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WEEKLY REPORT

For Week Ending March 30, 1974

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE
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CONTENTS

INTERNATIONAL NOTES

IMPORTED CHOLERA – Canada

On March 30, 1974, Canadian health officials reported an imported case of cholera in a 27-year-old South African businessman who arrived in Canada on March 24. He was well on arrival and experienced the onset of diarrhea during the evening of March 25; hospitalized on March 27, he was given 11 liters of fluid replacement. His recovery has been uneventful. The organism was identified by the hospital laboratory and confirmed by the provincial laboratory as *Vibrio cholerae*, biotype El Tor, serotype Inaba; the identity of the organism has also been confirmed by CDC.

The patient, a resident of Pretoria, had left Johannesburg on the morning of March 23 by air (Flight A), stopping briefly in Luanda, Angola, and arriving in Lisbon, Portugal, that evening. Food and drinking water for Flight A were taken on in Johannesburg; water used for toilets and sink spigots was taken on in Johannesburg and in Luanda. The patient stated that he ate 3 meals aboard Flight A; his water consumption consisted solely of water and beverages with ice served by the stewardess, but he washed his face and hands

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

DISEASE	13th WEEK ENDING		MEDIAN 1969-1973	CUMULATIVE, FIRST 13 WEEKS		
	March 30, 1974	March 31, 1973		1974	1973	MEDIAN 1969-1973
Aseptic meningitis	24	40	31	7,418	461	426
Brucellosis	3	3	5	24	22	27
Chickenpox	4,042	5,995	– – –	47,484	70,940	– – –
Diphtheria	6	3	3	52	60	51
Encephalitis:						
Primary: Arthropod-borne and unspecified	13	28	21	213	230	251
Post-Infectious	2	6	6	49	50	64
Hepatitis, Viral:						
Type B	173	164	164	2,204	1,820	1,820
Type A	721	996	1,142	11,028	12,800	14,044
Type unspecified	147			2,076		
Malaria	3	4	50	38	54	606
Measles (rubeola)	547	1,229	1,229	7,147	9,191	10,418
Meningococcal infections, total	35	52	57	407	448	855
Civilian	32	50	52	398	434	730
Military	3	2	2	9	14	81
Mumps	1,621	2,068	2,775	21,924	25,299	31,152
Pertussis	22	– – –	– – –	331	– – –	– – –
Rubella (German measles)	478	1,391	1,980	3,641	9,729	14,010
Tetanus	1	2	2	11	14	21
Tuberculosis, new active	633	769	– – –	7,154	7,509	– – –
Tularemia	2	4	2	26	19	24
Typhoid fever	4	90	5	85	241	64
Typhus, tick-borne (Rky. Mt. spotted fever)	–	1	1	14	7	5
Venereal Diseases:						
Gonorrhea	14,055	15,548	– – –	207,790	188,314	– – –
Syphilis, primary and secondary	472	520	– – –	5,899	6,274	– – –
Rabies in animals	58	110	107	629	823	950

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Poliomyelitis, total: Ill. 1	2
Botulism:	4	Paralytic: Ill. 1	2
Congenital rubella syndrome: *. Calif. 1, S. Dak. 1	21	Psittacosis: Wis. 1	6
Leprosy: Calif. 6	26	Rabies in man:	–
Leptospirosis:	16	Trichinosis: N.J. 1	37
Plague:	–	Typhus, murine:	6

*Delayed reports: Congenital rubella syndrome: Texas delete 1 (1974)

CHOLERA – Continued

on the plane after leaving Luanda. He also drank a cup of coffee with cream in the Luanda airport.

He spent the night and ate breakfast in a Lisbon hotel, ate lunch in a restaurant, and departed Lisbon (Flight B) on March 24 for New York City. Food and water for Flight B were taken on in Lisbon.

After a 6-hour layover at Kennedy International Airport, he continued on to Montreal (Flight C) that evening, arriving at 11 p.m. He was picked up and driven to a friend's home in Kingston, Ontario, where he experienced the onset of diarrhea the following evening, March 25.

No other cases from these flights have been reported in Canada or the United States.

(Reported by Ivan T. Beck, M.D., private physician and Director, Gastroenterology Division, R.J. Lewis, Ph.D., microbiologist, Hotel Dieu Hospital, Kingston, Ontario; R.A. Kelly, M.D., Medical Officer of Health, R.D. Tennant and staff, Regional Public Health Laboratory, Kingston, Ontario; S. Toma, M.D., Chief of Bacteriology and staff, Central Public Health Laboratory, and Shirley Johnson, M.D., Senior Medical Consultant in Epidemiology, Ontario Ministry of Health, Toronto, Ontario; R.A. Springer, M.D., Medical Services Branch, National Health and Welfare, Ottawa, Canada; John W. Davies, M.B., Director, Bureau of Epidemiology, Laboratory Centre for Disease Control, National Health and Welfare, Ottawa, Canada; Enteric Disease Branch and Epidemiologic Services Laboratory Section, Bacterial Diseases Division, Quarantine Division, Bureau of Epidemiology, CDC.)

Editorial Note

The incubation period for cholera ranges from hours to 5 days (usually 2-3 days), thus acquisition of this man's illness could have occurred before or during his travel. Portugal and the Republic of South Africa have not recently reported cholera; however, active transmission is currently occurring in Angola and several other countries near South Africa. Although the source of this patient's infection has not been determined, it is probably related to a currently infected focus in southern Africa. Infection in other passengers aboard flights B and C arriving in the United States and Canada is not likely, unless they had been similarly exposed; the risk of direct contact spread from a person incubating the disease to other passengers is negligible. Imported cases of cholera are not considered a threat to other persons in places that have adequate sewerage and water systems *(1)*.

The patient's recovery is undoubtedly due to his physician's prompt recognition of the need for vigorous fluid replacement; parenteral and oral fluid therapy can reduce cholera fatality to less than 1%.

Reference

1. Gangarosa EJ, Barker WH: Cholera – Implications for the United States. JAMA 227:170-171, 1974

EPIDEMIOLOGIC NOTES AND REPORTS

FOLLOW-UP ON HAMSTER-ASSOCIATED LCM INFECTION – United States

The 14 breeders who supply hamsters to the Aquarium Supply Company, Harrison, New Jersey, have been contacted and are sending CDC samples of their breeder stock for serologic testing and virus isolation. The first 137 hamsters tested, representing 2 breeders, were negative by indirect FA serology.

A breeder in Birmingham, Alabama, sent 388 juvenile hamsters to Tampa on March 26, 1974. Sixty-five of these were dead on arrival; 31 of the 323 survivors were tested, and 7 were FA positive. The dead animals and a sample of their breeding stock are now being tested at CDC.

The Aquarium Supply Company is no longer shipping animals from the Alabama source. The Alabama Department of Public Health and the Jefferson County Health Department are investigating local distribution of hamsters and looking for human cases of lymphocytic choriomeningitis.

(Reported by Clyde Sellers, Director of Communicable Diseases, George E. Hardy, Jr., M.D., Health Officer, Jefferson County Health Department, Birmingham, Ala.; Frederick Wolf, M.D., State Epidemiologist, Alabama State Department of Health, Montgomery, Ala.; and an EIS Officer.)

MEASLES – Ohio

In the 5-month period October 1973 through February 1974, 828 cases of measles were reported in suburban Cuyahoga County, Ohio. Approximately 7% of the cases were reported by physicians, and the rest by school nurses. No atypical or complicated cases were recorded.

The outbreak began in the western suburb of North Olmsted in October. In December, the neighboring suburbs of Westlake and Fairview Park were affected; in January, measles spread to Lakewood and Euclid; and in early February, 2 junior high schools and an elementary school in the southwest corner of Cleveland reported outbreaks.

The age distribution of measles cases is shown in Figure 1. Fifty-six percent of the ill children were 5-11 years old (elementary school), 34% were 12-14 (junior high) and 8% were 15-18 (high school); the median age was 10. Outbreaks occurred in junior high schools in all of the affected towns.

Approximately 1% of cases were in preschool-age chil-

Figure 1
MEASLES CASES BY AGE, CUYAHOGA COUNTY, OHIO
OCTOBER 1973–FEBRUARY 1974

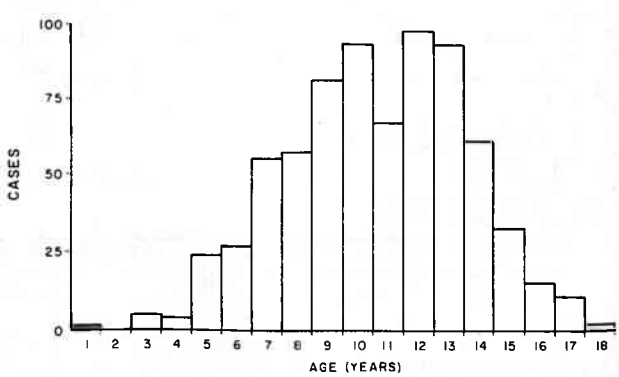

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MARCH 30, 1974 AND MARCH 31, 1973 (13th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod-borne and Unspecified		Post Infectious	Type B	Type A	Type Unspecified		
	1974	1974	1974	1974	Cum. 1974	1974	1973	1974	1974	1974	1974	1974	Cum. 1974
UNITED STATES	24	3	4,042	6	52	13	28	2	173	721	147	3	38
NEW ENGLAND	–	–	640	–	–	–	1	–	7	42	16	–	3
Maine *	–	–	6	–	–	–	–	–	–	4	–	–	–
New Hampshire *	–	–	13	–	–	–	–	–	1	9	–	–	–
Vermont *	–	–	25	–	–	–	–	–	–	1	1	–	–
Massachusetts	–	–	293	–	–	–	–	–	3	12	14	–	1
Rhode Island	–	–	154	–	–	–	–	–	2	2	–	–	2
Connecticut	–	–	149	–	–	–	1	–	1	14	1	–	–
MIDDLE ATLANTIC	2	–	264	–	–	3	4	–	41	73	26	1	3
Upstate New York	1	–	138	–	–	1	–	–	4	31	8	1	1
New York City	–	–	124	–	–	1	3	–	5	16	–	–	1
New Jersey	1	–	NN	–	–	1	–	–	17	16	15	–	–
Pennsylvania *	–	–	2	–	–	–	1	–	15	10	3	–	1
EAST NORTH CENTRAL	3	–	1,909	–	–	2	9	–	31	120	11	–	4
Ohio	–	–	561	–	–	–	3	–	4	23	–	–	3
Indiana	–	–	132	–	–	–	–	–	3	13	–	–	–
Illinois	–	–	–	–	–	1	1	–	3	–	6	–	1
Michigan	3	–	650	–	–	1	5	–	15	60	5	–	–
Wisconsin	–	–	566	–	–	–	–	–	6	24	–	–	–
WEST NORTH CENTRAL	–	–	328	–	–	1	4	–	7	30	20	–	1
Minnesota	–	–	5	–	–	–	–	–	2	7	–	–	–
Iowa	–	–	271	–	–	–	2	–	1	3	–	–	–
Missouri	–	–	4	–	–	1	–	–	3	–	20	–	–
North Dakota	–	–	10	–	–	–	1	–	–	–	–	–	–
South Dakota	–	–	3	–	–	–	–	–	1	4	–	–	1
Nebraska	–	–	–	–	–	–	–	–	–	–	–	–	–
Kansas	–	–	35	–	–	–	1	–	–	16	–	–	–
SOUTH ATLANTIC	1	1	301	–	–	–	2	–	15	139	18	–	8
Delaware	–	–	9	–	–	–	–	–	1	1	–	–	–
Maryland	–	–	5	–	–	–	–	–	3	5	1	–	–
District of Columbia	–	–	7	–	–	–	–	–	–	–	–	–	2
Virginia	–	–	19	–	–	–	–	–	3	16	3	–	2
West Virginia	–	–	241	–	–	–	–	–	–	7	1	–	–
North Carolina	–	–	NN	–	–	–	–	–	3	21	3	–	1
South Carolina	–	–	20	–	–	–	–	–	1	9	1	–	–
Georgia	–	1	–	–	–	–	1	–	–	24	–	–	–
Florida *	1	–	–	–	–	–	1	–	4	56	9	–	2
EAST SOUTH CENTRAL	3	–	73	–	–	1	1	–	8	51	4	–	–
Kentucky	–	–	59	–	–	–	–	–	2	15	4	–	–
Tennessee	1	–	–	–	–	1	–	–	5	24	–	–	–
Alabama	–	–	9	–	–	–	1	–	–	5	–	–	–
Mississippi	2	–	5	–	–	–	–	–	1	7	–	–	–
WEST SOUTH CENTRAL	2	1	125	–	8	1	1	1	3	23	10	–	2
Arkansas	–	–	6	–	–	–	–	–	1	10	3	–	–
Louisiana	2	–	NN	–	–	1	1	–	2	8	1	–	1
Oklahoma	–	1	119	–	–	–	–	1	–	5	6	–	1
Texas	---	---	---	---	8	---	–	---	---	---	---	---	–
MOUNTAIN	1	1	109	6	7	2	–	–	8	89	19	–	1
Montana	–	–	31	–	–	–	–	–	–	11	–	–	–
Idaho	–	1	–	–	–	–	–	–	–	2	–	–	–
Wyoming	–	–	–	–	–	–	–	–	–	–	3	–	–
Colorado	1	–	34	–	–	–	–	–	4	6	10	–	1
New Mexico	–	–	44	5	6	2	–	–	1	40	–	–	–
Arizona	–	–	–	1	1	–	–	–	2	11	5	–	–
Utah	–	–	–	–	–	–	–	–	1	3	1	–	–
Nevada	–	–	–	–	–	–	–	–	–	16	–	–	–
PACIFIC	12	–	293	–	37	3	6	1	53	154	23	2	16
Washington	–	–	267	–	34	–	1	–	1	9	3	–	–
Oregon	–	–	1	–	–	–	–	–	2	11	6	–	–
California *	12	–	–	–	1	3	5	1	47	124	14	2	16
Alaska	–	–	3	–	2	–	–	–	3	7	–	–	–
Hawaii	–	–	22	–	–	–	–	–	–	3	–	–	–
Guam *	–	–	–	–	–	–	–	–	–	–	–	–	1
Puerto Rico	–	–	12	–	–	–	–	–	1	–	6	–	–
Virgin Islands	–	–	14	–	–	–	–	–	–	1	–	–	–

*Delayed reports: Aseptic Meningitis: N.H. delete 1 (1974)
Chickenpox: Me. 10, N.H. 26, Calif. 85, Guam 1 (1974)
Diphtheria: Florida delete 1 (1974)
Hepatitis B: Penn. 3 (1973)
Hepatitis A: Penn. 2 (1973), Me. 3, N.H. 2, Vt. delete 1, Guam 12 (1974)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MARCH 30, 1974 AND MARCH 31, 1973 (13th WEEK) – Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1974	Cumulative		1974	Cumulative		1974	Cum. 1974	1974	1974	Cum. 1974	Cum. 1974
		1974	1973		1974	1973						
UNITED STATES	547	7,147	9,191	35	407	448	1,621	21,924	22	478	3,641	11
NEW ENGLAND	24	392	3,647	–	21	21	252	3,177	1	53	336	–
Maine*	–	22	14	–	–	–	18	555	–	14	81	–
New Hampshire*	5	187	674	–	4	3	4	131	–	1	7	–
Vermont	4	5	75	–	–	2	–	9	–	1	7	–
Massachusetts	12	104	1,830	–	7	7	40	477	–	17	129	–
Rhode Island	1	46	265	–	4	1	143	1,085	–	2	15	–
Connecticut	2	28	789	–	6	8	47	920	1	18	97	–
MIDDLE ATLANTIC	217	2,708	767	3	47	64	148	1,724	3	35	385	1
Upstate New York	8	41	190	1	22	22	54	354	1	5	83	–
New York City	25	144	431	–	12	13	16	240	2	5	45	–
New Jersey	160	2,217	67	2	10	14	10	380	–	19	170	1
Pennsylvania	24	306	79	–	3	15	68	750	–	6	87	–
EAST NORTH CENTRAL	170	2,775	2,741	5	45	47	565	6,425	9	140	1,194	–
Ohio	49	1,193	126	2	14	25	262	1,801	–	28	175	–
Indiana	5	83	251	–	2	1	28	521	–	52	311	–
Illinois	31	474	660	–	7	7	17	548	3	8	150	–
Michigan	76	875	1,239	2	15	11	183	2,664	–	32	402	–
Wisconsin*	9	150	465	1	7	3	75	891	6	20	156	–
WEST NORTH CENTRAL	37	206	227	6	30	35	89	1,714	–	27	108	2
Minnesota	–	76	14	3	13	–	1	26	–	–	3	–
Iowa	–	7	149	–	5	5	57	1,149	–	1	7	–
Missouri	3	27	12	3	8	18	3	257	–	–	20	2
North Dakota	5	23	28	–	1	3	1	9	–	–	6	–
South Dakota	18	19	–	–	–	2	–	2	–	21	21	–
Nebraska	1	2	1	–	–	3	3	46	–	–	3	–
Kansas	10	52	23	–	3	4	24	225	–	5	48	–
SOUTH ATLANTIC	27	259	296	3	80	78	226	2,427	1	63	311	4
Delaware	–	3	1	–	3	1	4	37	–	–	7	–
Maryland	1	20	–	–	12	15	4	43	–	–	–	–
District of Columbia	–	–	–	–	–	1	3	26	–	–	1	–
Virginia	–	12	25	1	12	9	2	156	–	–	12	2
West Virginia	3	63	97	1	3	1	152	1,464	–	6	54	–
North Carolina	–	2	4	–	15	15	NN	NN	1	11	31	–
South Carolina	10	23	21	–	9	7	1	28	–	43	131	–
Georgia	–	1	11	–	4	15	–	–	–	–	2	–
Florida	13	135	137	1	22	14	60	673	–	3	73	2
EAST SOUTH CENTRAL	1	48	176	11	46	45	148	2,158	1	42	239	2
Kentucky	1	37	73	5	21	22	34	805	–	24	78	–
Tennessee	–	1	77	3	20	16	84	1,091	1	10	119	1
Alabama	–	2	–	3	5	3	22	230	–	8	33	–
Mississippi	–	8	26	–	–	4	8	32	–	–	9	1
WEST SOUTH CENTRAL	1	84	362	–	78	68	11	1,390	–	2	114	–
Arkansas	–	4	34	–	5	8	1	91	–	–	7	–
Louisiana	–	6	33	–	13	12	1	64	–	1	8	–
Oklahoma*	1	11	15	–	8	4	9	205	–	1	18	–
Texas	---	63	280	---	52	44	---	1,030	---	---	81	1
MOUNTAIN	46	264	218	2	11	12	32	626	–	23	189	–
Montana	29	148	4	–	1	2	2	106	–	4	60	–
Idaho	–	44	102	–	1	1	7	135	–	–	5	–
Wyoming	–	3	9	–	–	–	–	4	–	–	–	–
Colorado	6	21	20	1	2	2	22	260	–	14	44	–
New Mexico	7	37	73	–	2	1	1	118	–	4	51	–
Arizona	–	4	9	–	3	3	–	–	–	–	–	–
Utah	–	–	1	–	1	1	–	3	–	1	6	–
Nevada	4	7	–	1	1	2	–	–	–	–	23	–
PACIFIC	24	411	757	5	49	78	150	2,283	7	93	765	1
Washington	3	28	326	–	7	6	65	885	–	14	185	–
Oregon	–	–	185	–	6	4	26	445	–	6	82	–
California	21	380	241	5	33	65	54	873	7	72	487	1
Alaska	–	–	–	–	2	3	3	60	–	–	–	–
Hawaii	–	3	5	–	1	–	2	20	–	1	11	–
Guam*	–	1	3	–	–	–	–	106	–	–	–	–
Puerto Rico	24	205	596	–	–	3	27	281	5	1	5	1
Virgin Islands	–	–	–	–	–	–	2	8	–	–	–	1

*Delayed reports: Measles: N.H. 4 (1974)
Mumps: Me. 1, N.H. 6, Okla. 23, Guam 25 (1974)
Rubella: Me. 3, Wisc. delete 1 (1974)
Tetanus: Me. 1 (1973)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MARCH 30, 1974 AND MARCH 31, 1973 (13th WEEK) – Continued

AREA	TUBERCULOSIS (New Active)		TULAREMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES						RABIES IN ANIMALS
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1974	Cum. 1974	Cum. 1974	1974	Cum. 1974	1974	Cum. 1974	1974	Cumulative 1974	Cumulative 1973	1974	Cumulative 1974	Cumulative 1973	Cum. 1974
UNITED STATES	633	7,154	26	4	85	–	14	14,055	207,790	188,314	472	5,899	6,274	629
NEW ENGLAND	27	321	–	–	2	–	–	210	4,908	5,023	8	118	170	3
Maine	2	26	–	–	–	–	–	5	378	275	–	10	9	1
New Hampshire *	1	11	–	–	–	–	–	14	168	167	–	3	4	–
Vermont	–	3	–	–	–	–	–	12	163	61	–	1	8	–
Massachusetts	15	183	–	–	–	–	–	–	1,913	2,396	3	48	77	–
Rhode Island	–	32	–	–	2	–	–	15	455	592	–	3	6	2
Connecticut	9	66	–	–	–	–	–	164	1,831	1,532	5	53	66	–
MIDDLE ATLANTIC	129	1,244	1	1	16	–	9	2,016	26,631	24,358	88	1,292	1,427	3
Upstate New York	20	132	1	–	2	–	–	392	4,899	5,526	14	129	82	1
New York City	38	490	–	1	13	–	–	1,071	10,724	10,238	46	742	894	–
New Jersey	35	273	–	–	1	–	–	200	4,611	3,271	14	206	245	–
Pennsylvania	36	349	–	–	–	–	9	353	6,397	5,323	14	215	206	2
EAST NORTH CENTRAL	115	947	2	–	6	–	–	2,133	27,232	22,618	29	309	360	35
Ohio *	29	278	–	–	1	–	–	592	9,724	7,090	6	63	68	–
Indiana	32	150	–	–	–	–	–	344	2,947	2,619	4	46	75	2
Illinois	31	246	2	–	3	–	–	257	3,372	3,272	6	69	53	2
Michigan	23	273	–	–	2	–	–	645	8,067	7,216	11	102	139	–
Wisconsin	–	–	–	–	–	–	–	295	3,122	2,421	2	29	25	31
WEST NORTH CENTRAL	27	234	8	–	3	–	–	1,174	10,872	11,040	33	133	73	156
Minnesota	6	37	–	–	2	–	–	170	2,658	2,177	5	15	27	77
Iowa	2	18	–	–	–	–	–	307	1,548	1,470	2	11	8	31
Missouri	11	125	7	–	1	–	–	402	3,170	3,991	25	87	24	3
North Dakota	–	5	–	–	–	–	–	13	189	158	–	–	1	32
South Dakota	3	13	1	–	–	–	–	34	503	533	–	1	1	–
Nebraska	2	10	–	–	–	–	–	96	886	1,139	–	3	1	–
Kansas	3	26	–	–	–	–	–	152	1,918	1,572	1	16	11	13
SOUTH ATLANTIC	137	1,484	1	2	14	–	4	3,463	52,836	48,423	134	1,938	1,819	76
Delaware	–	24	–	–	–	–	–	58	797	706	1	25	21	–
Maryland	23	174	–	–	1	–	1	317	4,866	4,182	22	216	191	–
District of Columbia *	9	101	–	–	–	–	–	138	4,028	4,126	15	174	207	–
Virginia	7	187	1	–	1	–	–	263	4,615	4,577	8	251	177	33
West Virginia	3	79	–	–	3	–	–	52	664	757	1	7	8	10
North Carolina	17	259	–	–	–	–	–	464	7,111	7,364	10	208	142	1
South Carolina	22	156	–	–	–	–	–	327	5,976	5,119	15	250	287	2
Georgia	20	172	–	–	–	–	2	906	10,576	8,625	11	192	357	22
Florida	36	332	–	2	9	–	1	938	14,203	12,967	51	615	429	8
EAST SOUTH CENTRAL	65	657	6	–	13	–	–	1,342	17,946	16,258	26	321	447	89
Kentucky	20	140	1	–	7	–	–	137	2,172	1,953	9	72	189	59
Tennessee	12	199	3	–	4	–	–	489	7,063	6,083	14	125	105	20
Alabama	20	207	2	–	2	–	–	480	5,019	4,498	1	61	32	10
Mississippi	13	111	–	–	–	–	–	236	3,692	3,724	2	63	121	–
WEST SOUTH CENTRAL	22	898	6	–	5	–	–	1,176	29,249	24,992	42	583	701	156
Arkansas	8	123	2	–	1	–	–	481	3,037	3,510	1	27	52	21
Louisiana *	5	127	1	–	1	–	–	510	6,272	5,110	36	171	187	3
Oklahoma *	9	59	2	–	–	–	–	185	2,400	2,666	5	41	52	29
Texas *	---	589	1	---	3	---	–	---	17,540	13,706	---	344	410	103
MOUNTAIN	17	228	2	–	7	–	1	687	7,827	7,167	25	150	199	19
Montana	–	17	–	–	–	–	–	44	459	410	–	–	1	–
Idaho	–	9	–	–	–	–	–	20	502	431	–	1	5	–
Wyoming	2	6	1	–	2	–	–	7	154	109	–	3	8	2
Colorado	3	30	–	–	–	–	1	188	2,250	1,888	1	31	71	–
New Mexico	8	62	1	–	–	–	–	72	1,109	1,163	12	30	24	7
Arizona	–	72	–	–	5	–	–	203	2,363	2,117	3	45	48	10
Utah	1	12	–	–	–	–	–	35	369	400	–	6	6	–
Nevada	3	20	–	–	–	–	–	118	621	649	9	34	36	–
PACIFIC	94	1,141	–	1	19	–	–	1,854	30,289	28,435	87	1,055	1,078	92
Washington	8	82	–	–	2	–	–	234	2,723	2,620	–	27	35	–
Oregon	–	43	–	–	–	–	–	199	2,507	2,586	2	21	25	8
California	70	908	–	1	17	–	–	1,332	23,691	21,961	85	994	970	81
Alaska	7	27	–	–	–	–	–	53	686	684	–	1	20	3
Hawaii	9	81	–	–	–	–	–	36	682	584	–	12	28	–
Guam *	–	–	–	–	–	–	–	–	43	80	–	–	–	–
Puerto Rico	17	–	–	–	1	–	–	59	708	1,047	16	236	187	20
Virgin Islands	–	–	–	–	–	–	–	9	70	52	2	9	6	–

*Delayed reports: Tuberculosis: N.H. delete 1, Ohio delete 10 (1973) Guam 10 (1974)
Gonorrhea: La. delete 1, Guam 5 (1974)
Syphilis: D.C. 24 (1973), Okla 4 (1974)
Rabies: Texas 13 (1974)

Week No. 13

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING MARCH 30, 1974

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

Area	All Causes					Pneumonia and Influenza All Ages	Area	All Causes					Pneumonia and Influenza All Ages
	All Ages	65 years and over	45-64 years	25-44 years	Under 1 year			All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
NEW ENGLAND	726	459	189	33	26	37	SOUTH ATLANTIC	1,318	742	389	90	42	64
Boston, Mass.	231	129	62	14	10	12	Atlanta, Ga.	119	58	35	14	8	4
Bridgeport, Conn.	39	23	15	–	1	3	Baltimore, Md.	223	118	72	18	5	10
Cambridge, Mass.	29	27	2	–	–	5	Charlotte, N. C.	75	48	16	3	4	–
Fall River, Mass.	24	18	6	–	–	–	Jacksonville, Fla.	107	60	27	6	6	–
Hartford, Conn.	56	33	17	4	1	1	Miami, Fla.	139	74	47	11	2	11
Lowell, Mass.	29	19	9	–	1	2	Norfolk, Va.	73	37	27	4	4	7
Lynn, Mass.	13	8	3	1	1	–	Richmond, Va.	86	54	24	5	1	12
New Bedford, Mass.	33	26	6	1	–	2	Savannah, Ga.	26	9	10	1	1	1
New Haven, Conn.	42	19	13	4	5	1	St. Petersburg, Fla.	82	67	10	3	1	2
Providence, R. I.	53	32	16	1	3	3	Tampa, Fla.	85	49	22	7	4	5
Somerville, Mass.	9	5	4	–	–	–	Washington, D. C.	241	136	79	10	6	11
Springfield, Mass.	70	48	13	7	2	5	Wilmington, Del.	62	32	20	8	–	1
Waterbury, Conn.	34	24	9	1	–	–							
Worcester, Mass.	64	48	14	–	2	3	EAST SOUTH CENTRAL	694	393	208	39	31	28
							Birmingham, Ala.	94	47	32	6	3	–
MIDDLE ATLANTIC	3,536	2,224	896	210	96	179	Chattanooga, Tenn.	61	39	16	2	2	3
Albany, N. Y.	50	32	11	3	3	3	Knoxville, Tenn.	44	29	9	3	–	2
Allentown, Pa.	31	22	1	8	–	1	Louisville, Ky.	126	71	42	6	2	9
Buffalo, N. Y.	154	95	38	12	4	19	Memphis, Tenn.	154	83	45	11	11	2
Camden, N. J.	53	29	23	–	1	4	Mobile, Ala.	57	32	17	4	4	2
Elizabeth, N. J.	31	17	8	3	–	1	Montgomery, Ala.	48	30	14	1	2	5
Erie, Pa.	46	34	9	–	3	9	Nashville, Tenn.	110	62	33	6	7	5
Jersey City, N. J.	54	35	14	2	1	4							
Newark, N. J.	64	27	17	9	6	3	WEST SOUTH CENTRAL	1,180	629	349	80	61	45
New York City, N. Y. †	1,937	1,234	480	118	43	95	Austin, Tex.	38	21	10	5	2	3
Paterson, N. J.	38	20	14	2	1	–	Baton Rouge, La.	52	25	19	4	1	4
Philadelphia, Pa.	414	234	124	28	14	11	Corpus Christi, Tex.	39	18	13	1	4	1
Pittsburgh, Pa.	209	126	60	8	7	12	Dallas, Tex.	170	83	53	13	12	2
Reading, Pa.	39	31	6	1	1	2	El Paso, Tex.	51	33	11	1	2	2
Rochester, N. Y.	130	99	17	3	7	4	Fort Worth, Tex.	105	64	28	3	5	–
Schenectady, N. Y.	30	16	11	2	–	1	Houston, Tex.	253	120	85	23	13	7
Scranton, Pa.	56	38	13	3	1	4	Little Rock, Ark.	75	43	20	6	3	8
Syracuse, N. Y.	86	57	24	3	1	1	New Orleans, La.	150	79	40	9	8	3
Trenton, N. J.	48	28	11	4	3	3	San Antonio, Tex.	125	72	29	9	8	4
Utica, N. Y.	29	26	3	–	–	2	Shreveport, La.	55	34	18	2	–	3
Yonkers, N. Y.	37	24	12	1	–	–	Tulsa, Okla.	67	37	23	4	3	8
EAST NORTH CENTRAL	2,540	1,547	691	133	80	92	MOUNTAIN	560	324	161	36	11	25
Akron, Ohio	72	36	21	4	3	–	Albuquerque, N. Mex.	52	33	12	3	–	3
Canton, Ohio	48	29	11	4	1	–	Colorado Springs, Colo.	28	15	10	2	–	5
Chicago, Ill.	681	399	196	42	23	19	Denver, Colo.	130	84	35	7	1	8
Cincinnati, Ohio	161	92	50	7	4	7	Las Vegas, Nev.	25	7	11	5	1	1
Cleveland, Ohio	201	116	63	11	5	11	Ogden, Utah	24	13	6	4	–	2
Columbus, Ohio	133	82	38	5	6	7	Phoenix, Ariz.	137	75	40	8	4	1
Dayton, Ohio	106	69	29	3	3	3	Pueblo, Colo.	27	20	5	2	–	1
Detroit, Mich.	340	198	100	24	6	10	Salt Lake City, Utah	46	25	14	2	2	2
Evansville, Ind.	47	33	11	2	–	1	Tucson, Ariz.	91	52	28	3	3	2
Fort Wayne, Ind.	73	43	25	1	3	3							
Gary, Ind.	36	21	8	2	1	2	PACIFIC	1,688	1,069	396	96	68	50
Grand Rapids, Mich.	42	30	10	–	1	8	Berkeley, Calif.	9	6	2	–	–	1
Indianapolis, Ind.	150	94	34	10	8	2	Fresno, Calif.	64	39	13	4	4	–
Madison, Wis.	27	16	2	2	3	2	Glendale, Calif.	33	27	6	–	–	1
Milwaukee, Wis.	116	85	20	7	2	3	Honolulu, Hawaii	57	28	18	2	5	2
Peoria, Ill.	32	23	4	1	4	1	Long Beach, Calif.	108	66	31	4	3	2
Rockford, Ill.	46	31	9	2	1	4	Los Angeles, Calif.	561	364	121	39	17	9
South Bend, Ind.	50	33	12	2	1	3	Oakland, Calif.	72	44	20	5	1	–
Toledo, Ohio	114	73	32	2	3	4	Pasadena, Calif.	35	24	9	1	1	–
Youngstown, Ohio	65	44	16	2	2	2	Portland, Oreg.	152	92	37	8	13	8
							Sacramento, Calif.	54	35	13	2	4	2
WEST NORTH CENTRAL	822	537	203	34	31	31	San Diego, Calif.	118	74	26	7	4	3
Des Moines, Iowa	45	32	11	2	–	6	San Francisco, Calif.	156	91	45	14	1	7
Duluth, Minn.	17	13	3	1	–	–	San Jose, Calif.	47	36	6	3	–	3
Kansas City, Kans.	34	19	10	3	–	1	Seattle, Wash.	133	85	28	3	14	6
Kansas City, Mo.	125	74	38	7	4	2	Spokane, Wash.	52	32	15	2	1	4
Lincoln, Nebr.	30	27	1	1	–	2	Tacoma, Wash.	37	26	6	2	–	2
Minneapolis, Minn.	105	62	28	3	9	4							
Omaha, Nebr.	87	61	16	5	3	4	Total	13,064	7,924	3,482	751	446	551
St. Louis, Mo.	207	132	57	7	6	2							
St. Paul, Minn.	69	51	15	1	1	2	Expected Number	12,592	7,427	3,437	810	430	477
Wichita, Kans.	103	66	24	4	8	8							

†Delayed report for week ending March 23, 1974

MEASLES – Continued

dren (0-4 years). A survey of day-care centers in North Olmsted, Fairview Park, and Westlake showed that only 1 of 353 children attending had had measles. A telephone survey of all private general practitioners and pediatricians in the 3 towns confirmed that few preschoolers had been affected.

Of all affected children age 11 years and older, 28% had a history of measles vaccination; of all affected children aged 10 and younger, 65% had been vaccinated. Vaccine efficacy at 4 affected elementary and junior high schools ranged from 82% to 93%. Preliminary studies suggested that low vaccine efficacy may be attributed to vaccination before 1969 and at less than 12 months of age.

The outbreaks occurred despite high measles vaccination levels recorded for children entering elementary school in 1973 in the 3 most affected communities (91%, 93%, and 95%). Ten percent of North Olmsted Junior High School students had had neither measles vaccine nor disease prior to the outbreak. Attack rates in elementary and junior high schools ranged from 3% to 10%.

(Reported by Francis F. Silver, M.D., Health Commissioner, Cuyahoga County, Ohio; John Kelly, Immunization Representative, Ohio Department of Health; Ray Overton, Project Coordinator, Immunization Program, Ohio Department of Health; John Ackerman, M.D., Deputy Director, Ohio Department of Health; and an EIS Officer.)

Editorial Note

Outbreaks of measles with a large percentage of cases in older children and adolescents have been reported this year from New Jersey and Ohio. The unusual age distribution may be related to several factors: vaccination before 12 months of age if the vaccine was given before 1969, lower vaccination levels in older children who missed mass public vaccination programs, and reduced chance of exposure to natural measles in recent years. The significance of measles in older age groups can be assessed only by accurate surveillance and investigation in other states. It is evident from the Ohio experience that measles outbreaks can be prevented only by having high levels of immunity in all age groups, not just young children.

INTERNATIONAL NOTES

FOLLOW-UP ON SYLVATIC YELLOW FEVER – Panama

On February 9, 1974, an 18-year-old man from Maje Arriba was seen at a Panama City hospital with a 7-day history of fever, chills, weakness, headache, myalgia, and hematemesis. He was afebrile, oriented, and hypotensive and had bradycardia on admission; otherwise, physical examination was essentially unremarkable except for slight scleral icterus. Laboratory values included markedly abnormal liver function tests (SGOT 1640, SGPT 1900, Bilirubin 8.3, Prothrombin Time 4.5 minutes) and a white blood cell count of 4,500 (39% neutrophils, 56% lymphocytes); electrolytes and renal function studies were normal. Serial serologic tests (complement fixation, neutralizing antibody, hemagglutination inhibition) showed a rising titer to yellow fever. Liver biopsy on February 15 showed focal areas of mid-zonal regeneration and Councilman bodies. During the next 2 weeks the patient improved; on February 27 liver function tests were normal.

On February 16, a 36-year-old man from Las Piraguas was admitted to a Panama City hospital with a 5-day history of bloody diarrhea, vomiting, fever, and abdominal pain. He came to the hospital because a co-worker who had developed similar symptoms on February 9 and had not sought medical attention died on February 14. On admission the patient was febrile but normotensive; physical examination was otherwise unremarkable. Two days later he became disoriented and developed scleral icterus and a hemorrhagic diathesis. Laboratory values showed: marked renal disfunction (BUN 120, creatinine 9.2); SGOT 60, SGPT 38; partial thromboplastin time 75 seconds; platelets 33,000/mm^3; and white blood cell count 3,700, (neutrophils 83%, lymphocytes 15%, monocytes 2%). Urine volume and blood pressure dropped during the night of February 18, and the patient died on February 19. At autopsy massive liver necrosis with Councilman bodies was found. Yellow fever virus was subsequently isolated from blood obtained on February 17 and 18.

The patients were from the Chepo District east of the Canal in a jungle area of Panama, and they had been working in the jungle, clearing land and cutting lumber. During the last year thousands of people have moved into the previously sparsely populated Bayano River Basin as a result of construction of a hydroelectric dam, extension of the Pan-American Highway, and lumbering activities in the previously inaccessible Chepo area.

Retrospective review of hospital records in Panama City revealed 3 additional highly suspect cases of "hepatitis," in residents of the Chepo District who were admitted to the hospital in late January. Of these, 1 had died, another had high complement fixation titers for both yellow fever and St. Louis encephalitis virus and liver cell regeneration on biopsy, and no information was available on the third. Serologic surveys are being conducted in Chepo, and even though results are incomplete, some specimens have shown complement-fixing yellow fever antibodies at levels of $\geq$1:64. In 1 survey of a housing cluster in the Ipeti area, 10 of 30 persons had had recent illnesses suggestive of yellow fever; results of serologic tests on this group are pending.

Physicians, vaccination and survey teams, and malaria workers have been instructed to ask about hepatitis-like illness and deaths. A clinic has been established on the road into Chepo to screen patients and give yellow fever vaccinations. Surveillance of mosquito and monkey populations has been established. A voluntary campaign initiated on February 22, for administering 17D vaccine at existing health facilities had, as of March 7, given 372,000 doses; of these, 17,660 were given in Chepo (population 21,000). Vaccination is compulsory at the 3 Chepo access points (airport, seaport, road).

Aedes aegypti control activities have been intensified in Panama City, where the infestation rate is less than 0.5%; foci are confined to the central sections of the city.

Jungle yellow fever, involving transmission of the virus from monkey to man by *Haemagogus* mosquitoes, was first recognized in Panama in 1948. In the period 1948-1954, human cases were also reported in Costa Rica, Nicaragua, and Honduras. The virus was detected in Eastern Panama in 1957 and again in 1965; in the latter instance the virus was found only in the Darien Province.

(Reported by Abraham Saiad, M.D., Minister of Health, Panama; Pedro Galindo, M.D., Deputy Director, Gorgas Memorial Institute – Gorgas Memorial Laboratory, Karl Johnson, M.D., Director, Gorgas Memorial Institute – Middle America Research Unit; and the Bureau of Tropical Diseases, CDC.)

CURRENT TRENDS
SURVEILLANCE OF INFLUENZA – United States

Localized outbreaks of influenza have continued to occur in the last 2 weeks of March on the East and the West Coast. School absenteeism ranging from 40% to 70% was reported from the Echo, Oregon, area, where influenza-B virus has been isolated. An increase in school absenteeism in the 15% to 25% range associated with influenza-like disease has also been reported in Massachusetts, Rhode Island, and eastern New York State. Localized outbreaks of influenza-like disease associated with influenza-A isolates have also been reported in Nassau County and Albany, New York; Cleveland, Ohio; and Newark, New Jersey.

In March, Puerto Rico experienced its first reported outbreak of influenza-like disease; in the Mayaguez area, absenteeism reached 20% in the La Milagrossa School. Symptoms included sore throat, fever, headache, cough, chills, and myalgias. Nausea and vomiting were found in 30% and diarrhea in 5% of the cases. Secondary spread within families occurred with 56% of the cases. No increase in industrial absenteeism or reported influenza-like illness has occurred in other areas of the island.

No sustained nationwide excess mortality from pneumonia and influenza has occurred during this influenza season through March.

(Reported by Nicholas J. Fiumara, M.D., State Epidemiologist, Massachusetts Dept. of Public Health; Ronald Altman, M.D., State Epidemiologist, New Jersey Dept. of Health; Alan R. Hinman, M.D., Asst. Commissioner for Epidemiology and Preventive Health Services, New York State Dept. of Health; John H. Ackerman, M.D., State Epidemiologist, Ohio Dept. of Health; Tamara M. Vega, M.D., County Health Officer, Umatillo (Oregon) County, and John A. Googins, M.D., State Epidemiologist, Oregon Dept. of Human Resources; James R. Allen, M.D., State Epidemiologist, Rhode Island Dept. of Health; Puerto Rico Health Dept.; Diaz Martinez, M.D., Director of Preventive Medicine, West Region, San Juan Tropical Disease Laboratory; and the Viral Diseases Division, Bureau of Epidemiology, CDC, the International Influenza Center for the Americas.)

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Director, Center for Disease Control	David J. Sencer, M.D.
Director, Bureau of Epidemiology, CDC	Philip S. Brachman, M.D.
Editor, MMWR	Michael B. Gregg, M.D.
Managing Editor, MMWR	Deborah L. Jones, B.S.

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.

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

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