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For Week Ending December 7, 1974

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

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EPIDEMIOLOGIC NOTES AND REPORTS
TYPE A BOTULISM DUE TO A COMMERCIAL PRODUCT – Georgia

On November 28, 1974, a 73-year-old female in Griffin, Georgia, developed nausea and vomiting; that night, her 79-year-old neighbor began to vomit. In the next two days, the elder woman complained of a sore throat, her voice changed, and she had progressive difficulty in swallowing. On December 1 she was hospitalized but died of an undetermined cause shortly after admission. The other woman noted the same symptoms but her illness progressed more slowly; when hospitalized 3 days after the onset of illness, she had ptosis, dysarthria, a decreased gag reflex, and weak facial, nuchal, lingual, and proximal arm muscles. However, she was alert and had no sensory deficit or marked peripheral weakness.

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She was given trivalent (ABE) botulinal antitoxin and has required continuous mechanical respiratory assistance since shortly after admission. Type A botulinal toxin was detected in a pretreatment serum specimen.

Initially, home-canned green beans eaten on November 28, 6 hours before the onset of the first patient's illness,

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

DISEASE	49th WEEK ENDING		MEDIAN 1969-1973	CUMULATIVE, FIRST 49 WEEKS		
	December 7, 1974	December 8, 1973		1974	1973	MEDIAN 1969-1973
Aseptic meningitis	63	61	80	3,024	4,502	4,502
Brucellosis	6	4	4	174	171	178
Chickenpox	2,471	2,191	– – –	113,863	155,815	– – –
Diphtheria	2	1	4	227	180	185
Encephalitis:						
Primary: Arthropod-borne and unspecified	29	15	24	1,021	1,449	1,447
Post-Infectious	6	3	3	243	262	286
Hepatitis, Viral:						
Type B	208	160	160	9,361	7,661	7,661
Type A	667	1,038	1,162	39,225	48,859	51,707
Type unspecified	117			7,739		
Malaria	7	1	24	251	231	2,762
Measles (rubeola)	233	261	536	21,507	26,042	30,270
Meningococcal infections, total	18	35	36	1,270	1,289	2,079
Civilian	18	35	35	1,241	1,263	1,861
Military	–	–	1	29	26	218
Mumps	1,459	1,677	1,696	53,228	65,556	82,254
Pertussis	30	– – –	– – –	1,637	– – –	– – –
Rubella (German measles)	128	177	326	11,499	27,483	42,302
Tetanus	4	2	3	91	85	113
Tuberculosis, new active	564	598	– – –	28,648	29,340	– – –
Tularemia	–	6	4	133	155	149
Typhoid fever	10	6	8	405	617	361
Typhus, tick-borne (Rky. Mt. spotted fever)	4	1	1	760	627	449
Venereal Diseases:						
Gonorrhea	18,549	18,159	– – –	865,632	804,895	– – –
Syphilis, primary and secondary	484	428	– – –	23,618	23,410	– – –
Rabies in animals	54	52	53	2,764	3,191	3,191

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Poliomyelitis, total:	5
Botulism: Ga. 2, Ohio 1	19	Paralytic:	5
Congenital rubella syndrome:	45	Psittacosis: Tex. 1	152
Leprosy: Calif. 2	91	Rabies in man:	–
Leptospirosis: Mo. 1	46	Trichinosis:*	89
Plague:	6	Typhus, murine:	24

*Delayed report: Trichinosis, W. Va. delete 4, Utah delete 1

BOTULISM – Continued

were thought to be the responsible food item, but an investigation revealed that 6 other persons had eaten the beans at the same common meal without ill effect. The beans had been cooked at least a half hour and had boiled for part of that time; no toxin was detected in the leftover beans recovered from the patient's yard. Further epidemiologic investigation revealed that both women had eaten commercially canned beef stew at noon on November 27. The can, which was not swollen or dented, was opened just before the meal and the contents were heated but not boiled. Three people ate the stew at a common meal: the 2 women ate at least a half cup each, while the third person noted that the stew had a very sour taste and ate only 1 to 3 spoonfuls; he has remained well.

The suspect can of beef stew was recovered from the trash and type A botulinal toxin was detected in stew remaining in the can. No defects were found in the can. An investigation of the canning plant is in progress.

The implicated can was Kroger Beef Stew (Lot No. $\frac{\text{EST } 712}{192\ S4}$) produced by Kelly Foods, Inc. of Jackson, Tennessee. On December 10 the U.S. Department of Agriculture recalled all beef stew produced by this company. The recalled beef stew cans are embossed with the plant identification number EST 712 and are sold under 9 labels: Kelly, A.Q., Thrifty Maid, Kroger, Krey, Allen Pride, Hermitage, Lancaster, and Porter. Consumers having these cans of beef stew should return them to the retail store where they were purchased.

There have been no other cases of botulism known to be linked with this product.

(Reported by Tom Grayson, MD, Private Physician, Griffin, Georgia; Grant Lewis, MD, Intern (Internal Medicine), Michael Norman, MD, Neurology Resident, Linton Hopkins, MD, Assistant Professor of Medicine (Neurology), Dale McFarlin, MD, Associate Professor of Medicine (Neurology), and Stephen Schwarzmann, MD, Assistant Professor of Medicine (Infectious Diseases), Emory University Hospital; John E. McCroan, PhD, Director, Epidemiology Section, Georgia Department of Human Resources; Robert H. Hutcheson, Jr, MD, State Epidemiologist, Tennessee Department of Public Health; United States Department of Agriculture; United States Food and Drug Administration; the Anaerobe Section, Enterobacteriology Branch, Bureau of Laboratories, and the Enteric Diseases Branch, Bacterial Diseases Division, Bureau of Epidemiology, CDC.)

Editorial Note

Since 1899, 89% of all foodborne botulism outbreaks in the United States in which the vehicle was identified have been traced to home-processed foods *(1)*; consequently, epidemiologic investigation is usually concentrated on such foods. This outbreak in which a home-canned product was initially suspected and a commercial product was subsequently incriminated illustrates the importance of thorough epidemiologic and laboratory investigation of every outbreak of botulism.

Reference

1. Center for Disease Control: Botulism in the United States, 1899-1973. Handbook for Epidemiologists, Clinicians, and Laboratory Workers, Issued June 1974.

CURRENT TRENDS
INFLUENZA – United States

Since last week's report of influenza cases from Hawaii (MMWR, Vol. 23, No. 48) no other confirmed influenza activity has been reported to CDC. Pneumonia and influenza deaths reported from 121 cities serve as an index of the extent and duration of influenza activity in the United States (see MMWR, Vol. 22, No. 49). As of the 48th week, 1974, the observed number of pneumonia and influenza deaths remain near expected normal seasonal levels (Figure 1).

(Reported by Viral Diseases Division, Bureau of Epidemiology, CDC.)

Figure 1
PNEUMONIA-INFLUENZA DEATHS IN 121 UNITED STATES CITIES

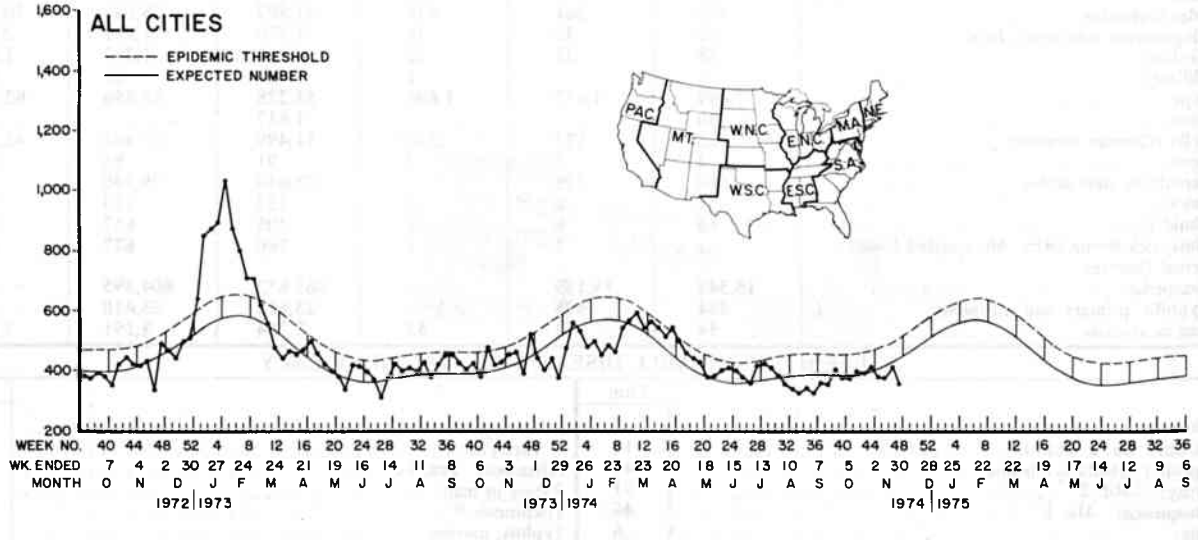

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING DECEMBER 7, 1974 AND DECEMBER 8, 1973 (49th WEEK)

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	63	6	2,471	2	227	29	15	6	208	667	117	7	251
NEW ENGLAND	–	–	235	–	–	1	1	–	4	27	6	2	11
Maine *	–	–	47	–	–	–	–	–	–	1	–	–	–
New Hampshire	–	–	4	–	–	–	–	–	1	1	–	–	1
Vermont	–	–	8	–	–	–	–	–	–	3	–	1	1
Massachusetts	–	–	108	–	–	–	1	–	–	4	6	–	2
Rhode Island	–	–	14	–	–	–	–	–	1	9	–	–	3
Connecticut	–	–	54	–	–	1	–	–	2	9	–	1	4
MIDDLE ATLANTIC	15	–	101	–	1	12	3	–	38	80	30	–	49
Upstate New York	2	–	57	–	–	2	2	–	3	21	12	–	17
New York City	–	–	37	–	–	1	–	–	2	7	–	–	18
New Jersey	9	–	NN	–	–	4	1	–	17	15	15	–	8
Pennsylvania	4	–	7	–	1	5	–	–	16	37	3	–	6
EAST NORTH CENTRAL	7	1	1,161	–	2	3	4	–	31	131	14	–	20
Ohio	–	1	207	–	1	1	3	–	12	44	–	–	6
Indiana	–	–	103	–	–	1	–	–	–	8	–	–	–
Illinois	1	–	–	–	1	1	1	–	2	23	5	–	2
Michigan	4	–	624	–	–	–	–	–	12	39	9	–	11
Wisconsin	2	–	227	–	–	–	–	–	5	17	–	–	1
WEST NORTH CENTRAL	3	2	433	–	–	1	1	–	20	22	1	–	7
Minnesota	1	–	9	–	–	–	–	–	14	9	–	–	2
Iowa	–	1	358	–	–	–	–	–	1	2	1	–	3
Missouri *	1	–	10	–	–	1	1	–	4	5	–	–	1
North Dakota	–	–	11	–	–	–	–	–	1	1	–	–	–
South Dakota	–	–	–	–	–	–	–	–	–	1	–	–	1
Nebraska	–	–	7	–	–	–	–	–	–	–	–	–	–
Kansas	1	1	38	–	–	–	–	–	–	4	–	–	–
SOUTH ATLANTIC	4	1	163	–	1	2	3	6	18	82	17	1	36
Delaware	–	–	2	–	–	–	–	–	–	–	–	–	1
Maryland	–	–	7	–	–	–	–	–	–	2	–	1	7
District of Columbia	–	–	–	–	–	–	–	–	–	–	–	–	5
Virginia *	–	–	2	–	–	–	–	–	9	3	2	–	7
West Virginia	–	–	147	–	–	1	–	–	–	–	–	–	2
North Carolina	–	–	NN	–	1	–	–	–	3	5	–	–	4
South Carolina	–	–	5	–	–	–	–	–	–	7	2	–	1
Georgia	–	–	–	–	–	–	–	–	–	25	–	–	1
Florida	4	1	–	–	–	1	3	6	6	40	13	–	8
EAST SOUTH CENTRAL	4	–	77	–	–	5	–	–	10	68	2	–	10
Kentucky *	–	–	40	–	–	–	–	–	4	32	–	–	6
Tennessee	3	–	NN	–	–	2	–	–	4	30	1	–	1
Alabama *	–	–	29	–	–	–	–	–	2	5	1	–	–
Mississippi	1	–	8	–	–	3	–	–	–	1	–	–	3
WEST SOUTH CENTRAL	3	1	140	–	9	2	1	–	3	60	10	–	17
Arkansas	–	–	–	–	–	–	1	–	–	17	4	–	1
Louisiana	–	–	NN	–	–	2	–	–	–	2	1	–	1
Oklahoma	–	–	58	–	–	–	–	–	2	12	3	–	6
Texas	3	1	82	–	9	–	–	–	1	29	2	–	9
MOUNTAIN	–	–	66	1	37	1	–	–	6	42	15	–	12
Montana	–	–	22	–	–	–	–	–	–	–	–	–	–
Idaho	–	–	–	–	–	1	–	–	–	1	–	–	–
Wyoming	–	–	–	–	–	–	–	–	–	–	–	–	–
Colorado	–	–	25	–	3	–	–	–	–	2	4	–	5
New Mexico	–	–	4	–	14	–	–	–	–	–	5	–	3
Arizona	–	–	–	1	20	–	–	–	4	27	4	–	2
Utah	–	–	10	–	–	–	–	–	2	9	2	–	1
Nevada	–	–	5	–	–	–	–	–	–	3	–	–	1
PACIFIC	27	1	95	1	177	2	2	–	78	155	22	4	89
Washington	7	–	80	1	166	1	–	–	2	8	4	–	–
Oregon	–	–	1	–	–	–	–	–	5	26	2	–	2
California *	20	1	–	–	7	1	2	–	70	89	16	3	82
Alaska	–	–	5	–	4	–	–	–	1	31	–	–	–
Hawaii	–	–	9	–	–	–	–	–	–	1	–	1	5
Guam *	–	–	–	–	–	–	–	–	–	–	–	–	2
Puerto Rico	---	---	---	---	1	---	–	---	---	---	---	---	1
Virgin Islands	–	–	8	–	–	–	–	–	–	–	–	–	3

*Delayed reports: Chickenpox: Me. 31, Calif. 12, Guam 10
Encephalitis, primary: Ala. 1
Hepatitis A: Me. 1, Ky. delete 1, Ala. 1 Guam 12
Hepatitis unspecified: Me. 1, Mo. delete 1, Va. delete 1, Guam 8

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING DECEMBER 7, 1974 AND DECEMBER 8, 1973 (49th 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	233	21,507	26,042	18	1,270	1,289	1,459	53,228	30	128	11,499	91
NEW ENGLAND	–	959	7,609	2	75	52	75	6,500	1	10	1,195	1
Maine *	–	45	70	–	4	1	–	869	–	1	292	–
New Hampshire *	–	211	1,012	–	11	7	1	303	–	–	23	1
Vermont	–	56	120	1	13	3	1	18	–	2	43	–
Massachusetts	–	404	3,954	–	17	15	28	1,102	–	2	368	–
Rhode Island	–	61	639	–	10	3	32	2,619	–	–	20	–
Connecticut	–	182	1,814	1	20	23	13	1,589	1	5	449	–
MIDDLE ATLANTIC	21	8,276	2,789	2	189	180	146	4,090	6	10	1,162	8
Upstate New York	6	978	821	1	68	65	105	1,079	5	–	266	2
New York City	2	630	943	–	41	36	12	761	1	3	170	2
New Jersey	13	5,698	626	–	53	45	8	726	–	5	468	2
Pennsylvania	–	970	399	1	27	34	21	1,524	–	2	258	2
EAST NORTH CENTRAL	86	8,389	8,999	5	165	177	645	15,846	12	45	3,784	10
Ohio	5	3,069	313	–	66	74	78	3,455	–	10	535	2
Indiana	4	277	702	–	17	6	48	1,277	–	2	633	–
Illinois	20	2,144	2,158	1	12	28	57	1,453	4	11	624	3
Michigan	43	2,263	4,504	2	50	52	348	6,622	7	16	1,361	4
Wisconsin	14	636	1,322	2	20	17	114	3,039	1	6	631	1
WEST NORTH CENTRAL	6	726	463	2	99	92	69	3,278	–	–	241	14
Minnesota	–	85	24	1	32	12	12	63	–	–	15	2
Iowa	–	134	281	–	15	22	26	1,912	–	–	15	1
Missouri *	–	269	55	1	29	34	4	445	–	–	47	5
North Dakota	–	37	67	–	3	3	8	99	–	–	18	3
South Dakota	–	27	3	–	3	5	–	3	–	–	26	–
Nebraska	3	6	6	–	3	7	1	90	–	–	6	–
Kansas	3	168	27	–	14	9	18	666	–	–	114	3
SOUTH ATLANTIC	4	597	1,316	5	248	219	166	6,300	–	11	1,333	25
Delaware	–	16	10	–	5	3	1	103	–	1	31	–
Maryland	–	24	14	–	25	30	1	136	–	–	5	1
District of Columbia	–	3	8	–	1	4	–	50	–	–	4	–
Virginia	–	37	429	2	42	45	18	716	–	1	55	4
West Virginia	–	223	230	1	9	7	127	3,379	–	3	312	1
North Carolina	–	5	4	1	49	43	NN	NN	–	–	56	4
South Carolina	–	57	77	–	21	13	1	139	–	–	672	4
Georgia	–	4	153	–	8	23	–	1	–	–	3	1
Florida	4	228	391	1	88	51	18	1,776	–	6	195	10
EAST SOUTH CENTRAL	–	285	635	–	123	122	76	6,501	2	7	658	7
Kentucky	–	198	398	–	47	46	33	2,807	–	–	223	1
Tennessee	–	56	165	–	53	45	16	2,703	2	6	352	2
Alabama	–	18	14	–	14	18	26	601	–	1	64	1
Mississippi	–	13	58	–	9	13	1	390	–	–	19	3
WEST SOUTH CENTRAL	9	254	747	1	203	201	92	4,020	–	6	520	11
Arkansas *	–	7	72	–	14	14	1	217	–	–	26	–
Louisiana	1	14	89	–	48	48	15	297	–	–	130	4
Oklahoma	–	29	66	–	21	32	3	405	–	–	58	3
Texas	8	204	520	1	120	107	73	3,101	–	6	306	4
MOUNTAIN	37	832	1,024	1	41	37	28	1,222	–	10	445	–
Montana	–	373	292	–	1	9	–	179	–	–	68	–
Idaho	1	54	256	–	2	4	2	160	–	5	21	–
Wyoming	–	1	81	–	3	1	–	10	–	–	–	–
Colorado	36	107	109	–	9	11	14	598	–	1	166	–
New Mexico	–	62	135	–	3	3	–	183	–	–	125	–
Arizona *	–	20	21	1	10	5	–	–	–	–	2	–
Utah	–	15	129	–	9	2	10	77	–	1	27	–
Nevada	–	200	1	–	4	2	2	15	–	3	36	–
PACIFIC	70	1,189	2,460	–	127	209	162	5,471	9	29	2,161	15
Washington	–	76	1,107	–	17	21	91	1,988	2	5	426	1
Oregon	2	2	460	–	16	17	7	835	1	–	233	2
California	68	1,045	808	–	87	163	62	2,421	6	24	1,485	11
Alaska	–	–	65	–	4	8	–	150	–	–	–	–
Hawaii	–	66	20	–	3	–	2	77	–	–	17	1
Guam	–	20	52	–	2	1	–	373	–	–	7	–
Puerto Rico	---	665	1,996	---	6	11	---	1,178	---	---	33	5
Virgin Islands	–	30	7	–	–	–	9	45	–	–	–	2

*Delayed reports: Meningococcal infection: N.H. 1, Mo. 1
Mumps: Me. 8, N.H. 2, Ark. 71
Rubella: Mo. 1
Tetanus: Ariz. delete 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING DECEMBER 7, 1974 AND DECEMBER 8, 1973 (49th 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	564	28,648	133	10	405	4	760	18,549	865,632	804,895	484	23,618	23,410	2,764
NEW ENGLAND	25	1,144	–	–	21	–	8	211	22,857	19,680	8	475	600	25
Maine	1	87	–	–	1	–	–	60	1,962	1,297	–	40	25	3
New Hampshire	–	28	–	–	1	–	–	12	790	778	–	13	11	3
Vermont	–	23	–	–	1	–	–	8	609	341	–	2	21	1
Massachusetts	17	628	–	–	14	–	6	–	10,305	8,057	–	194	269	4
Rhode Island	5	102	–	–	2	–	2	23	2,053	2,007	1	20	15	4
Connecticut	2	276	–	–	2	–	–	108	7,138	7,200	7	206	259	10
MIDDLE ATLANTIC	109	5,242	2	2	68	–	67	2,626	103,970	111,477	103	4,975	5,201	81
Upstate New York	12	816	2	–	14	–	28	450	19,596	19,236	3	469	377	38
New York City	56	2,016	–	2	35	–	3	900	44,758	49,801	73	2,853	3,108	–
New Jersey	16	942	–	–	12	–	4	636	14,422	16,762	7	798	940	25
Pennsylvania	25	1,468	–	–	7	–	32	640	25,194	25,678	20	855	776	18
EAST NORTH CENTRAL	89	3,946	7	–	41	–	26	3,435	138,066	123,790	49	2,032	2,169	195
Ohio *	36	1,043	–	–	6	–	17	1,379	37,058	30,260	9	312	261	26
Indiana	18	571	–	–	5	–	1	213	12,990	11,334	3	174	272	14
Illinois	14	1,143	4	–	17	–	6	976	44,326	42,814	31	1,059	1,113	46
Michigan	14	1,065	–	–	11	–	2	600	30,335	29,135	5	390	451	6
Wisconsin *	7	124	3	–	2	–	–	267	13,357	10,247	1	97	72	103
WEST NORTH CENTRAL	30	1,113	20	–	12	–	17	823	45,042	40,681	7	597	368	723
Minnesota	3	175	–	–	4	–	–	210	9,875	8,147	2	80	98	247
Iowa	6	121	–	–	2	–	1	10	5,768	4,806	–	36	54	120
Missouri	13	538	17	–	4	–	9	330	14,999	13,618	5	388	177	38
North Dakota	2	32	–	–	–	–	–	20	724	679	–	3	2	109
South Dakota	–	54	3	–	–	–	2	47	2,137	2,031	–	2	5	134
Nebraska *	1	39	–	–	–	–	–	47	3,908	4,700	–	12	10	5
Kansas	5	154	–	–	2	–	5	159	7,631	6,700	–	76	22	70
SOUTH ATLANTIC	103	6,019	10	1	53	–	412	4,571	219,062	195,239	143	7,436	6,878	384
Delaware	2	96	–	–	–	–	10	107	3,038	2,798	1	85	87	1
Maryland	8	764	1	–	8	–	48	551	23,627	17,230	5	706	680	27
District of Columbia	5	346	–	–	1	–	–	360	15,354	16,996	18	640	790	–
Virginia	15	744	4	–	3	–	135	421	19,814	19,263	8	708	761	104
West Virginia	4	287	–	–	13	–	5	55	2,539	2,848	1	18	24	31
North Carolina*	14	894	3	1	4	–	109	462	29,922	28,150	5	915	619	38
South Carolina	4	539	–	–	5	–	55	391	21,910	20,628	14	764	1,125	6
Georgia	28	909	2	–	3	–	48	1,078	44,861	38,214	13	832	927	134
Florida	23	1,440	–	–	16	–	2	1,146	57,997	49,112	78	2,768	1,865	43
EAST SOUTH CENTRAL	52	2,524	13	2	56	1	117	1,372	71,458	65,265	22	1,219	1,294	232
Kentucky *	7	531	3	–	18	–	20	164	8,863	7,880	2	260	346	141
Tennessee	25	806	6	2	29	1	66	664	28,772	25,393	10	454	452	54
Alabama *	18	763	2	–	4	–	14	232	19,465	18,492	4	243	185	34
Mississippi	2	424	2	–	5	–	17	312	14,358	13,500	6	262	311	3
WEST SOUTH CENTRAL	58	3,277	59	–	27	3	103	2,220	113,399	104,478	24	2,160	2,520	588
Arkansas	13	399	31	–	5	–	13	225	11,057	12,005	–	91	129	74
Louisiana *	13	458	3	–	9	–	1	313	22,506	22,190	5	555	762	25
Oklahoma	3	282	18	–	2	3	71	307	10,692	9,434	4	137	163	158
Texas	29	2,138	7	–	11	–	18	1,375	69,144	60,849	15	1,377	1,466	331
MOUNTAIN	10	907	13	–	18	–	7	761	33,046	27,377	10	557	573	170
Montana	3	74	–	–	–	–	1	41	1,829	1,507	–	7	5	7
Idaho	1	33	–	–	–	–	1	38	1,691	1,964	–	12	10	–
Wyoming	–	25	6	–	3	–	1	44	738	487	2	11	31	11
Colorado	–	174	–	–	–	–	1	182	9,156	7,559	3	136	191	27
New Mexico	2	183	2	–	4	–	2	160	5,099	4,802	–	89	108	77
Arizona	3	321	–	–	8	–	–	228	9,256	7,600	5	206	151	47
Utah	–	41	5	–	–	–	1	22	2,005	1,600	–	14	13	1
Nevada	1	56	–	–	3	–	–	46	3,272	1,858	–	82	64	–
PACIFIC	88	4,476	9	5	109	–	3	2,530	118,732	116,908	118	4,167	3,807	366
Washington	4	315	–	–	13	–	1	128	11,216	11,271	13	93	145	–
Oregon	6	193	2	–	1	–	2	260	10,947	10,221	8	106	56	6
California	75	3,538	7	5	90	–	–	2,031	91,340	90,627	96	3,922	3,523	349
Alaska *	–	81	–	–	2	–	–	50	2,886	2,628	–	16	16	11
Hawaii	3	349	–	–	3	–	–	61	2,343	2,161	1	30	67	–
Guam *	–	31	–	–	1	–	–	–	309	410	–	5	5	–
Puerto Rico	---	503	–	---	4	---	–	---	3,070	3,976	---	826	676	50
Virgin Islands	–	4	–	–	–	–		3	292	228	–	45	32	–

*Delayed reports: TB: Ohio delete 4, Wisc. 4, N.C. delete 3, La. delete 1, Alaska delete 1, Guam 1
RMSF: Ala. 4

Gonorrhea: Neb. delete 1, Guam 7
Rabies: Ky. 7

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TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING DECEMBER 7, 1974

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

Area	All Causes					Pneumonia and Influenza All Ages
	All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
NEW ENGLAND	760	462	195	45	39	39
Boston, Mass.	220	125	60	15	9	11
Bridgeport, Conn.	41	22	13	4	1	4
Cambridge, Mass.	23	14	8	1	–	3
Fall River, Mass.	23	18	5	–	–	–
Hartford, Conn.	69	42	18	4	4	5
Lowell, Mass.	19	13	5	–	–	1
Lynn, Mass.	26	20	5	1	–	–
New Bedford, Mass.	27	17	10	–	–	–
New Haven, Conn.	76	43	13	1	18	1
Providence, R. I.	72	42	18	7	3	5
Somerville, Mass.	11	6	2	3	–	1
Springfield, Mass.	56	34	16	3	3	4
Waterbury, Conn.	32	26	4	2	–	–
Worcester, Mass.	65	40	18	4	1	4
MIDDLE ATLANTIC	3,031	1,920	738	179	102	124
Albany, N. Y.	53	33	12	1	4	–
Allentown, Pa.	26	23	2	–	1	1
Buffalo, N. Y.	172	102	46	11	8	11
Camden, N. J.	49	30	17	2	–	3
Elizabeth, N. J.	35	23	9	3	–	1
Erie, Pa.	32	22	5	3	2	4
Jersey City, N. J.	73	56	14	1	1	3
Newark, N. J.	76	38	20	10	3	5
New York City, N. Y. †	1,416	886	347	93	46	50
Paterson, N. J.	65	34	18	6	3	1
Philadelphia, Pa.	397	242	105	22	12	6
Pittsburgh, Pa.	206	119	62	9	10	18
Reading, Pa.	42	31	7	4	–	3
Rochester, N. Y.	125	82	27	4	7	4
Schenectady, N. Y.	30	24	3	2	–	1
Scranton, Pa.	29	20	7	1	1	1
Syracuse, N. Y.	91	68	16	1	4	2
Trenton, N. J.	44	34	8	2	–	2
Utica, N. Y.	37	29	5	3	–	5
Yonkers, N. Y.	33	24	8	1	–	3
EAST NORTH CENTRAL	2,717	1,573	750	189	98	52
Akron, Ohio	68	41	22	2	2	–
Canton, Ohio	60	29	19	3	2	2
Chicago, Ill.	681	373	185	67	24	17
Cincinnati, Ohio	160	100	39	9	6	1
Cleveland, Ohio	190	107	68	12	1	2
Columbus, Ohio	136	75	41	4	6	1
Dayton, Ohio	142	78	44	9	5	4
Detroit, Mich.	320	181	82	24	20	5
Evansville, Ind.	56	36	16	–	4	1
Fort Wayne, Ind.	74	44	18	6	3	3
Gary, Ind.	40	18	14	3	–	1
Grand Rapids, Mich.	51	36	11	1	–	6
Indianapolis, Ind.	196	118	56	10	4	2
Madison, Wis.	38	19	11	5	3	2
Milwaukee, Wis.	175	115	45	11	3	3
Peoria, Ill.	43	26	12	1	4	2
Rockford, Ill.	70	33	15	9	9	–
South Bend, Ind.	47	36	8	2	–	–
Toledo, Ohio	98	61	25	6	2	–
Youngstown, Ohio	72	47	19	5	–	–
WEST NORTH CENTRAL	836	508	204	48	42	19
Des Moines, Iowa	58	38	15	1	2	1
Duluth, Minn.	26	19	6	1	–	2
Kansas City, Kans.	42	15	5	5	12	1
Kansas City, Mo.	127	77	31	9	7	3
Lincoln, Nebr.	38	27	8	–	2	2
Minneapolis, Minn.	100	62	21	4	7	2
Omaha, Nebr.	91	57	23	3	2	1
St. Louis, Mo.	245	143	73	16	7	4
St. Paul, Minn.	69	48	12	5	2	–
Wichita, Kans.	40	22	10	4	1	3
SOUTH ATLANTIC	1,259	689	367	102	54	46
Atlanta, Ga.	97	52	28	9	5	–
Baltimore, Md.	161	90	46	15	4	5
Charlotte, N. C.	54	28	15	6	4	1
Jacksonville, Fla.	102	61	33	2	2	2
Miami, Fla.	170	94	44	16	11	5
Norfolk, Va.	75	34	35	3	2	4
Richmond, Va.	108	48	43	11	2	3
Savannah, Ga.	41	23	8	3	1	5
St. Petersburg, Fla.	123	100	16	2	1	–
Tampa, Fla.	81	40	27	5	3	10
Washington, D. C.	187	83	54	27	18	6
Wilmington, Del.	60	36	18	3	1	5
EAST SOUTH CENTRAL	685	394	214	31	25	24
Birmingham, Ala.	87	48	28	3	6	2
Chattanooga, Tenn.	32	23	7	2	–	1
Knoxville, Tenn.	47	27	16	4	–	–
Louisville, Ky.	127	72	40	4	6	8
Memphis, Tenn.	171	93	51	8	10	4
Mobile, Ala.	63	37	22	1	1	3
Montgomery, Ala.	58	35	18	4	1	4
Nashville, Tenn.	100	59	32	5	1	2
WEST SOUTH CENTRAL	1,220	649	363	94	55	33
Austin, Tex.	35	21	9	2	1	2
Baton Rouge, La.	70	43	19	6	2	2
Corpus Christi, Tex.	33	13	12	4	3	–
Dallas, Tex.	181	95	52	16	6	6
El Paso, Tex.	61	35	14	7	2	5
Fort Worth, Tex.	94	52	28	8	1	–
Houston, Tex.	153	67	55	9	6	3
Little Rock, Ark.	79	42	23	6	3	3
New Orleans, La.	189	93	62	18	11	–
San Antonio, Tex.	158	87	45	10	10	3
Shreveport, La.	87	50	24	3	7	3
Tulsa, Okla.	80	51	20	5	3	6
MOUNTAIN	553	327	128	46	27	17
Albuquerque, N. Mex.	72	33	16	14	4	3
Colorado Springs, Colo.	25	18	5	–	2	2
Denver, Colo.	135	72	38	10	10	5
Las Vegas, Nev.	26	12	8	3	–	–
Ogden, Utah	26	13	9	2	2	1
Phoenix, Ariz.	124	72	26	12	7	1
Pueblo, Colo.	24	20	2	–	–	1
Salt Lake City, Utah	55	41	10	1	2	3
Tucson, Ariz.	66	46	14	4	–	1
PACIFIC	1,660	1,035	417	98	57	44
Berkeley, Calif.	15	7	6	1	–	–
Fresno, Calif.	71	42	17	2	6	1
Glendale, Calif.	22	20	1	1	–	–
Honolulu, Hawaii	63	45	10	4	3	2
Long Beach, Calif.	91	62	17	7	3	1
Los Angeles, Calif.	441	260	114	36	16	7
Oakland, Calif.	67	42	15	6	3	–
Pasadena, Calif.	49	31	12	1	5	–
Portland, Oreg.	121	82	30	4	3	8
Sacramento, Calif.	94	56	27	5	1	4
San Diego, Calif.	133	74	35	6	8	4
San Francisco, Calif.	179	109	47	15	4	5
San Jose, Calif.	64	38	17	4	2	1
Seattle, Wash.	154	97	46	6	2	3
Spokane, Wash.	49	35	13	–	–	6
Tacoma, Wash.	47	35	10	–	1	2
Total	12,721	7,557	3,376	832	499	398
Expected Number	12,687	7,642	3,364	810	407	451

†Delayed report for week ending November 30, 1974

EPIDEMIOLOGIC NOTES AND REPORTS
NOSOCOMIAL *PSEUDOMONAS CEPACIA* BACTEREMIA CAUSED BY CONTAMINATED PRESSURE TRANSDUCERS – Georgia

Between October 23, 1974 and November 15, 1974, 8 of 35 open-heart surgery patients (23%) in a hospital intensive care unit (ICU) in Georgia developed *Pseudomonas cepacia* bacteremia 1 to 3 days after operation; one of the patients had simultaneous isolation of Acinetobacter *(Mima polymorpha)* from his blood. *P. cepacia*, an infrequent cause of bacteremia in the hospital, was not cultured from any site other than blood in these patients. Antimicrobial susceptibility testing of the *P. cepacia* blood isolates from all 8 patients showed a common pattern: sensitivity to chloramphenicol and sulfamethoxazole but resistance to ampicillin, carbenicillin, cephalothin, colistin, gentamicin, kanamycin, nalidixic acid, nitrofurantoin, streptomycin, and tetracycline.

Prior to infection 7 of the 8 patients had undergone coronary artery bypass surgery for treatment of unstable angina pectoris and the 8th patient had received a porcine valve xenograft. Although none of the patients had clinical evidence of gram-negative shock, all 8 patients were febrile to 103°F or greater at the time of positive culture and had experienced a 2°F or greater increase in temperature during the previous 24 hours. A 9th coronary artery bypass patient had *Pseudomonas fluorescens* isolated from a central venous pressure catheter tip culture; because this patient was asymptomatic at the time of catheter removal, no blood cultures were obtained.

All open-heart surgery patients in the hospital have arterial and venous catheters inserted percutaneously prior to surgery for cardiovascular monitoring with pressure transducers. Such monitoring continues in the ICU for 2 to 5 days postoperatively. In all 8 patients with *P. cepacia* bacteremia, the intravascular catheters were removed within the 24-hour period following temperature elevation. In 6 of the 8 cases, catheter removal was followed by defervescence of fever within 2 to 6 hours. The 2 remaining patients were started on appropriate antibiotic therapy. Subsequent blood cultures from these 2 patients have been negative and their continuing fevers appear unrelated to *P. cepacia* infection.

Because all patients had been exposed to monitoring equipment just before the onset of *P. cepacia* bacteremia, contamination of a portion of this equipment was suspected as a source of the organism. A control group of unexposed open-heart surgery patients was not available since a standard protocol was used in all patients. Cultures of the transducers that were used in the ICU during the outbreak could not be obtained since this equipment had been dismanteled and sterilized. Cultures of all other portions of the monitoring system used in the operating room (OR) and ICU showed that all 4 OR transducers were contaminated with *P. cepacia.*

During surgery, patients' intravascular catheters were connected to the transducers by intravenous (IV) monitoring lines. After surgery, these lines were disconnected from the transducers and were brought to the ICU with the patient. In one instance *P. cepacia* was isolated from the IV monitoring lines of a patient upon arrival in the ICU at a time when the patient's blood cultures were sterile. Presumably, over the next 24 to 72 hours, growth of *P. cepacia* in these contaminated lines would have led to bacteremia. Cultures of the detergent solution used in the OR to clean transducers prior to surgery grew 10^4 organisms per ml of *P. cepacia* with the epidemic antibiogram; a few colonies of *P. fluorescens* were also recovered from cultures of this solution. The ICU detergent solution was negative.

(Reported by Thomas W. McKinley, Assistant Director, John E. McCroan, PhD, Director, Epidemiology Section, Division of Physical Health, Georgia Department of Human Resources; Epidemiologic Investigation Laboratory Section, Hospital Infections Branch, Bacterial Diseases Division, Bureau of Epidemiology, CDC.)

Editorial Note

This is the second outbreak of nosocomial bacteremia investigated by CDC this year in which contaminated pressure transducers have been implicated as a source of infection. In a previous outbreak, epidemiologic investigation suggested that *Pseudomonas aeruginosa* bacteremias in 10 patients were associated with transducers that were used initially in a patient with *P. aeruginosa* bacteremia and were subsequently not effectively sterilized. Similarly, other investigators have suggested that difficulties in sterilization of pressure transducers may be a cause of bacteremia *(1).*

Although *P. cepacia* does not frequently cause human disease, it has been associated with several common source nosocomial outbreaks caused by contaminated quarternary ammonium disinfectants *(2).* In this outbreak, an ammonium-containing detergent provided a reservoir for the organism.

As the use of pressure transducers for monitoring critically ill patients increases, it is important that personnel sterilize transducers, preferably by the appropriate use of ethylene oxide *(3)* or gluteraldehyde sterilization *(4).*

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3. Scaliy P: Ethylene oxide as a hospital sterilizing agent. JAHA 40:100-104, 1967
4. Public Health Service, U.S. Department of Health, Education, and Welfare: Isolation Techniques Used in Hospitals. (DHEW Pub No 71-8043) Washington, D.C.: U.S. Government Printing Office, 1970, p 86

HEPATITIS B AND HIGH-RISK INDIVIDUALS – Minnesota

Eighty cases of hepatitis B in Minnesota residents were reported to the Minnesota Department of Health from June through August 1974.

At least 37 of these 80 individuals had their acute-phase serum tested for hepatitis B (surface) antigen; 95% of those tested were positive.

The Minnesota Department of Health questioned 59 of these 80 patients about possible sources of infection. For 24 patients (41% of those questioned), the likely source of infection was as follows:

1. Work-related–Eleven patients had jobs in which they were likely to have been exposed to hepatitis B virus: 3

HEPATITIS – Continued

nurses (of whom 1 was in the surgical special care unit and 1 in the kidney transplant unit), 2 nurse's aides (1 in the operating room and 1 in the anesthesia department), 2 laboratory technicians, 2 dialysis technicians, 1 dentist, and 1 dental hygienist.

2. Personal contact–Seven patients had close personal contact with others by which they were likely exposed: 4 women with their husbands who were renal dialysis or transplant patients, and 3 others with hepatitis B patients.

3. Parenteral drug abuse–3 patients

4. Transfusions–2 patients

5. Oral surgery–1 patient

Demographic characteristics of these individuals with recently reported cases of hepatitis B are similar to those of patients with previously reported cases. Their median age is 25 years, and 61% are in their 20s. Fifty-eight percent are male. Sixty-nine percent are residents of the 5-county Twin Cities metropolitan area, probably reflecting better reporting from this area.

These 80 cases represent an approximate 4-fold rise over the number of cases usually reported during a 3-month period. Because there were no discernible outbreaks in this period and because the Minnesota Department of Health is actively attempting to increase the reporting of hepatitis cases, this sharp increase probably reflects an improved level of reporting rather than a higher incidence of hepatitis B.

(Reported by Herbert Polesky, MD, Director, Minnesota War Memorial Blood Bank; Jeanette Mature, Epidemiology Aide, John W. Washburn, Assistant Epidemiologist, D.S. Fleming, MD, Director, Division of Personal Health Services, Minnesota Department of Health; and an EIS officer.)

ERRATUM, Vol. 23, No. 48, p. 415

In the article "Non-Cholera Vibrio Diarrhea – Massachusetts" the following name was inadvertently omitted from the credits: Sandra G. Campos, Medical Technologist, (ASCP), Chief of Microbiology, Union Hospital, Fall River, Massachusetts.

The Morbidity and Mortality Weekly Report, circulation 41,500, is published by the Center for Disease Control, Atlanta, Ga.

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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 cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials.

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