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For Week Ending September 22, 1973

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

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EPIDEMIOLOGIC NOTES AND REPORTS

PROBABLE BOTULISM – Washington

On August 5, 1973, an 18-year-old man in Wenatchee, Washington, developed dizziness and the following day had the onset of diplopia, dysphagia, dysphonia, and weakness in both arms. These symptoms progressed, and he was admitted to a local hospital on August 7.

Physical examination revealed evidence of cranial nerve impairment and upper extremity weakness. A Tensilon* test was negative. Spinal fluid protein was 53 mg%, and no cells were present. The patient's condition continued to deteriorate, and he was transferred to a hospital in Seattle on August 8.

On admission he denied a history of dry mouth, sore throat, nausea, vomiting, and paresthesias. On examination he was drowsy but oriented. His pupils were in mid-position and reactive. Extraocular movements were decreased in all fields of gaze, and marked ptosis was present bilaterally. There was also evidence of impairment of cranial nerves VII and IX-XII. The patient had muscle weakness in both the arms and legs. Sensory examination was normal. Deep tendon reflexes were diminished in the arms but normal in the legs.

The differential diagnosis at this time included atypical

*Inclusion of trade names does not imply endorsement by the Public Health Service or the U.S. Department of Health, Education, and Welfare.

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	38th WEEK ENDING		MEDIAN 1968-1972	CUMULATIVE, FIRST 38 WEEKS		
	September 22, 1973	September 23, 1972		1973	1972	MEDIAN 1968-1972
Aseptic meningitis	165	188	231	3,205	2,649	2,871
Brucellosis	5	11	5	138	144	154
Chickenpox	292	368	– – –	145,473	114,628	– – –
Diphtheria	1	3	3	126	75	75
Encephalitis, primary:						
Arthropod-borne and unspecified	48	38	38	1,066	743	930
Encephalitis, post-infectious	1	4	4	222	221	283
Hepatitis, serum (Hepatitis B)	138	150	126	5,816	6,652	5,211
Hepatitis, infectious (Hepatitis A)	1,122	1,040	1,056	36,975	39,972	39,973
Malaria	7	14	71	181	704	2,089
Measles (rubeola)	90	138	156	24,320	27,079	27,079
Meningococcal infections, total	11	23	23	1,075	1,039	1,911
Civilian	11	21	21	1,051	997	1,720
Military	–	2	1	24	42	191
Mumps	387	420	612	55,828	57,323	76,747
Rubella (German measles)	87	135	236	26,118	21,019	44,131
Tetanus	3	8	4	64	90	90
Tuberculosis, new active	620	699	– – –	22,972	24,499	– – –
Tularemia	7	1	1	127	103	102
Typhoid fever	13	12	13	507	253	253
Typhus, tick-borne (Rky. Mt. spotted fever)	15	20	9	562	453	352
Venereal Diseases:						
Gonorrhea	18,665	18,161	– – –	595,982	538,788	– – –
Syphilis, primary and secondary	461	515	– – –	18,876	17,955	– – –
Rabies in animals	46	71	58	2,641	3,162	2,614

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	1	Poliomyelitis, total: Md.-1, Fla.-1	5
Botulism:	14	Paralytic: Md.-1	4
Congenital rubella syndrome: *	21	Psittacosis:	18
Leprosy: Tex.-1	91	Rabies in man:	–
Leptospirosis: Pa.-1	27	Trichinosis: Conn.-1	71
Plague:	2	Typhus, murine: Tex.-1	28

* Delayed reports: Congenital rubella syndrome: Ariz.-2

BOTULISM – Continued

Guillain-Barré syndrome and botulism. The patient was treated initially with gastric lavage and high enemas. Botulinal antitoxin was withheld pending the results of laboratory tests.

On August 9, a repeat lumbar puncture was performed; spinal fluid protein was 31 mg%, and 2 mononuclear cells were seen. Nerve conduction velocities were normal, and an electromyogram (EMG) failed to demonstrate facilitation of the muscle action potential during rapid repetitive nerve stimulation. Because of rapidly increasing respiratory difficulty the patient required mechanical ventilatory assistance; later that day a tracheostomy was performed.

Over the next several days, the patient's neurologic condition stabilized. Deep tendon reflexes were absent in the arms and legs. A repeat lumbar puncture was performed on August 22; spinal fluid protein was 23 mg%, and no cells were present. A subsequent EMG revealed decreased amplitude of the muscle action potential but again failed to demonstrate facilitation of the potential.

Serum and stool specimens obtained on the fourth day of illness were negative for botulinal toxin; however, culture of the stool specimen yielded *Clostridium botulinum*, type A. Repeat analyses of serum specimens obtained on August 16 and 31 and a stool specimen obtained on August 31 were negative for botulinal toxin.

Epidemiologic investigation revealed that the patient had eaten fish soup and salmon, both home-canned, several days prior to the onset of his illness. Multiple food specimens were analysed, and an unopened container of the home-canned salmon was positive for type A botulinal toxin.

(Reported by Robert Rankin, M.D., general practitioner, Wenatchee, Washington; David Gilbert, M.D., Intern, Jack Miller, M.D., Neurology Resident, Robert Graebner, M.D., Chief Neurology Resident, Donald F. Farrell, M.D., Attending Neurologist, University of Washington Hospital, Seattle; Jean G. Spearman, R.N., M.N., Public Health Nurse Epidemiologist, Epidemiology Division, Seattle-King County Health Department; Clarence Hall, Head, Environmental Health Unit, Laboratory Section, Washington State Health Services Division; John Girard, R.S., Supervisor, Food Protection Section, Marshall Kremers, M.D., Acting State Epidemiologist, Washington State Department of Social and Health Services; the Food and Drug Administration; the Anaerobe Unit, Enterobacteriology Section, Bacteriology Branch, Bureau of Laboratories, CDC; and an EIS Officer.)

Editorial Note

The initial diagnosis in this case was atypical descending Guillain-Barré syndrome, which was suggested by the decreased and later absent deep tendon reflexes, the slightly elevated spinal fluid protein, and the negative serum and fecal analyses for botulinal toxin. In addition, 1 of the EMG findings frequently associated with botulism, facilitation of the muscle action potential with rapid, repetitive nerve stimulation, was not observed in this case.

However, the isolation of *C. botulinum*, type A, from the patient's stool and the demonstration of type A toxin in uneaten food obtained from the patient's home constitute circumstantial evidence favoring the diagnosis of botulism. Atypical Guillain-Barré syndrome is the entity most often confused with botulism in cases reported to CDC *(1)*.

Reference

1. U.S. Department of Health, Education, and Welfare, Public Health Service: Botulism in the United States: Review of Cases 1899-1973 and Handbook for Epidemiologists, Clinicians, and Laboratory Workers. In press

CURRENT TRENDS
MEASLES RESOLUTION ADOPTED BY THE AMERICAN MEDICAL ASSOCIATION

At its annual convention held June 24-28, 1973, the American Medical Association House of Delegates adopted "Resolution 108—More Complete and More Prompt Reporting of Measles," which requests all physicians and others charged with the responsibility for reporting measles cases to report them *promptly, preferably by telephone*, to the local and state public health officials concerned. In addition, both public health officials and private practitioners are encouraged to intensify and expand their efforts to immunize those persons susceptible to the disease whenever second or successive generation measles cases are detected in the community.

According to the measure, prior to the development of an effective vaccine, the action following the reporting of measles cases usually failed to prevent the spread of the disease; continuing failure to report measles until second, third, or fourth generation cases appear, also allows rapid spread. Prompt reporting, the measure states, could and frequently has prevented many cases by developing public health immunization campaigns and increased immunization efforts by private physicians in the area of the outbreak.

(Reported by the Department of Environmental, Occupational, and Public Health, American Medical Association.)

EPIDEMIOLOGIC NOTES AND REPORTS
MEASLES – Maryland

On May 24, 1973, a private physician in Prince George's County, Maryland, reported 1 case of measles in an 8-year-old third-grade boy (Case 1) who resided in Prince George's County but attended an elementary school in Charles County. The physician based his diagnosis on characteristic clinical signs and symptoms and listed the onset date as May 14. He also stated that the boy had not received measles vaccine. Subsequently, the physician reported 2 additional cases: 1 in a 6-year-old girl (Case 2) with onset on May 28 who had received further attenuated measles vaccine before she was 1 year of age and the other in a 10-month-old boy (Case 3) with no history of vaccination who became ill on May 29. Both children had been exposed to the index case in the physician's waiting room on May 15. A visit to the homes of these 3 children and to another elementary school which Case 2 attended revealed no new measles cases.

On June 20, a physician in Charles County reported 2

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING SEPTEMBER 22, 1973 AND SEPTEMBER 23, 1972 (38th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unspec. cases		Post Infectious	Serum (Hepatitis B)	Infectious (Hepatitis A)	
	1973	1973	1973	1973	Cum. 1973	1973	1972	1973	1973	1973	1972
UNITED STATES	165	5	292	1	126	48	38	1	138	1,122	1,040
NEW ENGLAND	14	–	49	–	3	3	–	1	1	68	66
Maine*	–	–	–	–	–	–	–	–	–	–	1
New Hampshire *	1	–	1	–	–	–	–	1	–	8	4
Vermont	–	–	–	–	–	–	–	–	–	5	5
Massachusetts	6	–	29	–	1	2	–	–	–	39	38
Rhode Island	3	–	13	–	2	–	–	–	–	3	5
Connecticut	4	–	6	–	–	1	–	–	1	13	13
MIDDLE ATLANTIC	26	–	14	–	–	11	12	–	23	149	206
Upstate New York	2	–	1	–	–	2	5	–	4	59	43
New York City	2	–	13	–	–	–	–	–	7	21	42
New Jersey	19	–	NN	–	–	3	1	–	4	47	57
Pennsylvania	3	–	–	–	–	6	6	–	8	22	64
EAST NORTH CENTRAL	49	1	75	–	–	12	12	–	32	172	162
Ohio	9	1	12	–	–	5	2	–	7	19	32
Indiana	2	–	4	–	–	–	–	–	–	16	15
Illinois	6	–	–	–	–	4	5	–	7	37	26
Michigan	29	–	22	–	–	3	2	–	16	87	83
Wisconsin	3	–	37	–	–	–	3	–	2	13	6
WEST NORTH CENTRAL	5	–	25	–	7	–	1	–	9	50	43
Minnesota	3	–	4	–	–	–	1	–	2	8	10
Iowa	–	–	12	–	–	–	–	–	3	5	10
Missouri	2	–	–	–	–	–	–	–	2	16	17
North Dakota	–	–	7	–	–	–	–	–	–	–	1
South Dakota	–	–	–	–	7	–	–	–	–	1	1
Nebraska	–	–	2	–	–	–	–	–	1	–	–
Kansas	–	–	–	–	–	–	–	–	1	20	4
SOUTH ATLANTIC	23	1	21	–	–	5	3	–	14	222	146
Delaware	–	–	–	–	–	–	–	–	–	3	3
Maryland	4	–	2	–	–	–	–	–	–	13	11
District of Columbia	2	–	–	–	–	–	–	–	3	–	1
Virginia	6	1	–	–	–	1	–	–	1	35	9
West Virginia	2	–	19	–	–	–	2	–	–	–	6
North Carolina	7	–	NN	–	–	2	1	–	6	37	28
South Carolina	–	–	–	–	–	–	–	–	–	21	7
Georgia	–	–	–	–	–	–	–	–	–	9	42
Florida	2	–	–	–	–	2	–	–	4	104	39
EAST SOUTH CENTRAL	15	–	4	–	–	2	4	–	7	88	88
Kentucky	3	–	2	–	–	–	–	–	2	23	30
Tennessee	7	–	NN	–	–	–	2	–	1	39	40
Alabama	3	–	1	–	–	–	2	–	2	20	12
Mississippi	2	–	1	–	–	2	–	–	2	6	6
WEST SOUTH CENTRAL	15	3	18	–	14	5	4	–	13	142	101
Arkansas*	–	–	2	–	–	–	–	–	1	2	5
Louisiana *	8	–	NN	–	–	–	–	–	5	19	14
Oklahoma	3	–	2	–	–	2	1	–	3	29	11
Texas	4	3	14	–	14	3	3	–	4	92	71
MOUNTAIN	–	–	28	–	20	1	–	–	–	49	75
Montana	–	–	8	–	–	–	–	–	–	3	8
Idaho	–	–	–	–	–	–	–	–	–	1	3
Wyoming	–	–	1	–	–	–	–	–	–	–	1
Colorado	–	–	15	–	–	1	–	–	–	13	44
New Mexico	–	–	4	–	6	–	–	–	–	2	1
Arizona*	–	–	–	–	14	–	–	–	–	–	12
Utah	–	–	–	–	–	–	–	–	–	3	5
Nevada *	–	–	–	–	–	–	–	–	–	27	1
PACIFIC	18	–	58	1	82	9	2	–	39	182	153
Washington	1	–	40	1	74	2	–	–	5	28	17
Oregon	1	–	–	–	3	–	–	–	2	19	27
California *	16	–	–	–	3	7	2	–	31	123	101
Alaska	–	–	15	–	2	–	–	–	–	–	2
Hawaii	–	–	3	–	–	–	–	–	1	12	6
Guam*	–	–	–	–	–	–	–	–	–	–	1
Puerto Rico	–	–	1	–	–	–	–	–	–	11	10
Virgin Islands	–	–	–	–	–	–	–	–	–	–	–

*Delayed reports: Aseptic meningitis: N. H. 1, Guam 1
Chickenpox: Guam 4
Diphtheria: Ariz. 1
Encephalitis, primary: N.H. 3, Calif. 2
Hepatitis B: Ark. 1, Ariz. 1, Nev. 3, Guam 1
Hepatitis A: Me. 6, N. H. 5, Ark. 8, La. delete 1, Ariz. 18, Nev. 28, Guam 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING SEPTEMBER 22, 1973 AND SEPTEMBER 23, 1972 (38th WEEK) – Continued

AREA	MALARIA		MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		RUBELLA	
	1973	Cum. 1973	1973	Cumulative		1973	Cumulative		1973	Cum. 1973	1973	Cum. 1973
				1973	1972		1973	1972				
UNITED STATES	7	181	90	24,320	27,079	11	1,075	1,039	387	55,828	87	26,118
NEW ENGLAND	1	15	4	7,379	3,169	–	46	43	41	2,929	2	3,637
Maine *	–	–	–	65	244	–	1	3	–	332	–	68
New Hampshire	–	–	–	857	260	–	6	3	–	191	–	375
Vermont	–	2	–	119	128	–	3	–	4	261	–	47
Massachusetts	–	6	2	3,930	716	–	12	21	17	858	1	2,045
Rhode Island	1	1	1	605	524	–	3	10	8	348	1	214
Connecticut	–	6	1	1,803	1,297	–	21	6	12	939	–	888
MIDDLE ATLANTIC	–	28	9	2,473	1,012	2	147	126	24	7,254	3	4,193
Upstate New York	–	14	–	802	127	1	52	32	NN	NN	–	422
New York City	–	2	4	903	341	–	29	38	18	4,557	–	470
New Jersey	–	5	5	416	486	1	35	24	1	1,500	2	3,007
Pennsylvania	–	7	–	352	58	–	31	32	5	1,197	1	294
EAST NORTH CENTRAL	1	23	39	8,537	11,057	–	141	150	65	14,264	33	5,995
Ohio	–	4	1	283	251	–	57	61	5	2,680	–	687
Indiana	–	3	12	644	1,243	–	4	11	7	1,195	4	944
Illinois	1	12	8	2,069	4,111	–	24	32	8	2,406	4	963
Michigan	–	4	11	4,375	1,990	–	41	40	20	3,933	14	1,841
Wisconsin	–	–	7	1,166	3,462	–	15	6	25	4,050	11	1,560
WEST NORTH CENTRAL	–	7	2	441	946	–	83	74	40	4,678	2	1,211
Minnesota	–	1	2	21	21	–	8	23	–	81	–	221
Iowa	–	1	–	277	659	–	19	4	25	2,854	1	191
Missouri	–	1	–	52	163	–	32	20	13	687	1	265
North Dakota	–	1	–	58	52	–	3	–	–	66	–	276
South Dakota	–	–	–	–	6	–	4	2	–	19	–	23
Nebraska	–	1	–	6	18	–	10	9	2	135	–	140
Kansas	–	2	–	27	27	–	7	16	–	836	–	95
SOUTH ATLANTIC	2	30	8	1,223	2,168	3	182	237	33	6,589	17	2,131
Delaware	–	–	–	8	50	–	–	1	–	264	1	14
Maryland	–	3	–	12	15	1	24	35	3	634	–	10
District of Columbia	–	1	–	5	2	–	4	10	7	123	–	3
Virginia	2	8	–	418	60	1	35	49	6	700	1	621
West Virginia *	–	–	3	213	278	–	4	8	–	2,248	13	308
North Carolina	–	7	–	4	34	1	39	29	NN	NN	–	202
South Carolina	–	1	1	60	216	–	12	20	–	354	2	86
Georgia	–	3	–	152	169	–	21	18	–	31	–	12
Florida	–	7	4	351	1,344	–	43	67	17	2,235	–	875
EAST SOUTH CENTRAL	–	9	6	606	1,044	3	97	79	60	4,616	3	1,315
Kentucky	–	4	2	371	523	1	34	25	32	1,360	–	394
Tennessee	–	–	–	165	192	–	39	28	26	2,141	3	529
Alabama	–	5	4	13	147	–	15	16	–	655	–	186
Mississippi	–	–	–	57	182	2	9	10	2	460	–	206
WEST SOUTH CENTRAL	1	10	10	688	1,485	–	166	125	39	3,764	7	1,451
Arkansas	–	–	–	69	13	–	13	9	1	356	–	112
Louisiana	–	2	–	84	85	–	39	37	–	85	–	99
Oklahoma	–	1	1	55	10	–	29	6	3	436	–	178
Texas	1	7	9	480	1,377	–	85	73	35	2,887	7	1,062
MOUNTAIN	–	9	3	727	1,857	1	32	22	11	2,466	2	2,383
Montana	–	1	–	17	16	1	7	4	5	238	–	502
Idaho	–	–	–	255	109	–	4	5	–	110	–	39
Wyoming	–	–	–	80	51	–	–	1	–	421	–	7
Colorado	–	2	–	105	525	–	11	5	5	455	1	1,545
New Mexico	–	2	3	124	122	–	3	3	1	966	1	193
Arizona *	–	4	–	17	878	–	3	1	–	140	–	19
Utah	–	–	–	128	155	–	2	2	–	128	–	75
Nevada	–	–	–	1	1	–	2	1	–	8	–	3
PACIFIC	2	50	9	2,246	4,341	2	181	183	74	9,268	18	3,802
Washington	–	3	1	1,014	977	1	20	16	27	1,438	5	668
Oregon	1	4	3	459	133	–	12	14	9	1,723	–	785
California	1	40	5	689	3,120	1	143	142	22	5,137	13	2,314
Alaska	–	2	–	65	13	–	6	8	13	707	–	9
Hawaii	–	1	–	19	98	–	–	3	3	263	–	26
Guam *	–	–	–	50	15	–	–	11	–	20	–	13
Puerto Rico	–	–	17	1,830	684	–	8	4	3	702	3	30
Virgin Islands	–	–	–	1	3	–	–	2	–	24	–	2

*Delayed reports: Measles: W. Va. 3, Guam 1; Mumps: Me. 2, W. Va. 3, Guam 1; Meningococcal infections: W. Va. 1; Rubella: W. Va. delete 2, Ariz. 1, Guam 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING SEPTEMBER 22, 1973 AND SEPTEMBER 23, 1972 (38th WEEK) – Continued

AREA	TETANUS	TUBERCULOSIS (New Active)		TULAREMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES		RABIES IN ANIMALS	
									GONORRHEA	SYPHILIS (Pri. & Sec.)		
	Cumulative 1973	1973	Cum. 1973	Cumulative 1973	1973	Cum. 1973	1973	Cum. 1973	1973	1973	1973	Cum. 1973
UNITED STATES	64	620	22,972	127	13	507	15	562	18,665	461	46	2,641
NEW ENGLAND	2	38	837	–	2	13	1	2	526	8	–	101
Maine	–	1	68	–	–	–	–	–	41	–	–	56
New Hampshire	–	1	44	–	–	–	–	–	23	–	–	35
Vermont	–	1	24	–	–	–	–	–	14	–	–	3
Massachusetts	–	29	448	–	2	13	–	1	263	6	–	6
Rhode Island	1	3	70	–	–	–	–	–	22	–	–	–
Connecticut	1	3	183	–	–	–	1	1	163	2	–	1
MIDDLE ATLANTIC	7	136	4,492	–	1	50	–	30	2,391	100	1	41
Upstate New York	1	29	801	–	1	8	–	13	354	11	–	17
New York City	3	35	1,672	–	–	18	–	4	1,458	51	–	–
New Jersey	2	21	778	–	–	15	–	5	306	20	–	2
Pennsylvania	1	51	1,241	–	–	9	–	8	273	18	1	22
EAST NORTH CENTRAL	11	87	3,490	3	2	35	–	19	2,978	31	8	261
Ohio	3	21	1,042	–	1	15	–	14	1,379	9	–	32
Indiana	2	20	468	–	–	–	–	–	271	8	–	51
Illinois	3	29	1,039	1	1	8	–	5	246	8	2	67
Michigan	1	17	864	2	–	10	–	–	845	6	–	7
Wisconsin	2	–	77	–	–	2	–	–	237	–	6	104
WEST NORTH CENTRAL	6	26	959	14	2	23	2	20	1,151	22	13	833
Minnesota	–	6	117	–	–	4	–	–	348	–	7	304
Iowa	–	3	96	–	–	–	–	7	209	3	2	170
Missouri	5	6	445	13	–	12	–	7	270	18	1	80
North Dakota	1	2	34	–	–	–	–	–	27	–	3	133
South Dakota	–	1	70	–	–	1	–	–	51	1	–	77
Nebraska	–	3	67	–	–	1	–	2	112	–	–	3
Kansas	–	5	130	1	2	5	2	4	134	–	–	66
SOUTH ATLANTIC	13	150	4,589	15	1	235	6	283	4,185	177	7	235
Delaware	–	3	75	–	–	–	–	7	103	3	–	3
Maryland	–	17	500	5	–	6	–	13	441	5	1	4
District of Columbia	–	3	206	–	–	–	–	–	404	16	–	–
Virginia	2	22	605	3	–	3	3	59	526	22	4	69
West Virginia	–	6	219	–	–	2	–	4	70	–	–	22
North Carolina *	–	30	753	2	–	5	2	127	367	16	–	5
South Carolina	1	16	366	–	1	6	1	30	487	50	–	5
Georgia	2	18	752	3	–	1	–	42	732	13	2	78
Florida	8	35	1,113	2	–	212	–	1	1,055	52	–	39
EAST SOUTH CENTRAL	7	34	2,023	10	2	37	4	97	1,128	25	2	364
Kentucky	1	8	477	1	2	10	–	–	165	5	1	197
Tennessee	4	15	624	7	–	11	3	48	532	11	–	126
Alabama	2	9	541	–	–	10	–	17	173	–	1	40
Mississippi	–	2	381	2	–	6	1	32	258	9	–	1
WEST SOUTH CENTRAL	10	76	2,355	81	–	21	2	95	2,960	54	7	462
Arkansas *	–	14	291	58	–	3	–	17	159	2	2	101
Louisiana *	3	15	363	–	–	6	–	–	478	13	1	37
Oklahoma	4	6	200	17	–	2	2	70	239	2	2	139
Texas	3	41	1,501	6	–	10	–	8	2,084	37	2	185
MOUNTAIN	–	14	750	3	2	9	–	8	751	11	4	41
Montana*	–	1	36	–	–	–	–	1	49	–	–	10
Idaho	–	2	28	–	1	1	–	2	95	–	–	–
Wyoming	–	1	21	–	–	1	–	1	13	1	–	–
Colorado	–	6	136	–	1	2	–	1	292	1	–	–
New Mexico	–	–	154	1	–	2	–	3	66	–	2	6
Arizona *	–	–	291	–	–	3	–	–	178	5	1	22
Utah	–	1	37	2	–	–	–	–	25	1	1	3
Nevada	–	3	47	–	–	–	–	–	33	3	–	–
PACIFIC	8	59	3,477	1	1	84	–	8	2,595	33	4	303
Washington	2	–	276	–	–	7	–	5	252	5	–	6
Oregon	1	5	186	–	–	2	–	2	218	–	–	7
California	5	44	2,725	1	1	70	–	1	2,009	26	4	282
Alaska	–	–	76	–	–	4	–	–	69	–	–	8
Hawaii	–	10	214	–	–	1	–	–	47	2	–	–
Guam *	–	–	35	–	–	–	–	–	–	–	–	–
Puerto Rico	4	17	356	–	–	7	–	–	97	6	1	39
Virgin Islands	–	–	2	–	–	–	–	–	8	1	–	–

*Delayed reports: TB: N. C. delete 3; Tularemia: Ark. 1; Typhoid: Ariz. delete 1; Gonorrhea: La. delete 5, Guam 23; Syphilis: Mont. delete 1, Guam 1; Rabies: Ariz. 1

Week No. 38

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDING SEPTEMBER 22, 1973

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

Area	All Causes			Pneumonia and Influenza	Area	All Causes			Pneumonia and Influenza
	All Ages	65 years and over	Under 1 year	All Ages		All Ages	65 years and over	Under 1 year	All Ages
NEW ENGLAND	690	411	27	36	SOUTH ATLANTIC	1515	839	56	62
Boston, Mass.	201	108	11	7	Atlanta, Ga.	145	79	5	5
Bridgeport, Conn.	31	13	1	2	Baltimore, Md.	245	131	16	5
Cambridge, Mass.	22	17	1	4	Charlotte, N. C.	44	27	2	–
Fall River, Mass.	34	21	1	1	Jacksonville, Fla.	110	55	9	1
Hartford, Conn.	63	34	1	2	Miami, Fla.	110	46	3	6
Lowell, Mass.	28	20	2	2	Norfolk, Va.	41	19	2	3
Lynn, Mass.	22	16	–	1	Richmond, Va.	92	49	4	12
New Bedford, Mass.	31	22	–	1	Savannah, Ga.	31	11	4	2
New Haven, Conn.	62	39	4	2	St. Petersburg, Fla.	129	109	3	6
Providence, R. I.	53	32	2	6	Tampa, Fla.	79	44	4	7
Somerville, Mass.	10	6	–	–	Washington, D. C.	429	236	4	14
Springfield, Mass.	56	34	1	7	Wilmington, Del.	60	33	–	1
Waterbury, Conn.	25	17	2	–					
Worcester, Mass.	52	32	1	1	EAST SOUTH CENTRAL	691	361	25	30
					Birmingham, Ala.	110	66	3	1
MIDDLE ATLANTIC	3185	1937	99	166	Chattanooga, Tenn.	57	29	1	3
Albany, N. Y.	48	36	2	–	Knoxville, Tenn.	39	24	–	–
Allentown, Pa.	30	21	–	4	Louisville, Ky.	162	79	5	10
Buffalo, N. Y.	133	72	8	4	Memphis, Tenn.	125	69	5	4
Camden, N. J.	41	20	2	4	Mobile, Ala.	61	28	4	3
Elizabeth, N. J.	23	14	–	1	Montgomery, Ala.	48	24	2	5
Erie, Pa.	29	19	3	1	Nashville, Tenn.	89	42	5	4
Jersey City, N. J.	63	40	6	1					
Newark, N. J.	71	27	8	2	WEST SOUTH CENTRAL	1168	648	59	39
New York City, N. Y.†	1681	1047	37	92	Austin, Tex.	44	23	2	3
Paterson, N. J.	36	21	1	–	Baton Rouge, La.	42	26	1	2
Philadelphia, Pa.	489	286	15	30	Corpus Christi, Tex.	29	15	4	1
Pittsburgh, Pa.	171	100	9	8	Dallas, Tex.	159	95	5	2
Reading, Pa.	33	22	–	5	El Paso, Tex.	58	32	6	5
Rochester, N. Y.	99	63	1	7	Fort Worth, Tex.	71	42	2	3
Schenectady, N. Y.	20	15	–	–	Houston, Tex.	187	89	7	4
Scranton, Pa.	36	20	–	2	Little Rock, Ark.	47	33	2	2
Syracuse, N. Y.	79	46	7	–	New Orleans, La.	149	76	7	4
Trenton, N. J.	38	24	–	4	Oklahoma City, Okla.*	82	49	4	2
Utica, N. Y.	28	20	–	–	San Antonio, Tex.	137	70	10	3
Yonkers, N. Y.	37	24	–	1	Shreveport, La.	109	68	4	4
					Tulsa, Okla.	54	30	5	4
EAST NORTH CENTRAL	2450	1389	104	65					
Akron, Ohio	71	37	5	–	MOUNTAIN	528	288	40	11
Canton, Ohio	39	26	–	3	Albuquerque, N. Mex.	42	19	3	2
Chicago, Ill.	635	316	36	13	Colorado Springs, Colo.	31	20	1	3
Cincinnati, Ohio	200	113	9	3	Denver, Colo.	144	76	27	3
Cleveland, Ohio	208	111	6	6	Las Vegas, Nev.	21	9	2	–
Columbus, Ohio	92	60	4	6	Ogden, Utah	22	16	–	1
Dayton, Ohio	103	68	4	4	Phoenix, Ariz.	123	59	7	–
Detroit, Mich.	323	191	7	7	Pueblo, Colo.	20	12	–	2
Evansville, Ind.	34	24	2	–	Salt Lake City, Utah	58	36	–	–
Fort Wayne, Ind.	53	23	4	2	Tucson, Ariz.	67	41	–	–
Gary, Ind.	37	21	2	1					
Grand Rapids, Mich.	56	30	1	4	PACIFIC	1675	1004	57	45
Indianapolis, Ind.	150	90	7	3	Berkeley, Calif.	12	7	1	1
Madison, Wis.	40	23	2	4	Fresno, Calif.	58	33	7	–
Milwaukee, Wis.	123	86	2	1	Glendale, Calif.	23	20	–	–
Peoria, Ill.	35	21	4	4	Honolulu, Hawaii	51	25	6	1
Rockford, Ill.	33	20	1	1	Long Beach, Calif.	107	70	2	3
South Bend, Ind.	49	28	1	3	Los Angeles, Calif.	517	336	13	13
Toledo, Ohio	106	62	2	–	Oakland, Calif.	80	37	6	2
Youngstown, Ohio	63	39	5	–	Pasadena, Calif.	33	21	–	–
					Portland, Oreg.	149	78	4	2
WEST NORTH CENTRAL	774	489	36	20	Sacramento, Calif.	66	33	4	1
Des Moines, Iowa	41	31	–	–	San Diego, Calif.	143	79	9	1
Duluth, Minn.	23	15	1	2	San Francisco, Calif.	155	96	2	4
Kansas City, Kans.	40	19	2	2	San Jose, Calif.	48	27	1	–
Kansas City, Mo.	130	90	8	1	Seattle, Wash.	132	75	2	5
Lincoln, Nebr.	16	10	2	1	Spokane, Wash.	56	41	–	9
Minneapolis, Minn.	114	74	7	4	Tacoma, Wash.	45	26	–	3
Omaha, Nebr.	77	51	6	1					
St. Louis, Mo.	189	108	3	3	Total	12,676	7,366	503	474
St. Paul, Minn.	65	46	4	1	Expected Number	12,082	6,836	543	390
Wichita, Kans.	79	45	3	5	Cumulative Total (includes reported corrections for previous weeks)	490,520	288,578	18,336	19,964

†Delayed report for week ending Sept. 15, 1973
*Estimate based on average percent of divisional total

MEASLES – Continued

more cases of measles in third-grade students attending the first school. Case 4 was in an 8 1/2-year-old girl who had onset of symptoms on June 3. Case 5 was in a 9-year-old girl who became ill on June 6; she had received further attenuated measles vaccine when she was 6 months of age. Epidemiologic follow-up investigation identified 2 additional measles cases in contacts of the 9-year-old: a 6 1/2-year-old male student (Case 6) at the first school who became ill on June 6 and his 2-year-old sister (Case 7) who had onset of symptoms on June 19. Case 6 had received inactivated measles vaccine at approximately 18 months of age; Case 7 had never received measles vaccine.

The school health records of children in kindergarten through sixth grades at this elementary school were subsequently reviewed, and any child who did not have a history of measles vaccination was investigated; no new cases were uncovered. The school closed for summer vacation on June 8.

Further investigation revealed that on April 28 the index case and his family had taken a vacation trip to Florida and had visited Orlando, Daytona Beach, and Palatka, returning home on May 12. On May 14 the son became ill, and on May 15 he was diagnosed as having measles.

(Reported by Gilbert Fisher, Immunization Program Representative, George Pelletier, Public Health Advisor, Edmund Rodriquez, Prince George's County Health Department; A. O. Woodie, M.D., Charles County; Wayne R. Bobbitt, Jr., Public Health Advisor, John D. Stafford, M.D., State Epidemiologist, Maryland State Department of Health.)

GASTROINTESTINAL DISEASE AT A PRIVATE CAMPSITE – Maryland

Between May 15 and 21, 1973, 52 of 66 school children who had been camping at a site in Carroll County, Maryland, became ill. Symptoms included vomiting (79%), headache (62%), fever (48%), diarrhea (44%), coryza (38%), cramps (29%), and sore throat (8%).

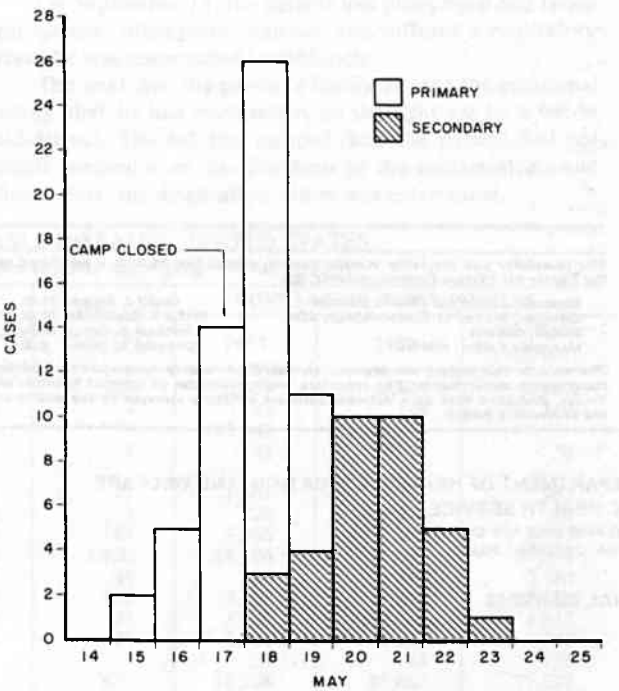
The times of onset of illness suggested a common-source exposure (Figure 1); however, histories of food consumption at the camp failed to implicate food as a vehicle. Cultures of stool specimens from affected campers were negative for *Salmonella, Shigella, Bacillus,* and strains of enteropathogenic *Escherichia coli* identifiable with commercially produced antisera. Samples of food and drinking water from the camp and of water from streams at the campsite were negative for the same organisms. Analysis of representative serum specimens failed to reveal any enteric virus titers.

A telephone and questionnaire survey of household contacts of the campers revealed a 14% attack rate of gastrointestinal illness among 205 contacts of ill children. None of 45 household contacts of campers who had not become ill reported illness. The epidemic curve of presumed secondary cases suggested that the illness had spread explosively among the families of contacts (Figure 1).

Four other outbreaks of gastrointestinal illness had been associated with the same campsite in the preceding 2 years. In all 5 instances several days of heavy rainfall at the campsite had preceded the outbreaks.

(Reported by James Naylor, R.S., Sanitarian, E. Maxine Fritz, R.N., Chief, Public Health Nursing, Willa Tommaney, M.D., Health Officer, Carroll County Health Department; Elizabeth Petran, Ph.D., Chief, Division of Microbiology, Mary Jo Garris, R.S., Sanitarian, Ron Nelson, R.S., Sanitarian, John D. Stafford, M.D., Chief, Division of Communicable Diseases, Maryland Department of Health and Mental Hygiene; and an EIS Officer.)

Figure 1
CASES OF GASTROINTESTINAL DISEASE BY DATE OF ONSET CARROLL COUNTY (MD.) CAMPSITE – MAY 1973



Editorial Note

The syndrome in this outbreak is compatible with a clinical entity variously known as winter vomiting disease, epidemic collapse, epidemic diarrhea and vomiting, or epidemic nausea and vomiting. The significance of heavy rainfall before each outbreak and the recurrence of the problem in a single geographical area is unknown. There has recently been increasing interest in the possibility that similar outbreaks may be due to 1 or more yet uncharacterized enteric viruses (*1, 2, 3*). Recognized bacterial pathogens that are not routinely looked for such as enteropathogenic *E. coli* not identifiable with commercial antisera may also be responsible for some outbreaks of gastrointestinal illness of obscure etiology.

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WAREHOUSE INSPECTION OF CANNED MUSHROOMS – United States

On September 25, 1973, the Food and Drug Administration (FDA) announced the initiation of a nationwide visual inspection of all commercially canned mushrooms in stock in warehouses. Laboratory tests will be conducted on all abnormal cans to find out if they are contaminated with botulinal toxin.

(Reported by the Food and Drug Administration; and the Bacterial Diseases Branch, Bureau of Epidemiology, CDC.)

Editorial Note

This inspection has been undertaken because 5 commercially canned mushroom products contaminated with botulinal toxin have been recalled so far this year (MMWR, Vol. 22, Nos. 7, 10, 13, 14, 29, and 37). Earlier this year, FDA evaluated all mushroom processing plants in the United States. FDA has worked with the companies to make necessary production improvements and has instituted new mandatory production safeguards.

As reported previously, only 1 case, nonfatal, has been associated with these products (MMWR, Vol. 22, No. 29).

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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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