November 13, 1971		1972	1971	MEDIAN 1967-1971
Aseptic meningitis	125	114	114	3,708	4,615	3,890
Brucellosis	3	5	4	166	146	196
Chickenpox	1,635	---	---	120,511	---	---
Diphtheria	3	5	7	97	158	158
Encephalitis, primary:						
Arthropod-borne and unspecified	21	37	33	984	1,340	1,340
Encephalitis, post-infectious	3	2	1	242	302	346
Hepatitis, serum (Hepatitis B)	172	172	126	7,818	7,520	4,593
Hepatitis, infectious (Hepatitis A)	1,088	1,200	1,112	47,511	52,510	41,129
Malaria	10	38	48	779	2,656	2,656
Measles (rubeola)	357	367	276	28,395	72,040	42,057
Meningococcal infections, total	23	26	29	1,167	1,976	2,129
Civilian	22	23	27	1,122	1,766	1,914
Military	1	3	2	45	210	209
Mumps	959	1,691	---	61,913	108,306	---
Rubella (German measles)	255	209	317	22,869	41,090	46,086
Tetanus	4	2	4	102	97	142
Tuberculosis, new active	615	---	---	29,144	---	---
Tularemia	2	1	---	115	167	150
Typhoid fever	14	27	10	324	369	348
Typhus, tick-borne (Rky. Mt. spotted fever)	3	2	2	512	394	330
Venereal Diseases:†						
Gonorrhea	15,745	13,939	---	652,308	572,692	---
Syphilis, primary and secondary	565	471	---	21,920	20,480	---
Rabies in animals	53	50	50	3,590	3,494	2,994

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Poliomyelitis, total: Iowa - 1, N.Y. Ups. - 2	21
Botulism:	8	Paralytic: N.Y. Ups. - 2	19
Congenital rubella syndrome:	30	Psittacosis: Conn. - 1, Tex. - 1	32
Leprosy: Calif. - 2	109	Rabies in man:	1
Leptospirosis:	33	Trichinosis: Ind. - 1, Mo. - 1	73
Plague:	1	Typhus, murine:	13

†Numbers for 1971 are estimated from quarterly reports to the Venereal Disease Branch, CDC

INTERNATIONAL NOTES
LASSA FEVER - Sierra Leone

Between Oct. 1, 1970, and Oct. 1, 1972, 64 persons from Sierra Leone, Africa, had prolonged fever unresponsive to antibiotics and antimalarials and clinically compatible with Lassa Fever and were admitted to the Panguma Mission Hospital (62) or the nearby Tongo Hospital (2). Twenty-three (36%) died. Over the last 16 months, cases have been observed with increasing frequency, and 12 patients were hospitalized in September 1972 (Figure 1). At the time that an increasing number of Lassa Fever cases were being admitted, the total number of admissions to these two hospitals remained relatively constant.

One of the 64 cases was in a nurse at the Panguma Mission Hospital. On April 26, 1972, she pricked her finger on an intravenous needle from a patient who subsequently died of clinical Lassa Fever. The nurse developed fever, myalgia, headache, cough, and abdominal pain 8 days later, but recovered after a prolonged illness. Convalescent sera tested by complement-fixation subsequently demonstrated a 1:8 titer against Lassa virus.

Fourteen of the 64 cases were in residents of Panguma (estimated population 3,100), and 18 were in residents of Tongo (estimated population 11,700). These two towns lie 10 miles apart in a rural area of cutover rain forest in Eastern Sierra Leone. The attack rate in each town was 4.5 and 1.5 cases per 1,000, respectively. Cases occurred in all age groups:

the attack rate for males was 1.7 cases per 1,000 and females, 2.7 cases per 1,000. Among women ages 20-29 years, the attack rate was 8.3 cases per 1,000. Among pregnant women, the case fatality ratio was 75% (6/8).

Fifty-four of the 64 cases were in patients who had no known direct or indirect contact with the Panguma or Tongo Hospitals in the month before they became ill. Five cases were in Panguma Hospital staff, and one was in a patient who fell ill during her hospitalization for routine delivery. Four others had visited the outpatient departments in the two hospitals prior to their illness.

Families of 35 cases were located and interviewed concerning febrile illness within 1 month of the index case. Intervals between primary and secondary cases of clinical disease compatible with Lassa Fever ranged from 3 to 14 days in these households. Fever with onset within 1 month of the Lassa Fever case and lasting 4 or more days was reported by 21% (19/92) of the persons sleeping in the same room as the person with clinical Lassa Fever and by 11% (34/304) of household members sleeping in different rooms. The difference is statistically significant. Intrafamilial spread of illness compatible with Lassa Fever was described by one family as follows:

On Feb. 2, 1972, a 36-year-old man from Faranah, Guinea, visited a family in Largo, 10 miles south of Panguma. On February 6, he had onset of fever, myalgia, headache, and vomiting (Figure 2). During his illness, a 28-year-old woman of the house prepared his food and washed his clothes. On February 9, she developed fever, headache, tinnitus, sore throat, neck pain, and back pain. On February 14, this woman's 7-year-old daughter became ill with fever, epistaxis, vomiting, diarrhea, and hematochezia and was hospitalized at Panguma Hospital on February 21 (one of the 64 cases in this report). Six other family members developed febrile disease in the next 4 weeks. All ill family members recovered.

In this and other families, there was clustering of disease in crowded bedrooms (Figure 3), suggesting further evidence of person-to-person spread. Of 14 persons sleeping in two rooms of seven persons each, eight became ill. Of eight per-

Figure 1
CLINICAL CASES OF LASSA FEVER ADMITTED TO PANGUMA AND TONGO HOSPITALS, BY MONTH OF ONSET SIERRA LEONE - OCTOBER 1970-OCTOBER 1972

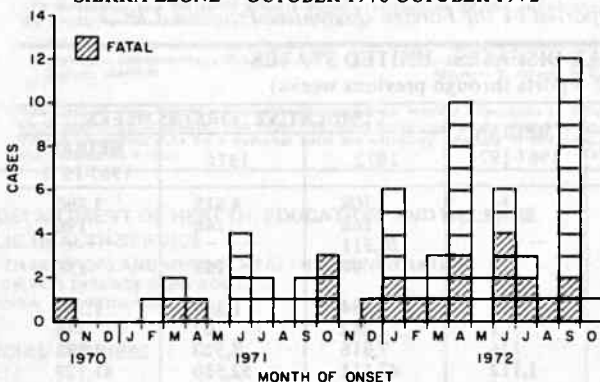


Figure 2
FEBRILE DISEASE IN HOUSEHOLD MEMBERS OF HOSPITALIZED LASSA FEVER CASE, BY TIME AND SYMPTOMS - LARGO, SIERRA LEONE, FEBRUARY-MARCH, 1972

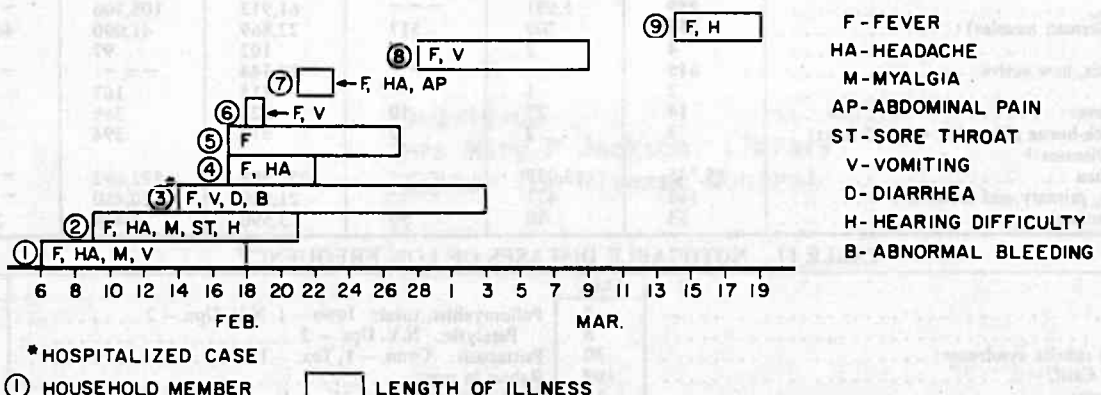
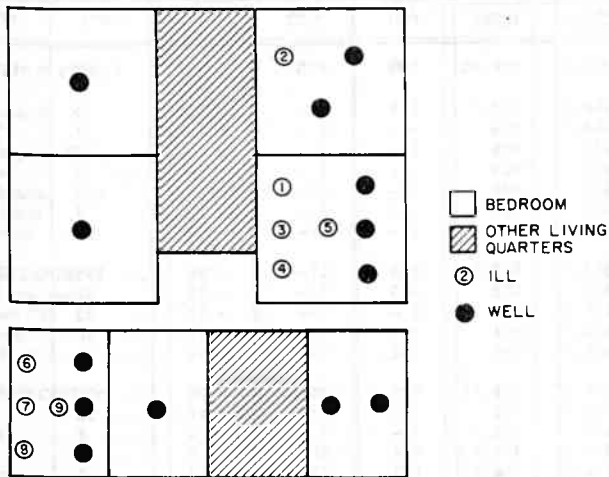


Figure 3
BEDROOMS OCCUPIED BY ILL AND WELL
HOUSEHOLD MEMBERS

LARGO, SIERRA LEONE – FEBRUARY-MARCH 1972



sons living in the five bedrooms of three or fewer occupants, only one became ill. The difference is statistically significant.

Control measures which have been instituted in the epidemic area include prompt isolation of all patients at Panguma Mission Hospital who are suspected of having Lassa Fever. Gowns, gloves, and masks are worn by nurses and other staff working in the isolation ward, and gloves and masks are worn by laboratory personnel working with blood and urine specimens from isolated patients. Attempts are being made to identify and isolate all febrile family contacts of patients with suspected Lassa Fever. Severe suspect cases at the Panguma Mission Hospital are treated with plasma from survivors who have demonstrable complement-fixation titers against Lassa

virus. Some have shown a marked improvement after receiving this immune plasma, but statistical evidence of its efficacy has not been obtained.

(Reported by Dr. Mary Maher, Panguma Mission Hospital, Panguma; M. S. Ibrahim, S. N. Kamara, A. Kargbo-Reffell, Endemic Diseases Control Unit, Bo; Paul Goff, M.D., Peace Corps physician, Freetown; Dr. E. Cummings, F. A. Findlay, Dr. R. Beresford Cole, Ministry of Health, Freetown; Rockefeller Foundation, Yale Arbovirus Research Unit, New Haven; Arbovirology Section, Laboratory Division, CDC; and two EIS Officers.)

Editorial Note

The present epidemic of Lassa Fever in Sierra Leone is the largest yet reported. Unlike the previous nosocomial outbreaks in Nigeria and Liberia, it consists primarily of community-acquired infection. The epidemiologic investigation in Sierra Leone has produced evidence of family outbreaks of Lassa Fever in which spread has occurred among those with most intimate contact. Previous work has shown that ill patients carry Lassa virus in the pharynx and may excrete virus in the urine for several weeks after recovery (1). Either respiratory droplets or infected urine, therefore, may be the vehicle of spread of the virus in crowded sleeping quarters.

Lassa virus is antigenically related to the Tacaribe group of rodent-associated viruses, which include the lymphocytic choriomeningitis virus, Machupo virus, and Junin virus. No animal source of Lassa virus has yet been found, but the trapping of animals in the Sierra Leone investigation concentrated on rodents and may clarify the source of introduction of the virus into the human population.

Reference

1. Leifer E, Gocke DJ, Bourne H: Lassa fever, a new virus disease of man from West Africa. II. Report of a laboratory-acquired infection treated with plasma from a person recently recovered from the disease. *Am J Trop Med Hyg* 19:677-679, 1970

EPIDEMIOLOGIC NOTES AND REPORTS
INFLUENZA – Colorado

During the week ending November 4, admissions to the hospital and quarters at Lowry Air Force Base, Colorado, exceeded their threshold level of 5 per 1,000. The illness responsible for this increase was characterized by sudden onsets of high fever, malaise, myalgias, headache, and cough. Men were moderately ill with illness lasting 2-3 days.

Throat washings from ill individuals grew an influenza A virus. Antiserum against an Australian influenza strain identical to A/England/42/72 inhibited hemagglutination of this virus to a greater extent than did antiserum against the Hong Kong/68 strain of virus.

(Reported by Robert A. Watson, Colonel, MSC, Director,

Base Medical Services, Lowry Air Force Base, Colorado; Gordon Meiklejohn, M.D., Professor, University of Colorado Medical School, Denver, Colorado; and Thomas M. Vernon, Jr., M.D., State Epidemiologist, Colorado State Department of Public Health.)

Editorial Note

This is the first documented influenza outbreak in the continental United States for the current season. Following patterns seen in other countries this year, the influenza A virus responsible for this outbreak is moderately different from previously isolated Hong Kong strains and most closely resembles the A/England/42/72 variant.

RUBELLA-LIKE ILLNESS – Arizona

Between Sept. 11 and Nov. 1, 1972, 29 persons from Greenlee County, Arizona, had onset of a rubella-like illness, characterized by rash, low grade fever, and slight catarrhal manifestations. Of the 29 patients, 21 were among 223 high school students, five were older siblings of these students, two were teachers, and one was an infant. Twenty-one patients (18 students, the two teachers, and the infant) were examined on October 13. Twelve of the 21 complained of joint pains, and eight had lymphadenopathy and exhibited a

light pink to red macular rash on the upper extremities. Results of rubella hemagglutination-inhibition tests and viral studies from throat washings and stool specimens obtained from these 21 patients are pending.

Epidemiologic investigation revealed that the index case in the community was a 20-year-old serviceman, home on leave from Fort Leonard Wood, Missouri. On September 11, he sought treatment for rash at a local hospital, and his illness

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 11, 1972 AND NOVEMBER 13, 1971 (45th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unspec. cases		Post In- fectious	Serum (Hepatitis B)	Infectious (Hepatitis A)	
						1972	1971	1972	1972	1972	1971
UNITED STATES	125	3	1,635	3	97	21	37	3	172	1,088	1,200
NEW ENGLAND	7	-	221	-	-	1	1	-	8	75	66
Maine *	-	-	1	-	-	-	-	-	-	1	10
New Hampshire	1	-	30	-	-	-	-	-	-	8	1
Vermont	-	-	5	-	-	-	-	-	-	2	5
Massachusetts	3	-	36	-	-	-	-	-	1	34	25
Rhode Island	1	-	57	-	-	-	1	-	-	7	11
Connecticut	2	-	92	-	-	1	-	-	7	23	14
MIDDLE ATLANTIC	28	-	37	-	3	5	5	-	56	156	202
Upstate New York	9	-	-	-	1	3	3	-	13	49	67
New York City	6	-	35	-	2	-	-	-	12	33	41
New Jersey *	8	-	NN	-	-	1	-	-	17	40	76
Pennsylvania	5	-	2	-	-	1	2	-	14	34	18
EAST NORTH CENTRAL	14	-	657	-	4	9	13	-	28	172	161
Ohio	4	-	125	-	-	2	8	-	11	56	39
Indiana	-	-	115	-	-	-	-	-	-	6	7
Illinois	3	-	-	-	3	1	4	-	5	46	44
Michigan	7	-	134	-	1	6	1	-	12	58	66
Wisconsin	-	-	283	-	-	-	-	-	-	6	5
WEST NORTH CENTRAL	25	2	203	-	11	1	12	-	2	26	28
Minnesota	4	-	15	-	-	-	6	-	-	2	6
Iowa *	-	2	145	-	-	-	-	-	1	2	4
Missouri	2	-	2	-	-	1	-	-	-	16	5
North Dakota	-	-	40	-	-	-	-	-	-	-	3
South Dakota	-	-	-	-	8	-	-	-	-	2	-
Nebraska	-	-	1	-	3	-	-	-	1	-	-
Kansas	19	-	-	-	-	-	6	-	-	4	10
SOUTH ATLANTIC	17	1	130	-	10	1	2	-	18	149	184
Delaware	-	-	5	-	-	-	-	-	1	3	1
Maryland	1	-	13	-	1	1	-	-	4	18	20
District of Columbia	2	-	-	-	-	-	-	-	-	3	3
Virginia	9	1	5	-	-	-	-	-	8	25	58
West Virginia *	-	-	105	-	-	-	-	-	-	23	21
North Carolina	1	-	NN	-	-	-	1	-	1	20	31
South Carolina	-	-	2	-	1	-	-	-	-	2	10
Georgia	-	-	-	-	3	-	-	-	-	25	19
Florida	4	-	-	-	5	-	1	-	4	30	21
EAST SOUTH CENTRAL	8	-	93	-	7	2	-	-	3	64	59
Kentucky	3	-	93	-	-	-	-	-	-	25	20
Tennessee	1	-	NN	-	-	1	-	-	-	28	25
Alabama	4	-	-	-	7	-	-	-	-	5	9
Mississippi	-	-	-	-	-	1	-	-	3	6	5
WEST SOUTH CENTRAL	4	-	60	1	41	-	2	1	16	125	117
Arkansas	-	-	-	-	-	-	-	-	-	5	3
Louisiana *	-	-	NN	-	5	-	-	-	-	-	14
Oklahoma	1	-	3	-	-	-	2	1	3	24	19
Texas	3	-	57	1	36	-	-	-	13	96	81
MOUNTAIN	3	-	131	-	5	1	1	-	6	102	66
Montana *	-	-	18	-	-	-	-	-	-	6	4
Idaho	-	-	-	-	2	-	-	-	1	23	4
Wyoming	-	-	52	-	-	-	-	-	-	2	1
Colorado	-	-	19	-	-	-	1	-	4	17	28
New Mexico	1	-	4	-	1	-	-	-	-	22	7
Arizona	-	-	38	-	2	-	-	-	-	18	14
Utah	2	-	-	-	-	1	-	-	1	7	8
Nevada	-	-	-	-	-	-	-	-	-	7	-
PACIFIC	19	-	103	2	16	1	1	2	35	219	317
Washington	-	-	85	-	12	-	-	-	1	25	15
Oregon	-	-	-	-	1	-	-	-	3	32	25
California	19	-	-	-	1	1	1	2	30	145	270
Alaska	-	-	3	2	2	-	-	-	-	1	2
Hawaii	-	-	15	-	-	-	-	-	1	16	5
Guam	-	-	2	-	-	-	---	-	-	-	---
Puerto Rico	1	-	9	-	-	-	-	-	2	31	13
Virgin Islands*	-	-	-	-	-	-	-	-	-	-	-

*Delayed reports: Aseptic meningitis: W. Va. 1
Chickenpox: Me. 9, W. Va. 139, V.I. 4
Encephalitis, primary: Mont. 3

Hepatitis B: Iowa 1
Hepatitis A: Me. 5, N.J. delete 1, W. Va. 21, La. delete 1, V.I. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 11, 1972 AND NOVEMBER 13, 1971 (45th 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	10	779	357	28,395	72,040	23	1,167	1,976	959	61,913	255	22,869
NEW ENGLAND	-	28	112	3,470	3,479	2	51	93	89	2,719	10	1,019
Maine*	-	2	-	249	1,473	-	4	8	-	299	-	75
New Hampshire*	-	4	25	398	211	-	3	20	2	190	1	33
Vermont	-	1	-	128	118	-	-	-	6	138	-	70
Massachusetts	-	10	85	866	252	-	21	34	25	663	4	480
Rhode Island	-	1	-	524	238	-	12	3	9	407	1	92
Connecticut	-	10	2	1,305	1,187	2	11	28	47	1,022	4	269
MIDDLE ATLANTIC	1	73	5	1,079	7,635	2	141	267	98	3,657	14	1,935
Upstate New York	-	17	-	130	694	-	32	81	NN	NN	-	243
New York City	-	17	5	388	3,790	1	43	55	52	2,103	1	247
New Jersey	-	19	-	498	1,225	1	27	59	32	774	11	1,175
Pennsylvania	1	20	-	63	1,926	-	39	72	14	780	2	270
EAST NORTH CENTRAL	3	86	168	11,535	15,966	7	178	230	248	16,783	47	5,890
Ohio	1	19	6	271	4,034	5	71	74	22	2,265	5	418
Indiana	-	1	3	1,293	2,772	-	12	17	24	1,106	1	737
Illinois	1	32	55	4,248	3,092	2	39	66	24	2,939	13	1,072
Michigan	1	31	80	2,141	2,459	-	48	58	65	2,998	14	1,351
Wisconsin	-	3	24	3,582	3,609	-	8	15	113	7,475	14	2,312
WEST NORTH CENTRAL	1	50	8	1,008	7,047	1	82	142	78	8,931	20	1,321
Minnesota	1	8	-	22	55	-	24	26	6	701	-	495
Iowa	-	3	4	698	2,465	1	6	12	61	6,151	1	407
Missouri	-	12	-	164	2,605	-	25	49	7	568	-	113
North Dakota	-	1	4	57	238	-	-	6	4	399	17	48
South Dakota	-	4	-	7	221	-	2	6	-	120	1	13
Nebraska	-	3	-	23	69	-	9	15	-	271	1	54
Kansas	-	19	-	37	1,394	-	16	28	-	721	-	191
SOUTH ATLANTIC	2	121	8	2,253	8,678	2	257	346	83	5,788	15	2,304
Delaware	-	-	1	53	42	-	1	2	3	116	-	8
Maryland	-	9	-	15	553	1	39	50	23	420	1	53
District of Columbia	1	7	-	2	15	-	11	13	4	27	1	7
Virginia	-	9	2	69	1,605	1	57	40	18	1,193	-	72
West Virginia*	-	2	2	298	538	-	8	11	24	2,514	2	418
North Carolina	-	39	-	37	1,949	-	30	59	NN	NN	1	32
South Carolina	-	12	-	216	919	-	20	20	1	181	-	50
Georgia	1	28	-	183	1,133	-	19	24	-	24	-	58
Florida	-	15	3	1,380	1,924	-	72	127	10	1,313	10	1,606
EAST SOUTH CENTRAL	2	168	4	1,071	8,412	1	91	181	33	3,182	19	1,591
Kentucky	2	146	3	538	3,962	-	28	53	9	482	11	884
Tennessee	-	-	1	194	1,025	1	29	71	21	2,014	7	543
Alabama	-	18	-	154	1,954	-	20	31	3	566	-	51
Mississippi	-	4	-	185	1,471	-	14	26	-	120	1	113
WEST SOUTH CENTRAL	-	85	32	1,609	12,628	2	139	171	74	5,257	34	1,656
Arkansas	-	5	-	13	778	1	11	5	-	167	-	35
Louisiana	-	6	-	99	1,701	-	42	62	-	323	-	94
Oklahoma	-	6	-	10	757	-	9	10	1	163	-	39
Texas	-	68	32	1,487	9,392	1	77	94	73	4,604	34	1,488
MOUNTAIN	-	49	3	1,926	3,491	1	29	60	54	3,181	4	1,147
Montana*	-	2	-	16	925	-	4	7	1	200	-	34
Idaho	-	3	1	151	272	-	8	11	2	214	1	34
Wyoming	-	1	-	51	85	-	1	2	16	275	-	8
Colorado	-	31	-	534	836	-	5	7	1	768	-	524
New Mexico	-	3	-	127	399	-	3	5	16	634	1	119
Arizona	-	7	2	888	631	-	1	8	18	905	2	391
Utah	-	2	-	158	336	1	6	17	-	138	-	34
Nevada	-	-	-	1	7	-	1	3	-	47	-	3
PACIFIC	1	119	17	4,444	4,704	5	199	486	202	12,415	92	6,006
Washington	-	1	1	983	1,070	-	17	30	43	3,825	12	877
Oregon	-	11	6	141	377	-	14	39	17	1,733	8	417
California	1	92	10	3,209	2,720	5	157	407	134	6,409	72	4,631
Alaska	-	3	-	13	56	-	8	1	5	153	-	22
Hawaii	-	12	-	98	481	-	3	9	3	295	-	59
Guam	-	2	-	16	---	-	13	---	-	10	-	12
Puerto Rico	-	5	28	836	581	-	4	10	3	889	-	30
Virgin Islands	-	-	-	3	17	-	2	-	-	130	-	3

*Delayed reports: Measles: N.H. 18, W. Va. 11

Mumps: Me. 2, W. Va. 27

Meningococcal infections: Mont. 1

Rubella: W. Va. 4

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 11, 1972 AND NOVEMBER 13, 1971 (45th 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	1972	Cum. 1972
UNITED STATES	4	615	2	115	14	324	3	512	15,745	565	53	3,590		
NEW ENGLAND	-	24	-	-	-	15	-	2	378	12	-	104		
Maine	-	1	-	-	-	-	-	-	15	1	-	80		
New Hampshire	-	-	-	-	-	2	-	-	14	1	-	4		
Vermont	-	-	-	-	-	-	-	-	1	-	-	9		
Massachusetts	-	11	-	-	-	11	-	2	137	6	-	4		
Rhode Island	-	6	-	-	-	-	-	-	46	-	-	2		
Connecticut	-	6	-	-	-	2	-	-	165	4	-	5		
MIDDLE ATLANTIC	-	114	-	1	1	52	1	38	2,193	112	2	96		
Upstate New York	-	9	-	-	-	15	-	6	455	9	1	43		
New York City*	-	47	-	-	-	27	-	2	873	74	-	-		
New Jersey	-	30	-	1	1	6	-	15	325	21	-	-		
Pennsylvania *	-	28	-	-	-	4	1	15	540	8	1	53		
EAST NORTH CENTRAL	1	100	-	1	-	22	-	27	1,930	43	5	354		
Ohio*	-	29	-	1	-	7	-	23	613	2	-	97		
Indiana	-	7	-	-	-	-	-	-	425	15	-	69		
Illinois	-	20	-	-	-	6	-	3	171	-	1	58		
Michigan	-	25	-	-	-	7	-	-	480	24	-	9		
Wisconsin	1	19	-	-	-	2	-	1	241	2	4	121		
WEST NORTH CENTRAL	-	16	2	28	-	8	-	20	791	2	23	1,015		
Minnesota	-	7	-	-	-	1	-	-	197	2	13	246		
Iowa	-	1	-	-	-	-	-	2	110	-	2	289		
Missouri	-	1	-	21	-	3	-	11	248	-	-	89		
North Dakota *	-	-	-	-	-	-	-	-	12	-	6	138		
South Dakota	-	1	-	1	-	-	-	4	29	-	-	113		
Nebraska	-	-	-	1	-	1	-	1	94	-	-	16		
Kansas	-	6	2	5	-	3	-	3	101	-	2	124		
SOUTH ATLANTIC	-	113	-	10	1	41	1	254	4,558	162	6	372		
Delaware	-	2	-	-	-	-	-	1	32	1	-	10		
Maryland	-	10	-	1	-	9	-	31	282	10	1	18		
District of Columbia	-	6	-	-	-	3	-	1	418	16	-	-		
Virginia	-	24	-	7	-	11	-	56	455	68	-	97		
West Virginia *	-	3	-	-	-	1	-	3	54	-	1	55		
North Carolina *	-	22	-	-	-	-	1	119	573	10	-	3		
South Carolina	-	10	-	-	-	3	-	20	1,022	13	-	13		
Georgia	-	12	-	1	1	4	-	22	620	24	2	100		
Florida	-	24	-	1	-	10	-	1	1,102	20	2	76		
EAST SOUTH CENTRAL	-	49	-	8	-	39	-	98	1,413	105	4	585		
Kentucky	-	8	-	-	-	13	-	4	138	82	1	228		
Tennessee	-	14	-	7	-	11	-	60	612	14	2	292		
Alabama	-	11	-	1	-	10	-	19	390	2	1	62		
Mississippi	-	16	-	-	-	5	-	15	273	7	-	3		
WEST SOUTH CENTRAL	3	89	-	53	-	40	1	62	1,615	47	10	718		
Arkansas	1	17	-	29	-	13	-	15	177	-	-	101		
Louisiana *	-	14	-	4	-	7	-	-	279	10	-	39		
Oklahoma	-	8	-	11	-	3	-	34	107	4	2	271		
Texas *	2	50	-	9	-	17	1	13	1,052	33	8	307		
MOUNTAIN	-	22	-	10	1	12	-	9	579	11	-	92		
Montana	-	1	-	1	-	-	-	2	48	-	-	7		
Idaho	-	1	-	-	-	-	-	6	59	-	-	-		
Wyoming	-	-	-	-	-	-	-	-	10	1	-	1		
Colorado	-	2	-	1	1	2	-	-	221	2	-	-		
New Mexico	-	6	-	-	-	1	-	-	75	-	-	23		
Arizona *	-	12	-	2	-	7	-	-	122	8	-	52		
Utah*	-	-	-	6	-	2	-	1	29	-	-	7		
Nevada	-	-	-	-	-	-	-	-	15	-	-	2		
PACIFIC	-	88	-	4	11	95	-	2	2,288	71	3	254		
Washington	-	8	-	-	-	2	-	1	290	-	-	-		
Oregon	-	5	-	1	-	-	-	1	192	-	-	4		
California	-	71	-	2	10	89	-	-	1,727	69	3	242		
Alaska	-	-	-	1	-	-	-	-	28	-	-	8		
Hawaii	-	4	-	-	1	4	-	-	51	2	-	-		
Guam	-	2	-	-	-	-	-	-	2	-	-	-		
Puerto Rico	2	9	-	-	-	7	-	-	77	12	-	47		
Virgin Islands *	-	-	-	-	-	-	-	-	3	1	-	-		

*Delayed reports: TB: Ohio delete 1, N. Dak. delete 1, W. Va. 10, N.C. delete 2, La. delete 1
Gonorrhoea: N.Y.C. 1,007, W. Va. 47, V.I. 8Syphilis: N.Y.C. 66, W. Va. 2, Utah 1
Rabies in animals: Pa. 4, Tex. 3, Ariz. 1

Morbidity and Mortality Weekly Report

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

Week No.
45

(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	689	435	26	39	SOUTH ATLANTIC	1,230	662	79	53
Boston, Mass.	213	131	10	10	Atlanta, Ga.	131	71	2	4
Bridgeport, Conn.	32	18	—	3	Baltimore, Md.	231	130	7	5
Cambridge, Mass.	28	21	1	6	Charlotte, N. C.	65	27	2	—
Fall River, Mass.	27	18	1	—	Jacksonville, Fla.	74	42	4	2
Hartford, Conn.	53	32	1	4	Miami, Fla.	107	54	6	7
Lowell, Mass.	24	14	—	—	Norfolk, Va.	61	30	1	6
Lynn, Mass.	20	15	—	3	Richmond, Va.	88	53	4	6
New Bedford, Mass.	33	21	1	—	Savannah, Ga.	31	19	5	5
New Haven, Conn.	42	24	2	1	St. Petersburg, Fla.	93	73	1	7
Providence, R. I.	65	33	3	8	Tampa, Fla.	76	43	3	2
Somerville, Mass.	12	9	—	—	Washington, D. C.	227	94	44	7
Springfield, Conn.	44	29	2	3	Wilmington, Del.	46	26	—	2
Waterbury, Conn.	35	26	—	—	EAST SOUTH CENTRAL	678	375	25	23
Worcester, Mass.	61	44	5	1	Birmingham, Ala.	130	66	6	2
MIDDLE ATLANTIC	3,353	2,006	97	124	Chattanooga, Tenn.	43	21	3	4
Albany, N. Y.	64	45	2	1	Knoxville, Tenn.	42	30	—	—
Allentown, Pa.	36	28	1	5	Louisville, Ky.	103	64	1	5
Buffalo, N. Y.	153	82	10	18	Memphis, Tenn.	162	90	3	3
Camden, N. J.	54	36	2	2	Mobile, Ala.	65	31	6	1
Elizabeth, N. J.	36	21	1	—	Montgomery, Ala.	43	28	2	4
Erie, Pa.	48	28	3	2	Nashville, Tenn.	90	45	4	4
Jersey City, N. J.	60	38	2	5	WEST SOUTH CENTRAL	1,183	651	67	39
Newark, N. J.	70	35	2	2	Austin, Tex.	45	33	—	2
New York City, N. Y. †	1,542	952	30	48	Baton Rouge, La.	39	18	2	1
Paterson, N. J.	53	26	3	7	Corpus Christi, Tex.	24	15	—	—
Philadelphia, Pa.	598	343	15	4	Dallas, Tex.	167	79	6	2
Pittsburgh, Pa.	249	132	10	18	El Paso, Tex.	40	27	3	3
Reading, Pa.	53	35	2	3	Fort Worth, Tex.	94	50	3	5
Rochester, N. Y.	116	71	4	1	Houston, Tex.	229	110	13	4
Schenectady, N. Y.	20	12	1	—	Little Rock, Ark.	57	34	7	7
Scranton, Pa.	22	13	1	1	New Orleans, La.	146	83	11	3
Syracuse, N. Y.	84	49	3	1	Oklahoma City, Okla. *	84	50	5	2
Trenton, N. J.	40	24	3	4	San Antonio, Tex.	122	63	13	2
Utica, N. Y.	29	20	1	—	Shreveport, La.	67	42	3	3
Yonkers, N. Y.	26	16	1	2	Tulsa, Okla.	69	47	1	5
EAST NORTH CENTRAL	2,495	1,476	99	71	MOUNTAIN	550	307	24	24
Akron, Ohio	57	41	—	—	Albuquerque, N. Mex.	61	35	—	6
Canton, Ohio	41	30	—	3	Colorado Springs, Colo.	29	13	1	3
Chicago, Ill.	710	404	30	17	Denver, Colo.	147	88	9	5
Cincinnati, Ohio	182	117	6	2	Las Vegas, Nev.	19	9	—	1
Cleveland, Ohio	177	97	8	1	Ogden, Utah	13	9	—	—
Columbus, Ohio	139	77	4	2	Phoenix, Ariz.	113	54	6	1
Dayton, Ohio	122	71	3	5	Pueblo, Colo.	29	18	1	5
Detroit, Mich.	325	188	18	6	Salt Lake City, Utah	72	37	5	1
Evansville, Ind.	35	27	—	2	Tucson, Ariz.	67	44	2	2
Fort Wayne, Ind.	72	40	5	7	PACIFIC	1,603	952	55	28
Gary, Ind.	37	22	1	3	Berkeley, Calif.	26	17	—	—
Grand Rapids, Mich.	66	41	1	5	Fresno, Calif.	50	31	3	—
Indianapolis, Ind.	147	80	4	3	Glendale, Calif.	13	9	1	—
Madison, Wis.	28	17	2	4	Honolulu, Hawaii	48	17	4	1
Milwaukee, Wis.	105	65	1	4	Long Beach, Calif.	102	61	—	1
Peoria, Ill.	10	6	—	—	Los Angeles, Calif.	508	321	21	11
Rockford, Ill.	35	25	4	4	Oakland, Calif.	81	51	5	2
South Bend, Ind.	29	19	1	1	Pasadena, Calif.	36	28	—	—
Toledo, Ohio	102	64	8	1	Portland, Oreg.	129	75	3	1
Youngstown, Ohio	76	45	3	1	Sacramento, Calif.	62	33	3	—
WEST NORTH CENTRAL	834	539	36	8	San Diego, Calif.	100	60	1	1
Des Moines, Iowa	61	45	2	1	San Francisco, Calif.	157	84	5	6
Duluth, Minn.	23	15	1	—	San Jose, Calif.	44	29	2	—
Kansas City, Kans.	39	26	4	—	Seattle, Wash.	137	68	4	1
Kansas City, Mo.	123	67	3	3	Spokane, Wash.	65	41	1	3
Lincoln, Nebr.	39	29	3	1	Tacoma, Wash.	45	27	2	1
Minneapolis, Minn.	93	64	4	1	Total	12,615	7,403	508	409
Omaha, Nebr.	99	66	6	—	Expected Number	12,566	7,220	556	429
St. Louis, Mo.	225	148	10	2	Cumulative Total (includes reported corrections for previous weeks)	569,218	331,190	22,539	21,867
St. Paul, Minn.	73	42	3	—					
Wichita, Kans.	59	37	—	—					

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

RUBELLA - Continued

was diagnosed as rubella. On September 26, his brother, a 17-year-old high school student, visited the same hospital and was found to have a rash which was also diagnosed as rubella.

There has been no reported spread of the disease to children 1 to 13 years of age or to pregnant women. An immunization survey of 496 school children 5 to 13 years of age showed that 15 had not been vaccinated against rubella. (Reported by Robert V. Horan, M.D., Health Officer, Greenlee County; Philip M. Hotchkiss, D.V.M., Division Director, Epidemiology and Acute Disease Control, Arizona State De-

partment of Health; and a Public Health Advisor, Immunization Branch, State and Community Services Division, CDC.)

Editorial Note

Prior to the introduction of vaccine, rubella outbreaks occurred occasionally in junior and senior high school students. These can be expected to continue for several years until children vaccinated at a younger age reach high school. The most significant fact about this outbreak is that there was no extensive spread of rubella in the community because of high levels of immunization in pre-pubertal children. Furthermore, no exposures to susceptible pregnant women were documented.

INTERNATIONAL NOTES
CHOLERA

Worldwide

As of Oct. 31, 1972, there has been no extension of cholera into countries not previously infected. The number of cases reported this year is some 90,000 fewer than for the corresponding period in 1971. Eighteen countries in Africa and 14 in Asia have reported approximately 53,000 cases and 6,600 deaths in the first 10 months of 1972. Unofficial reports of minor outbreaks in some previously infected territories have not been confirmed by official sources. Despite incomplete reporting, it appears that the cholera situation in general has been calmer than in 1971.

Imported Cholera - Australia, New Zealand

In Australia, an imported case of cholera, *V. cholerae*, biotype El Tor, serotype Inaba, was reported on Nov. 7, 1972. The patient was a passenger on an international flight

which arrived in Sydney on November 4. Food taken on board at an airport in transit is believed to be a possible source of infection. Nine additional passengers are under investigation. In New Zealand, three cases of suspected cholera, one of which was fatal, have been imported. The three persons were passengers on the same international flight into Sydney reported by the Australian Health Administration.

The attention of health administrations is drawn to the fact that no part of Australia or New Zealand should be considered as infected on the basis of the importation of a cholera case or cases. The last case of cholera imported into Australia was in December 1969. There were no secondary cases.

(Reported by the World Health Organization: Weekly Epidemiological Record, Vol. 47, No. 45.)

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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 outbreaks or case investigations of current interest to health officials.

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