NATIONAL COMMUNICABLE DISEASE CENTER

Morbidity and Mortality

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WEEKLY REPORT

Week Ending November 23, 1968

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

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

CONTENTS

EPIDEMIOLOGIC NOTES AND REPORTS

INFLUENZA – United States and Puerto Rico

Reports of documented outbreaks of A2/Hong Kong/68 influenza or of influenza-like illness were received from the following areas during the past week: southeastern Pennsylvania; Colorado Springs, Colorado; southern Arizona; North Carolina; Seattle, Washington; eastern Oregon; and Puerto Rico.

In Pennsylvania, febrile respiratory illness rates and absenteeism rates increased in several industries, universities, and one high school. Between October 30 and November 22, an outbreak of A2/Hong Kong/68 influenza occurred among residents at a home for the elderly; five deaths were attributed to the outbreak. It was confirmed by viral isolations.

In Colorado Springs, Colorado, an increase in absenteeism rates in public schools and in three military installations due to influenza-like illness was noted. One of the military installations had an estimated attack rate of 60-70 percent among its personnel, and another installation experienced a 15 percent attack rate among the 30,000

(Continued on page 434)

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

DISEASE	47th WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 47 WEEKS		
	November 23, 1968	November 25, 1967	1963 - 1967	1968	1967	MEDIAN 1963 - 1967
Aseptic meningitis	81	45	45	4,055	2,785	1,964
Brucellosis	8	4	5	207	228	228
Diphtheria	6	10	8	215	163	184
Encephalitis, primary:						
Arthropod-borne & unspecified	33	19	---	1,295	1,470	---
Encephalitis, post-infectious	6	3	---	438	702	---
Hepatitis, serum	152	73	724	4,189	2,042	34,395
Hepatitis, infectious	1,178	701		41,343	34,848	
Malaria	39	30	3	2,146	1,890	97
Measles (rubeola)	245	282	1,414	21,234	60,484	250,745
Meningococcal infections, total	48	28	42	2,321	1,956	2,518
Civilian	44	27	---	2,129	1,833	---
Military	4	1	---	192	123	---
Mumps	2,055	---	---	137,916	---	---
Poliomyelitis, total	1	3	2	55	41	92
Paralytic	1	3	2	55	32	85
Rubella (German measles)	294	273	---	46,701	42,395	---
Streptococcal sore throat & scarlet fever	11,027	7,477	7,477	383,472	400,709	354,430
Tetanus	–	5	5	151	203	251
Tularemia	5	2	2	165	156	230
Typhoid fever	12	7	7	365	378	407
Typhus, tick-borne (Rky. Mt. spotted fever)	3	3	2	273	296	245
Rabies in animals	50	55	57	3,068	3,870	3,870

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	3	Rabies in man:	1
Botulism:	7	Rubella, Congenital Syndrome:	5
Leptospirosis: Fla.-1, Tex.-1	48	Trichinosis:* Iowa-1, Mich.-1, NYC-2, Tenn.-1	59
Plague:	3	Typhus, murine:	30
Psittacosis:	40	Polio, Unsp.:	

*Delayed reports: Trichinosis: N.H. delete 1

INFLUENZA – *(Continued from front page)*

people on the base. Several A2 influenza isolates were obtained, and additional specimens are being processed.

In southern Arizona, an outbreak of influenza-like illness occurred in a small town. The illness was described as mild and lasted from 5 to 7 days. From November 18-22, school absenteeism rates in an elementary school in the town increased 60 percent and in a high school, 400 percent. Laboratory confirmation of the outbreak is pending.

In North Carolina, an outbreak of influenza-like illness occurred in a group of residents who flew from North Carolina to Las Vegas and then to Honolulu in early October. The illnesses occurred between October 13 and November 1 and the attack rate was approximately 35 percent. Sera from 23 ill persons and from 17 persons without illness showed a greater than fourfold rise in titer to A2/Hong Kong/68 antibody by the hemagglutination-inhibition technique. There have been no other reported outbreaks in North Carolina.

In Seattle, Washington, a mild influenza-like illness occurred in 20 physicians at a hospital. Four viral isolates with hemadsorption properties of A2 influenza were obtained.

In eastern Oregon, an A2 influenza isolate was obtained from a patient with influenza-like illness. Although four or five other cases were associated with this case, there has been no major outbreak.

In Puerto Rico, an outbreak of influenza occurred between September 7 and November 16 with 51,658 cases being reported. The peak of the outbreak occurred during the weeks ending October 16 and 26 when 8,495 and 12,853 cases, respectively, were reported. This epidemic was reported as less intense than the January 1968 A2 influenza outbreak when approximately 23,000 cases were reported during 1 week along. Five influenza A2 viruses have been isolated; another isolate was confirmed as an A2/Hong Kong/68-like virus.

(Reported by W. D. Schrack, Jr., M.D., Director, Division of Communicable Diseases, and James E. Prier, Ph.D., Director, Division of Laboratories, Pennsylvania Department of Health; Lewis D. Polk, M.D., Deputy Health Commissioner for Community Health Services, and Alfred S. Bogucki, M.D., Director, Division of Epidemiology, Philadelphia Department of Public Health; Col. Ralph Singer, Chief, Communicable Diseases Branch, Preventive Medicine Division, Office of the Surgeon General, Department of the Army; James Hoffman, M.D., Director of Aviation Medicine, United States Air Force Academy, Colorado Springs; Col. Harry Umloff, Hospital Commander, Fort Carson, Colorado; Richard K. Miller, M.D., Director, El Paso City-County Health Department, Colorado Springs; Melvin H. Goodwin, Jr., Ph.D., Director, Preventive Medical Services, Arizona State Department of Health; Martin P. Hines, D.V.M., Director, Division of Epidemiology, North Carolina State Board of Health; Donald R. Peterson, M.D., Epidemiologist, Seattle-King County Health Department, Byron J. Francis, M.D., Head, Division of Epidemiology, and Vern Ashbey, Head, Virology Unit, Division of Laboratories, Washington State Department of Health; Edward Press, M.D., State Health Officer, Oregon State Board of Health; Louis Mainardi, M.D., Chief, Communicable Disease Control, Carlos Vicens, M.D., Director, Program for Preventive Medicine, Angeo A. Colon, M.D., Director of Institute of Laboratories, and Mrs. Maria Teresa P. de Perez, Statistician, Puerto Rico Department of Health; and Respiratory Virus Infections Unit, Laboratory Program, NCDC.)

EPIDEMIC GASTROENTERITIS, POSSIBLE WINTER VOMITING DISEASE, IN AN ELEMENTARY SCHOOL – Norwalk, Ohio

On October 30 and 31, 1968, an acute gastrointestinal illness developed in 50 percent (116 of 232) of the students and teachers of an elementary school in Norwalk, Ohio. Index cases occurred on the evening of October 29 with most cases occurring in the 24-hour period between noon of October 30 and noon of October 31 (Figure 1). The illness was characterized principally by nausea, vomiting, and abdominal cramps; diarrhea occurred in 44 percent of the cases (Table 1). The symptoms lasted from 12 to 24 hours in most instances and seldom more than 48 hours. No patient was hospitalized, and there were no known sequelae.

Family contacts of primary cases also developed the syndrome. The secondary attack rate in these families was 29.8 percent (113 ill of 379 at risk). This is significantly different from the 3 percent attack rate in both family contacts of well children who attend this school and in the community at large as ascertained by a telephone survey. Secondary cases occurred predominantly on November 1, 2, and 3, with an average incubation period of 48 hours (Figure 2). The attack rate difference between the students' mothers and fathers (37 and 22 percent, respectively) and between small and large families were not significantly different.

Epidemiologic analysis of primary cases excluded a foodborne mode of spread as students who brought their lunches from home had similar attack rates with those who bought lunch in the school cafeteria. This school, in contrast with the other schools in the system which receive city water, has its own well; this well water could not be excluded as the mode of spread. The one class with the lowest attack rate had the lowest reported use of drinking water on October 29 and 30. Although the water is routinely chlorinated, adequate levels of chlorine could not be demonstrated. Coliform counts on the well water on October 21 and November 12 were negative. No cross contamination could be demonstrated between the septic tank and

Figure 1
PRIMARY CASES OF GASTROENTERITIS
BY TIME OF ONSET
NORWALK, OHIO
OCTOBER 29 – NOVEMBER 3, 1968

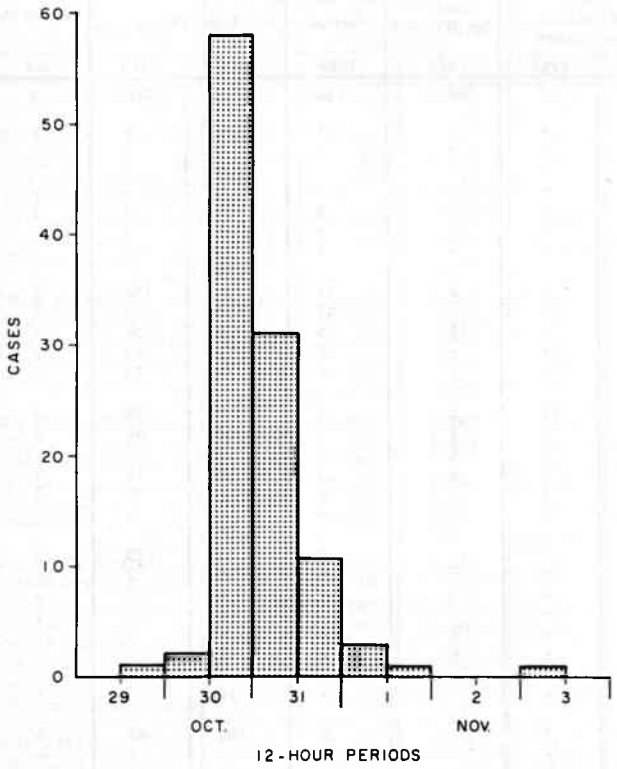
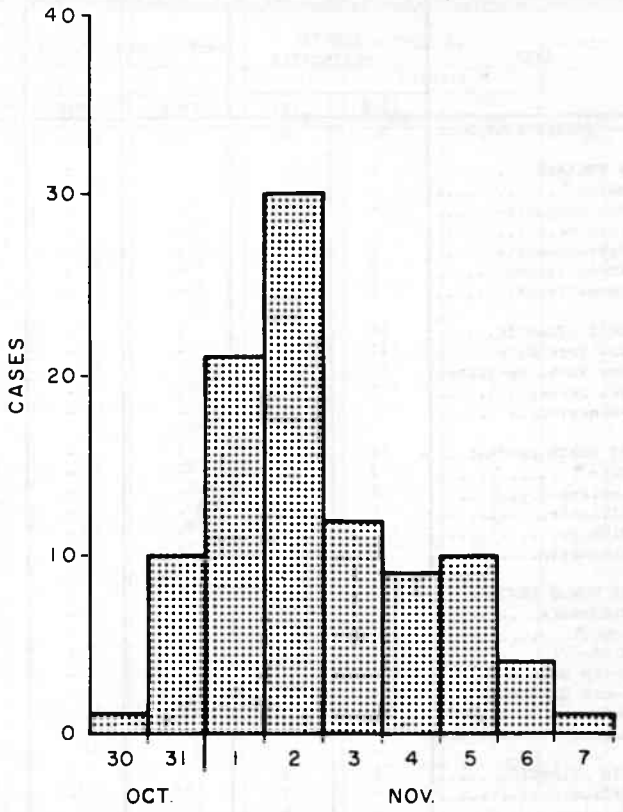


Figure 2
CASES OF GASTROENTERITIS IN FAMILY CONTACTS
OF PRIMARY CASES BY DAY OF ONSET
OCTOBER 30 – NOVEMBER 7, 1968



the well or between the septic tank and a water softener used to treat water for drinking in the school. Following the investigation, bottled water was purchased for the school until the drinking water could be proved safe.

Stool swabs and specimens were obtained from primary and secondary cases, some asymptomatic children attending the school, some asymptomatic persons from affected families, and food handlers for bacterial and viral studies and from some primary cases for parasitic studies. Throat swabs were also obtained. Results of these studies are pending.

Food from the October 28 and 29 lunches at the school was not available for culture, but milk and food from the October 30 lunch were analyzed for Salmonella, Shigella, *Staphylococcus aureus,* and coliforms. None were recovered. Well water was obtained for bacteriologic and virologic studies.

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Table 1
Clinical Data from Primary and Secondary Cases
Norwalk, Ohio
October 29 – November 7, 1968

Symptom	99 Primary Cases		100 Secondary Cases		Total	
	Number with Symptom	Percent	Number with Symptom	Percent	Number with Symptom	Percent
Nausea	97	98	73	73	170	85
Vomiting	91	92	76	76	167	84
Abdominal Cramps	58	59	66	66	124	62
Lethargy	52	53	54	54	106	53
Diarrhea	38	38	50	50	88	44
Fever	34	34	30	30	64	32
Chills	4	4	5	5	9	5

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED NOVEMBER 23, 1968 AND NOVEMBER 25, 1967 (47th WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA
					Primary including unsp. cases		Post-Infectious	Serum	Infectious		
	1968	1967	1968	1968	1968	1967	1968	1968	1968	1967	1968
UNITED STATES...	81	45	8	6	33	19	6	152	1,178	701	39
NEW ENGLAND.....	6	-	-	-	-	-	-	7	58	28	3
Maine*.....	1	-	-	-	-	-	-	-	2	1	1
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-	1	-	-
Massachusetts.....	2	-	-	-	-	-	-	2	22	9	2
Rhode Island.....	2	-	-	-	-	-	-	-	9	5	-
Connecticut.....	1	-	-	-	-	-	-	5	24	13	-
MIDDLE ATLANTIC.....	24	4	1	-	4	-	2	74	239	156	5
New York City.....	11	-	-	-	1	-	-	57	113	40	1
New York, up-State.	10	-	-	-	2	-	1	5	49	34	-
New Jersey.....	3	3	1	-	1	-	-	10	46	63	2
Pennsylvania.....	-	1	-	-	-	-	1	2	31	19	2
EAST NORTH CENTRAL...	14	11	1	-	14	11	2	5	165	138	3
Ohio*.....	3	-	-	-	10	7	1	1	36	46	-
Indiana.....	2	-	-	-	-	2	1	-	11	27	-
Illinois.....	4	2	-	-	-	1	-	3	55	18	2
Michigan.....	4	4	-	-	3	1	-	1	51	36	1
Wisconsin.....	1	5	1	-	1	-	-	-	12	11	-
WEST NORTH CENTRAL...	2	1	2	1	2	-	-	-	81	23	1
Minnesota.....	2	1	1	-	1	-	-	-	30	7	-
Iowa*.....	-	-	1	-	1	-	-	-	4	7	-
Missouri.....	-	-	-	1	-	-	-	-	14	2	1
North Dakota.....	-	-	-	-	-	-	-	-	-	-	-
South Dakota.....	-	-	-	-	-	-	-	-	16	-	-
Nebraska.....	-	-	-	-	-	-	-	-	1	1	-
Kansas.....	-	-	-	-	-	-	-	-	16	6	-
SOUTH ATLANTIC.....	1	6	-	3	2	2	2	9	143	48	4
Delaware.....	-	1	-	-	-	-	-	-	-	1	-
Maryland.....	-	4	-	-	1	1	-	1	23	15	-
Dist. of Columbia..	-	-	-	-	-	-	-	-	3	-	-
Virginia.....	-	-	-	-	-	-	-	-	11	14	-
West Virginia.....	-	-	-	-	-	-	-	-	3	7	-
North Carolina*....	1	1	-	-	-	-	-	-	2	1	2
South Carolina*....	-	-	-	-	-	1	-	-	8	-	-
Georgia.....	-	-	-	3	1	-	-	-	34	2	-
Florida.....	-	-	-	-	-	-	2	8	59	8	2
EAST SOUTH CENTRAL...	5	3	-	-	3	1	-	-	71	50	10
Kentucky.....	1	-	-	-	-	-	-	-	36	16	10
Tennessee.....	3	-	-	-	3	1	-	-	23	17	-
Alabama.....	-	1	-	-	-	-	-	-	4	3	-
Mississippi.....	1	2	-	-	-	-	-	-	8	14	-
WEST SOUTH CENTRAL...	5	2	1	2	3	-	-	-	67	65	-
Arkansas.....	1	-	-	-	-	-	-	-	6	4	-
Louisiana.....	1	-	-	2	1	-	-	-	20	19	-
Oklahoma.....	-	-	-	-	1	-	-	-	7	4	-
Texas*.....	3	2	1	-	1	-	-	-	34	38	-
MOUNTAIN.....	2	1	1	-	1	-	-	2	62	35	4
Montana.....	-	-	-	-	-	-	-	-	7	8	-
Idaho.....	-	-	-	-	-	-	-	-	9	3	-
Wyoming.....	-	-	-	-	-	-	-	-	1	-	-
Colorado.....	2	-	-	-	1	-	-	1	30	7	4
New Mexico.....	-	1	-	-	-	-	-	-	7	5	-
Arizona.....	-	-	-	-	-	-	-	-	6	9	-
Utah.....	-	-	1	-	-	-	-	1	2	2	-
Nevada.....	-	-	-	-	-	-	-	-	-	1	-
PACIFIC.....	22	17	2	-	4	5	-	55	292	158	9
Washington.....	1	2	-	-	1	-	-	1	46	32	-
Oregon.....	-	-	-	-	-	-	-	1	24	9	2
California.....	20	15	2	-	3	5	-	53	221	112	6
Alaska.....	1	-	-	-	-	-	-	-	1	4	-
Hawaii.....	-	-	-	-	-	-	-	-	-	1	1
Puerto Rico*.....	-	-	-	-	-	-	-	-	20	25	-

*Delayed reports: Diphtheria: Tex. 15
Encephalitis, primary: Iowa 1
Hepatitis, serum: P.R. 1
Hepatitis, infectious: Me. 3, Ohio delete 1, S.C. delete 5, P.R. 23
Malaria: N.C. delete 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

NOVEMBER 23, 1968 AND NOVEMBER 25, 1967 (47th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1968	1968	1967	1968	1968	1967	1968	1968	1968	Cum. 1968	1968
UNITED STATES...	245	21,234	60,484	48	2,321	1,956	2,055	1	1	55	294
NEW ENGLAND.....	11	1,224	915	1	134	78	251	-	-	1	23
Maine*	-	38	262	-	6	3	21	-	-	-	1
New Hampshire.....	-	141	77	-	7	3	19	-	-	-	2
Vermont.....	-	2	34	-	1	1	20	-	-	-	-
Massachusetts.....	3	381	384	1	71	36	98	-	-	1	8
Rhode Island.....	1	23	62	-	9	4	32	-	-	-	2
Connecticut.....	7	639	96	-	40	31	61	-	-	-	10
MIDDLE ATLANTIC.....	93	4,473	2,450	12	420	320	63	-	-	1	25
New York City.....	23	2,315	497	2	86	56	30	-	-	-	5
New York, Up-State.	46	1,324	623	-	72	81	NN	-	-	1	8
New Jersey.....	2	673	564	6	146	103	33	-	-	-	8
Pennsylvania.....	22	161	766	4	116	80	NN	-	-	-	4
EAST NORTH CENTRAL...	33	4,047	5,965	5	287	274	567	1	1	9	99
Ohio.....	2	315	1,175	4	81	92	30	-	-	2	8
Indiana.....	2	704	637	-	39	31	48	-	-	2	9
Illinois.....	5	1,404	1,138	-	63	61	97	-	-	2	9
Michigan.....	6	313	1,001	1	84	69	195	1	1	3	42
Wisconsin.....	18	1,311	2,014	-	20	21	197	-	-	-	31
WEST NORTH CENTRAL...	6	407	2,941	1	126	93	255	-	-	3	25
Minnesota.....	-	18	135	-	29	21	-	-	-	-	-
Iowa.....	4	108	773	-	10	19	194	-	-	1	16
Missouri.....	-	81	340	1	41	18	29	-	-	2	-
North Dakota.....	-	138	885	-	4	3	19	-	-	-	4
South Dakota.....	-	4	58	-	5	7	NN	-	-	-	-
Nebraska.....	2	48	656	-	9	15	11	-	-	-	-
Kansas.....	-	10	94	-	28	10	2	-	-	-	5
SOUTH ATLANTIC.....	28	1,608	7,194	12	463	376	163	-	-	3	26
Delaware.....	-	17	50	-	9	7	2	-	-	-	1
Maryland.....	-	103	174	-	40	53	14	-	-	-	1
Dist. of Columbia..	-	6	24	1	17	15	-	-	-	1	-
Virginia.....	-	319	2,253	-	44	43	11	-	-	-	7
West Virginia.....	2	312	1,457	-	13	36	73	-	-	1	4
North Carolina.....	8	292	926	5	91	75	NN	-	-	1	-
South Carolina.....	4	19	512	3	61	31	24	-	-	-	-
Georgia.....	-	4	41	-	90	57	-	-	-	-	-
Florida.....	14	536	1,757	3	98	59	39	-	-	-	13
EAST SOUTH CENTRAL...	1	503	5,448	4	208	155	76	-	-	1	6
Kentucky.....	-	103	1,426	1	94	45	41	-	-	1	1
Tennessee.....	1	64	1,994	2	63	67	35	-	-	-	1
Alabama.....	-	95	1,354	-	27	29	-	-	-	-	4
Mississippi.....	-	241	674	-	24	14	-	-	-	-	-
WEST SOUTH CENTRAL...	25	5,130	17,964	5	331	246	96	-	-	24	19
Arkansas.....	-	2	1,404	-	20	37	-	-	-	1	-
Louisiana.....	1	25	156	1	94	97	13	-	-	-	-
Oklahoma.....	-	128	3,359	1	53	18	3	-	-	2	2
Texas.....	24	4,975	13,045	3	164	94	80	-	-	21	17
MOUNTAIN.....	14	1,056	4,831	2	41	40	84	-	-	1	21
Montana.....	-	58	328	-	6	5	4	-	-	-	-
Idaho.....	-	21	395	-	11	3	-	-	-	-	1
Wyoming.....	-	54	195	-	3	1	1	-	-	-	-
Colorado.....	2	520	1,610	1	12	13	36	-	-	-	9
New Mexico.....	8	143	604	1	1	5	25	-	-	-	2
Arizona.....	3	233	1,047	-	4	6	11	-	-	1	5
Utah.....	-	21	383	-	1	4	7	-	-	-	4
Nevada.....	1	6	269	-	3	3	-	-	-	-	-
PACIFIC.....	34	2,786	12,776	6	311	374	500	-	-	12	50
Washington.....	2	583	5,607	-	47	37	119	-	-	1	20
Oregon.....	8	572	1,689	1	25	30	29	-	-	-	6
California.....	24	1,585	5,158	5	222	292	334	-	-	11	21
Alaska.....	-	11	140	-	3	11	14	-	-	-	-
Hawaii.....	-	35	182	-	14	4	4	-	-	-	3
Puerto Rico.*	4	485	2,231	-	20	15	23	-	-	-	-

*Delayed reports: Measles: P.R. 15
Mumps: Me. 15, P.R. 25
Rubella: Me. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
NOVEMBER 23, 1968 AND NOVEMBER 25, 1967 (47th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968
UNITED STATES...	11,027	-	151	5	165	12	365	3	273	50	3,068
NEW ENGLAND.....	1,251	-	4	-	47	1	13	-	1	-	74
Maine.*.....	26	-	-	-	-	-	2	-	-	-	55
New Hampshire.....	18	-	1	-	-	-	1	-	-	-	2
Vermont.....	19	-	-	-	47	-	-	-	-	-	11
Massachusetts.....	179	-	1	-	-	1	7	-	1	-	5
Rhode Island.....	131	-	-	-	-	-	-	-	-	-	-
Connecticut.....	878	-	2	-	-	-	3	-	-	-	1
MIDDLE ATLANTIC.....	311	-	19	3	10	2	34	-	22	1	50
New York City.....	5	-	11	-	-	2	17	-	-	-	-
New York, Up-State.	272	-	4	-	7	-	8	-	5	1	41
New Jersey.....	NN	-	1	-	-	-	4	-	7	-	-
Pennsylvania.....	34	-	3	3	3	-	5	-	10	-	9
EAST NORTH CENTRAL...	808	-	16	-	11	-	47	-	9	6	278
Ohio.....	99	-	2	-	1	-	19	-	7	1	92
Indiana.....	213	-	2	-	1	-	7	-	-	2	90
Illinois.....	129	-	8	-	8	-	19	-	2	-	38
Michigan.....	264	-	3	-	1	-	-	-	-	2	16
Wisconsin.....	103	-	1	-	-	-	2	-	-	1	42
WEST NORTH CENTRAL...	857	-	15	1	16	-	38	-	9	16	760
Minnesota.....	43	-	2	-	-	-	2	-	-	9	242
Iowa.....	134	-	4	-	-	-	2	-	1	1	119
Missouri.....	5	-	5	-	7	-	26	-	3	2	110
North Dakota.....	111	-	-	-	-	-	-	-	-	2	120
South Dakota.....	22	-	1	-	3	-	2	-	4	-	97
Nebraska.....	104	-	3	1	1	-	3	-	1	1	27
Kansas.....	438	-	-	-	5	-	3	-	-	1	45
SOUTH ATLANTIC.....	1,189	-	32	-	12	-	61	-	141	7	373
Delaware.....	6	-	-	-	-	-	-	-	-	-	1
Maryland.....	217	-	3	-	-	-	9	-	18	-	6
Dist. of Columbia..	3	-	2	-	-	-	1	-	-	1	2
Virginia.....	218	-	4	-	3	-	10	-	44	3	129
West Virginia.....	222	-	2	-	-	-	-	-	2	1	49
North Carolina.....	43	-	2	-	3	-	4	-	39	-	12
South Carolina.....	201	-	4	-	-	-	3	-	9	-	-
Georgia.....	18	-	3	-	4	-	15	-	26	-	73
Florida.....	261	-	12	-	2	-	19	-	3	2	101
EAST SOUTH CENTRAL...	1,596	-	15	1	9	2	44	2	55	8	656
Kentucky.....	265	-	1	1	2	1	10	-	10	7	345
Tennessee.....	1,027	-	6	-	5	1	19	1	38	1	279
Alabama.....	177	-	5	-	-	-	2	-	4	-	25
Mississippi.....	127	-	3	-	2	-	13	1	3	-	7
WEST SOUTH CENTRAL...	678	-	29	-	47	1	51	1	30	5	470
Arkansas.....	12	-	5	-	15	-	18	-	6	-	61
Louisiana.....	20	-	10	-	7	-	6	-	1	-	45
Oklahoma.....	69	-	-	-	9	-	15	1	4	-	119
Texas.....	577	-	14	-	16	1	12	-	9	5	245
MOUNTAIN.....	2,788	-	1	-	9	1	19	-	5	2	86
Montana.....	43	-	-	-	-	-	-	-	-	-	-
Idaho.....	121	-	-	-	-	-	-	-	1	-	-
Wyoming.*.....	648	-	-	-	1	-	1	-	-	-	3
Colorado.....	1,450	-	-	-	3	1	3	-	4	-	4
New Mexico.....	291	-	-	-	-	-	8	-	-	2	38
Arizona.*.....	82	-	1	-	-	-	6	-	-	-	37
Utah.....	149	-	-	-	5	-	-	-	-	-	1
Nevada.....	4	-	-	-	-	-	1	-	-	-	3
PACIFIC.....	1,549	-	20	-	4	5	58	-	1	5	321
Washington.....	645	-	1	-	-	-	2	-	-	-	2
Oregon.....	113	-	1	-	1	-	5	-	-	-	6
California.....	627	-	18	-	3	5	51	-	1	5	313
Alaska.....	35	-	-	-	-	-	-	-	-	-	-
Hawaii.....	129	-	-	-	-	-	-	-	-	-	-
Puerto Rico*.....	6	-	12	-	-	-	4	-	-	1	20

*Delayed reports: SST: Me. 45, Wyo. 83, P.R. 1
Typhoid: Ariz. 2
Rabies in animals: Me. 1

Week No. 47

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED NOVEMBER 23, 1968

(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
	All Ages	65 years and over		
NEW ENGLAND:	841	517	62	32
Boston, Mass.	272	164	23	14
Bridgeport, Conn.	54	36	5	2
Cambridge, Mass.	18	11	4	-
Fall River, Mass.	40	23	2	-
Hartford, Conn.	63	37	2	3
Lowell, Mass.	36	21	5	-
Lynn, Mass.	23	14	2	1
New Bedford, Mass.	19	14	1	2
New Haven, Conn.	58	33	2	4
Providence, R. I.	78	47	2	3
Somerville, Mass.	13	10	-	-
Springfield, Mass.	63	48	9	3
Waterbury, Conn.	49	32	-	-
Worcester, Mass.	55	27	5	-
MIDDLE ATLANTIC:	3,499	2,081	149	132
Albany, N. Y.	50	27	1	-
Allentown, Pa.	44	27	10	-
Buffalo, N. Y.	154	85	1	9
Camden, N. J.	45	24	5	3
Elizabeth, N. J.	46	24	2	-
Erie, Pa.	50	30	4	1
Jersey City, N. J.	66	36	6	6
Newark, N. J.	82	34	4	2
New York City, N. Y.	1,760	1,051	66	67
Paterson, N. J.	28	17	1	-
Philadelphia, Pa.	483	286	2	16
Pittsburgh, Pa.	224	140	15	7
Reading, Pa.	70	39	8	3
Rochester, N. Y.	109	74	8	1
Schenectady, N. Y.	27	18	-	2
Scranton, Pa.	48	35	2	2
Syracuse, N. Y.	90	61	4	5
Trenton, N. J.	54	29	6	3
Utica, N. Y.	34	22	2	-
Yonkers, N. Y.	35	22	2	5
EAST NORTH CENTRAL:	2,709	1,534	86	152
Akron, Ohio	70	43	1	5
Canton, Ohio	42	24	1	2
Chicago, Ill.	723	390	32	44
Cincinnati, Ohio	201	121	6	8
Cleveland, Ohio	173	94	-	7
Columbus, Ohio	145	72	2	8
Dayton, Ohio	77	38	2	4
Detroit, Mich.	405	227	11	23
Evansville, Ind.	45	32	1	2
Flint, Mich.	64	38	-	5
Fort Wayne, Ind.	60	34	4	3
Gary, Ind.	28	13	2	2
Grand Rapids, Mich.	61	41	-	4
Indianapolis, Ind.	156	93	1	9
Madison, Wis.	44	18	6	2
Milwaukee, Wis.	139	83	3	9
Peoria, Ill.	38	20	2	4
Rockford, Ill.	50	34	4	4
South Bend, Ind.	36	25	3	2
Toledo, Ohio	93	56	2	2
Youngstown, Ohio	59	38	3	3
WEST NORTH CENTRAL:	849	517	32	39
Des Moines, Iowa	62	46	3	-
Duluth, Minn.	21	15	2	1
Kansas City, Kans.	36	18	3	6
Kansas City, Mo.	133	80	4	6
Lincoln, Nebr.	26	20	2	-
Minneapolis, Minn.	129	78	1	7
Omaha, Nebr.	83	47	-	2
St. Louis, Mo.	232	127	5	12
St. Paul, Minn.	63	50	2	-
Wichita, Kans.	64	36	10	5
SOUTH ATLANTIC:	1,279	684	50	54
Atlanta, Ga.	154	62	2	6
Baltimore, Md.	281	146	7	18
Charlotte, N. C.	59	33	-	6
Jacksonville, Fla.	75	37	2	2
Miami, Fla.	112	64	2	5
Norfolk, Va.	61	32	3	2
Richmond, Va.	88	42	7	4
Savannah, Ga.	31	15	1	1
St. Petersburg, Fla.	92	74	10	4
Tampa, Fla.	88	53	6	2
Washington, D. C.	192	96	9	1
Wilmington, Del.	46	30	1	3
EAST SOUTH CENTRAL:	712	379	32	46
Birmingham, Ala.	110	57	2	8
Chattanooga, Tenn.	60	31	3	3
Knoxville, Tenn.	38	25	4	1
Louisville, Ky.	139	77	12	4
Memphis, Tenn.	161	86	2	14
Mobile, Ala.	59	30	2	8
Montgomery, Ala.	40	25	4	4
Nashville, Tenn.	105	48	3	4
WEST SOUTH CENTRAL:	1,061	562	41	67
Austin, Tex.	30	19	3	4
Baton Rouge, La.	39	22	1	3
Corpus Christi, Tex.	30	17	-	1
Dallas, Tex.	181	98	5	17
El Paso, Tex.	38	18	1	3
Fort Worth, Tex.	74	36	4	4
Houston, Tex.	166	85	5	6
Little Rock, Ark.	57	28	4	5
New Orleans, La.	117	58	1	6
Oklahoma City, Okla.	70	33	2	4
San Antonio, Tex.	139	73	7	9
Shreveport, La.	67	41	5	4
Tulsa, Okla.	53	34	3	1
MOUNTAIN:	477	266	25	28
Albuquerque, N. Mex.	43	19	3	11
Colorado Springs, Colo.	29	11	5	1
Denver, Colo.	142	76	8	5
Ogden, Utah	12	5	-	-
Phoenix, Ariz.	118	71	3	4
Pueblo, Colo.	27	18	4	3
Salt Lake City, Utah	56	32	1	2
Tucson, Ariz.	50	34	1	2
PACIFIC:	1,896	1,154	31	83
Berkeley, Calif.	28	20	-	1
Fresno, Calif.	42	23	2	1
Glendale, Calif.	50	32	-	-
Honolulu, Hawaii	46	25	2	4
Long Beach, Calif.	133	81	4	5
Los Angeles, Calif.	606	385	11	27
Oakland, Calif.	88	43	1	9
Pasadena, Calif.	50	37	-	-
Portland, Oreg.	140	89	1	6
Sacramento, Calif.	79	50	-	1
San Diego, Calif.	81	38	1	5
San Francisco, Calif.	232	124	8	9
San Jose, Calif.	38	27	-	1
Seattle, Wash.	183	109	-	9
Spokane, Wash.	53	39	-	4
Tacoma, Wash.	47	32	1	1
Total	13,323	7,694	508	633

Cumulative Totals
including reported corrections for previous weeks

All Causes, All Ages	596,589
All Causes, Age 65 and over	342,767
Pneumonia and Influenza, All Ages	23,518
All Causes, Under 1 Year of Age	28,248

EPIDEMIC GASTROENTERITIS

(Continued from page 435)

(Reported by Calvin B. Spencer, M.D., Acting Chief, Communicable Disease Division, Jack Russell, D.V.M., Chief, and George T. Bear, D.V.M., Assistant Veterinary Epidemiologist, Division of Veterinary Public Health, and William Halferty, Communicable Disease Investigator, Northwest District, Ohio Department of Health; George F. Linn, M.D., Commissioner of Health, Huron County Department of Health, Norwalk, Huron County, Ohio; and two EIS Officers.)

Editorial Comment

The precise mode of transmission in this outbreak has not yet been ascertained. However, characteristics of the epidemic curves suggest a common source exposure for the primary cases with a person-to-person spread in family contacts accounting for secondary cases. Person-to-person spread was probably responsible for the secondary cases, and consequently, one might expect a significantly higher attack rate in mothers, who have more intimate contact with sick children, than in fathers, and a higher attack rate in larger families (five or more members) than in smaller families. Although the attack rate in mothers (37 percent) was higher than in fathers (22 percent), this difference was not statistically significant. Furthermore, attack rates in large and small families were similar.

The illness is clinically and epidemiologically compatible with winter vomiting disease.[1,2,3] This disease has an explosive onset, usually mimics a common source epidemic, presents with either predominantly upper or lower gastrointestinal symptoms, and generally occurs in persons in residential schools between September and March.

Although no responsible agent has been isolated, a viral etiology for winter vomiting disease is suspected. This is supported by the experience of a few investigators who have been able to transmit infection to volunteers through aerosolized and ingested bacteria-free fecal filtrates. However, more than one agent may be responsible for this syndrome.

References:

[1]Editorial, Winter Vomiting Disease. Brit Med J, *2*:953-954, 1965.

[2]Reimann, H. A.: Viral Dysentery. Amer J Med Sci, *246*:404-409, 1963.

[3]Levitt, Lawrence P., Wolfe, Viola, and Bond, James O.: Winter Vomiting Disease in Florida Students. Submitted for Publication.

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DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER — DAVID J. SENCER, M.D.
CHIEF, EPIDEMIOLOGY PROGRAM — A.D. LANGMUIR, M.D.
CHIEF, STATISTICS SECTION — IDA L. SHERMAN, M.S.
EDITOR — MICHAEL B. GREGG, M.D.

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MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.