

Morbidity and Mortality



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

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EPIDEMIOLOGIC NOTES AND REPORTS
EYE INFECTIONS AFTER PLASTIC LENS

IMPLANTATION - California, Florida, Montana, Ohio

During October and November 1975, physicians in California, Florida, Montana, and Ohio noted 11 cases of unusual ocular infection in patients who had had a prosthetic plastic lens implanted in the eye after cataract extraction. The infections were suspected 2-6 weeks after lens implantation, when the usual short-term postoperative inflammatory changes persisted despite the topical corticosteroid therapy frequently used in these patients. Signs observed included hypercellularity and fibrinous deposition in the media, and fluffy nodules on the iris, in the anterior chamber, and in the vitreous. Ocular cultures from 8 of the patients grew *Paecilomyces lilacinus*, a penicillium-like organism, resistant *in vitro*

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to amphotericin B. In most cases, the plastic lens was removed after infection was suspected, and local antifungal therapy was instituted. Vision was seriously impaired in all patients, and 5 required enucleation.

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

DISEASE	WEEK ENDING		MEDIAN 1970-1974	CUMULATIVE, FIRST 52 WEEKS		MEDIAN 1970-1974
	December 27, 1975	December 28, 1974		December 27, 1975	December 28, 1974	
Aseptic meningitis	27	61	67	4,033	3,189	4,690
Brucellosis	6	15	11	266	203	193
Chickenpox	3,002	2,398	---	142,845	122,087	---
Diphtheria	---	10	6	285	257	224
Encephalitis	Primary	67	29	2,586	1,128	1,525
	Post-Infectious	4	4	301	251	280
Hepatitis, Viral	Type B	186	272	11,856	10,054	8,837
	Type A	471	865	34,570	841,536	54,442
	Type unspecified	102	180	8,302	8,241	---
Malaria	---	10	10	415	268	811
Measles (rubeola)	202	142	365	24,031	22,119	31,580
Meningococcal infections, total	Civilian	15	23	1,414	1,337	1,355
	Military	1	---	29	29	48
	Total	16	23	23	1,414	1,337
Mumps	969	896	1,146	58,366	57,429	71,303
Pertussis	22	32	---	1,563	1,757	---
Rubella (German measles)	112	104	197	16,209	11,845	27,958
Tetanus	---	2	4	93	96	121
Tuberculosis	429	515	---	32,965	30,332	---
Tularemia	4	4	3	116	142	160
Typhoid fever	9	8	5	371	427	416
Typhus, tick-borne (Rky. Mt. spotted fever)	2	7	2	817	782	528
Venereal Diseases:						
Gonorrhoea	Civilian	14,427	18,269	---	991,162	898,943
	Military	376	585	---	28,487	29,944
Syphilis, primary and secondary	Civilian	282	492	---	25,303	25,385
	Military	2	10	---	344	480
Rabies in animals	29	49	63	2,334	2,882	3,301

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	1	Poliomyelitis, total:	6
Botulism:	15	Paralytic:	6
Congenital rubella syndrome: Mo. 1	28	Psittacosis: Wisc. 1	48
Leprosy: Calif. 1	146	Rabies in man:	2
Leptospirosis: Ala. 2, Tex. 1	66	Trichinosis:	152
Plague:	16	Typhus, murine:	33

*Delayed Reports: Leprosy: Mich. 1, Typhus, murine: Delaware 1

EYE INFECTIONS - Continued

Epidemiologic investigation revealed that all of the patients received lenses manufactured by Luminex International, Inc., Las Vegas, Nevada. These lenses are distributed in a sterile 0.1% sodium hydroxide solution, and prior to use they are immersed in a sterile 1.0% sodium bicarbonate solution which accompanies the lens and is also supplied by Luminex International. A filmy white material was noted in the unopened vials from one lot (#128) of the sodium bicarbonate neutralizing solution. Direct smear of the fluid revealed a penicillium-like structure, and culture of the fluid grew *P. lilacinus*. In all of the cases, it could be documented that the sodium bicarbonate solution used was from lot #128.

SALMONELLA NEWPORT CONTAMINATION OF HAMBURGER

Colorado and Maryland

Surveillance of salmonella in Colorado uncovered an interstate outbreak of diarrheal illness caused by *S. newport* transmitted by raw ground beef.

Colorado Outbreak

During September 1975, the number of isolates of *S. newport* submitted for serotyping to the Colorado State Department of Health Laboratory increased approximately 10-fold. Patients and physicians involved with 34 *S. newport* isolates reported between August 1-October 15 were contacted to confirm the diagnosis of a diarrheal illness, and to obtain pertinent clinical and epidemiologic information. An unusual antibiotic susceptibility pattern (resistance to tetracycline and sulfonamides) was common to 26 of the 34 isolates.

Dates of onset of illness revealed a clustering of cases of antibiotic-resistant *S. newport* during the last 2 weeks of August (Figure 1). All had at least 3 days of diarrhea, and 50% required hospitalization. Sixty-six percent of the patients were women; 88% of these were between 15-45 years old. No infants were involved. Analysis revealed no geographic clustering or common meeting place among those ill.

Based on these observations and food histories, a case-control study was performed. Of the 26 cases identified, 3 cases having no permanent residence and 3 household secondary cases were excluded; 2 cases could not be contacted. Results from 18 cases and 35 controls matched for age, sex, and town revealed a significant association between illness and eating raw hamburger. Furthermore, there was an association between illness and buying meat at stores of a grocery chain (Table 1). Two ill individuals from different towns who ordinarily never bought meat at that chain recalled eating hamburger purchased there on August 16, 2 days before onset of illness.

Maryland Outbreak

Nine cases of *S. newport* with the same drug-resistance pattern noted above were reported in Maryland between August 1 and September 30. These cases were investigated after the Colorado report implicated 1 grocery chain's ground beef. Unlike the Colorado cases, the Maryland cases had no unusual age and sex distribution. In Maryland, the 9 patients resided in the central and eastern parts of the state. A case-control survey matching 2 controls per case by age, sex, and neighborhood of residence revealed that illness caused by drug-resistant *S. newport* was statistically associated with the ingestion of raw or very rare ground beef sold by the same grocery chain implicated in Colorado ($p = 0.029$, Fisher's exact test, 2-tailed).

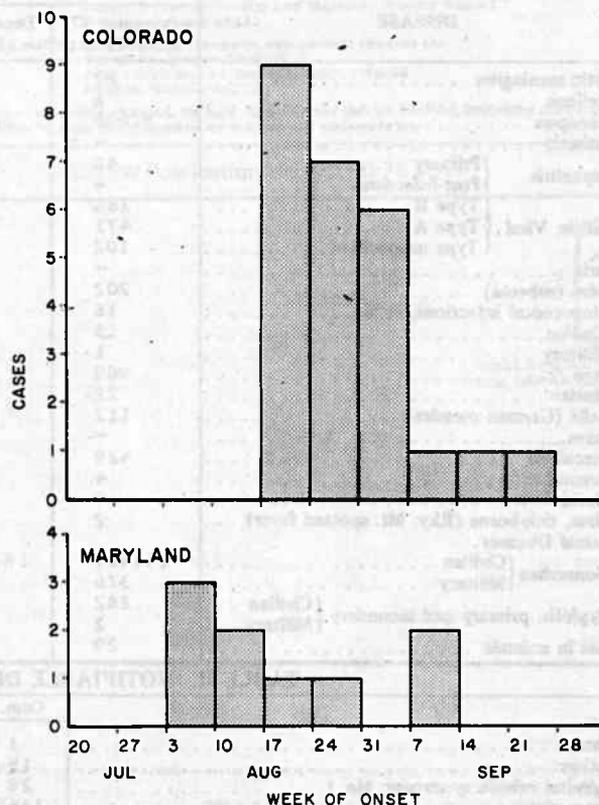
The manufacturer has voluntarily recalled all of its intraocular lens products and accompanying solutions, pending an investigation by the Food and Drug Administration into the mode of contamination of the suspect lot of sodium bicarbonate solution. The company is instituting changes in its sterilization techniques to prevent recurrences of this problem.

(Reported by RG Webster, Jr, MD, Pacific Medical Center, San Francisco; WJ Martin, PhD, TH Pettit, MD, J Rhodes, MS, UCLA Center for the Health Sciences, Los Angeles; B Boni, MD, MPH, T Midura, PhD, California State Dept of Health; MD Skinner, MD, State Epidemiologist, Montana State Dept of Health and Environmental Sciences; Food and Drug Admin; Hospital Infections Branch, Bacterial Diseases Div, Bur of Epidemiology, CDC.)

Other Investigations

The incriminated ground beef reaching Colorado and Maryland was distributed by the grocery chain from a single meat processing plant in Dallas, Texas. Areas of 20 states received ground beef from the Dallas plant. National surveillance data from August through October revealed an increased incidence of *S. newport* isolations only in Arkansas, Colorado, and Maryland, when compared to the same period in 1974. In Arkansas, a non-antibiotic resistant *S. newport* caused a nursing home outbreak in August; no foods containing ground beef had been served during the 2 days before that

Figure 1
CASES OF ANTIBIOTIC-RESISTANT *S. NEWPORT*
BY WEEK OF ONSET
COLORADO AND MARYLAND, JULY-SEPTEMBER 1975



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**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING DECEMBER 27, 1975 AND DECEMBER 28, 1974 (52nd WEEK)**

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
	1975	1975	1975	1975	Cum. 1975	Primary: Arthropod-borne and Unspecified		Post Infectious	Type B	Type A	Type Unspecified	1975	Cum. 1975
						1975	1974	1975	1975	1975	1975		
UNITED STATES	27	6	3,002	-	285	43	67	4	186	471	102	-	415
NEW ENGLAND	-	-	324	-	-	1	-	-	3	16	14	-	24
Maine*	-	-	-	-	-	-	-	-	-	-	-	-	2
New Hampshire	-	-	63	-	-	-	-	-	1	3	-	-	1
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	3
Massachusetts	-	-	81	-	-	1	-	-	-	2	13	-	9
Rhode Island	-	-	102	-	-	-	-	-	-	4	-	-	2
Connecticut	-	-	78	-	-	-	-	-	2	7	1	-	7
MIDDLE ATLANTIC	2	-	95	-	-	6	16	-	50	63	9	-	97
Upstate New York	-	-	72	-	-	1	1	-	18	14	1	-	11
New York City	1	-	23	-	-	-	1	-	4	7	-	-	29
New Jersey*	-	-	NN	-	-	-	4	-	14	12	7	-	13
Pennsylvania	1	-	-	-	-	5	10	-	14	30	1	-	44
EAST NORTH CENTRAL	3	-	1,597	-	5	24	3	2	30	82	3	-	15
Ohio*	-	-	116	-	-	13	1	1	-	23	-	-	4
Indiana	-	-	35	-	-	-	-	-	-	6	-	-	-
Illinois	-	-	163	-	4	-	1	-	-	16	-	-	5
Michigan	1	-	822	-	1	11	1	1	22	34	3	-	6
Wisconsin	2	-	461	-	-	-	-	-	8	3	-	-	-
WEST NORTH CENTRAL	-	1	461	-	7	2	8	-	21	16	2	-	16
Minnesota	-	-	17	-	-	-	4	-	9	2	1	-	6
Iowa	-	1	302	-	-	-	-	-	3	-	-	-	-
Missouri	-	-	7	-	-	2	-	-	4	4	1	-	7
North Dakota	-	-	25	-	6	-	-	-	-	5	-	-	1
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	40	-	1	-	-	-	-	-	-	-	2
Kansas	-	-	70	-	-	-	4	-	5	5	-	-	-
SOUTH ATLANTIC	2	-	195	-	-	-	1	1	24	48	7	-	67
Delaware*	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	2	-	8	-	-	-	-	-	4	4	2	-	10
District of Columbia	-	-	1	-	-	-	-	-	1	-	-	-	15
Virginia*	-	-	11	-	-	-	-	-	7	3	2	-	8
West Virginia	-	-	122	-	-	-	-	-	-	3	-	-	3
North Carolina	-	-	NN	-	-	-	-	-	2	2	1	-	7
South Carolina	-	-	-	-	-	-	-	1	1	2	-	-	2
Georgia	-	-	-	-	-	-	-	-	-	23	-	-	10
Florida	-	-	53	-	-	-	1	-	9	11	2	-	12
EAST SOUTH CENTRAL	8	-	27	-	-	3	36	-	6	28	2	-	11
Kentucky*	-	-	3	-	-	-	-	-	4	13	1	-	3
Tennessee	-	-	NN	-	-	-	1	-	1	12	-	-	-
Alabama	7	-	21	-	-	3	-	-	1	1	1	-	6
Mississippi	1	-	3	-	-	-	35	-	-	2	-	-	2
WEST SOUTH CENTRAL	4	3	103	-	6	3	-	-	13	40	18	-	22
Arkansas	1	-	-	-	-	-	-	-	-	1	3	-	1
Louisiana	-	-	NN	-	-	-	-	-	-	-	-	-	-
Oklahoma	1	2	22	-	-	-	-	-	-	8	2	-	2
Texas*	2	1	81	-	6	3	-	-	13	31	13	-	19
MOUNTAIN	1	1	57	-	30	-	-	-	6	31	23	-	15
Montana*	-	1	7	-	6	-	-	-	1	3	1	-	1
Idaho	-	-	-	-	-	-	-	-	-	2	5	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	1	-	42	-	1	-	-	-	3	10	4	-	8
New Mexico	-	-	-	-	8	-	-	-	-	8	-	-	-
Arizona	-	-	-	-	15	-	-	-	1	3	1	-	4
Utah	-	-	8	-	-	-	-	-	1	5	12	-	2
Nevada	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-
PACIFIC	7	1	143	-	237	4	3	1	33	147	24	-	148
Washington	-	-	133	-	213	-	2	-	5	11	3	-	6
Oregon	-	-	-	-	-	1	-	-	8	7	1	-	10
California*	7	1	-	-	6	2	1	1	20	124	20	-	127
Alaska	-	-	2	-	18	-	-	-	-	4	-	-	2
Hawaii	-	-	8	-	-	1	-	-	-	1	-	-	3
Guam	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	5	-	-	-	-	-	2	12	-	-	1
Virgin Islands	-	-	-	-	-	-	-	-	-	-	-	-	-

NA: Not available. NN: Not notifiable

*Delayed Reports: Brucellosis: Delaware 1, Mont. 2. Chickenpox: Maine 5, Calif. 30. Encephalitis: N.J. 1, Iowa 1. Hepatitis B: Ky. 1. Hepatitis A: Ohio delete 1, Ky. delete 1, Texas delete 11.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING DECEMBER 27, 1975 AND DECEMBER 28, 1974 (52nd WEEK) - Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1975	Cumulative		1975	Cumulative		1975	Cum. 1975	1975	1975	Cum. 1975	Cum. 1975
		1975	1974		1975	1974						
UNITED STATES	202	24,031	22,119	16	1,414	1,337	969	58,366	22	112	16,209	93
NEW ENGLAND	-	358	568	2	82	80	68	2,243	2	3	2,098	3
Maine*	-	15	47	-	7	4	-	83	-	-	43	-
New Hampshire*	-	22	213	-	4	12	4	137	-	-	307	-
Vermont	-	75	56	-	2	13	-	19	-	-	72	-
Massachusetts	-	114	407	-	28	18	14	311	-	2	1,225	1
Rhode Island	-	3	61	-	7	11	29	881	-	-	28	-
Connecticut	-	129	184	2	34	22	21	812	2	1	423	2
MIDDLE ATLANTIC	7	2,326	8,335	1	146	158	81	3,350	4	7	1,856	13
Upstate New York	4	1,056	1,001	1	47	70	48	1,204	2	1	348	2
New York City	1	168	646	-	36	42	14	956	2	2	193	2
New Jersey	2	475	5,714	-	23	54	7	449	-	3	1,030	3
Pennsylvania	-	623	574	-	40	32	12	741	-	1	285	6
EAST NORTH CENTRAL	75	7,250	8,629	2	205	177	522	23,845	10	69	4,795	6
Ohio	-	112	3,075	1	69	67	33	2,770	-	-	649	2
Indiana	2	548	285	-	10	21	10	2,304	-	-	1,044	-
Illinois	2	1,865	2,199	-	27	13	58	2,853	4	45	413	3
Michigan	1	3,215	2,365	1	76	54	334	9,867	4	16	1,691	-
Wisconsin	70	1,506	705	-	23	22	87	6,051	2	8	998	1
WEST NORTH CENTRAL	9	5,156	823	-	93	108	84	4,409	-	9	1,494	11
Minnesota	-	231	85	-	20	37	23	240	-	-	37	2
Iowa	7	690	134	-	9	15	34	1,540	-	1	32	3
Missouri	-	273	274	-	47	33	4	945	-	6	753	2
North Dakota	2	1,063	37	-	2	3	1	514	-	-	71	-
South Dakota	-	356	28	-	1	3	-	6	-	-	18	-
Nebraska	-	396	94	-	3	3	5	91	-	-	21	-
Kansas	-	2,147	171	-	11	14	17	1,073	-	2	562	4
SOUTH ATLANTIC	25	510	608	1	279	258	64	4,135	1	-	1,630	17
Delaware	-	35	16	-	8	5	-	13	-	-	21	-
Maryland	2	64	24	1	35	25	17	466	-	-	38	1
District of Columbia	-	1	3	-	5	2	-	158	-	-	-	-
Virginia	-	40	38	-	21	42	4	854	-	-	325	2
West Virginia	-	222	252	-	5	9	17	1,472	1	-	238	1
North Carolina	-	2	5	-	53	52	-	126	-	-	44	6
South Carolina*	-	1	57	-	40	22	2	76	-	-	780	2
Georgia	-	40	4	-	18	9	-	17	-	-	4	-
Florida	23	105	229	-	94	92	24	953	-	-	180	5
EAST SOUTH CENTRAL	-	377	291	1	186	131	41	5,098	3	2	1,004	9
Kentucky	-	158	198	-	77	51	19	1,881	-	-	245	3
Tennessee	-	178	57	1	62	56	11	2,391	-	2	726	2
Alabama	-	5	21	-	33	14	10	453	3	-	23	1
Mississippi	-	26	15	-	14	10	1	373	-	-	10	3
WEST SOUTH CENTRAL	1	549	261	3	216	208	12	4,918	-	7	781	21
Arkansas	-	-	7	-	13	15	-	186	-	-	20	1
Louisiana	-	2	14	-	39	50	-	343	-	2	285	5
Oklahoma	-	269	30	-	16	22	12	345	-	2	103	-
Texas	1	278	210	3	148	121	-	4,044	-	3	373	15
MOUNTAIN	69	1,724	895	1	43	43	12	1,136	-	1	532	-
Montana	-	50	373	-	9	1	-	44	-	-	253	-
Idaho	2	20	54	1	6	3	1	71	-	-	74	-
Wyoming	-	3	14	-	1	3	-	2	-	-	-	-
Colorado	6	1,170	156	-	11	9	5	675	-	1	138	-
New Mexico	-	16	62	-	4	3	6	65	-	-	20	-
Arizona	-	83	21	-	3	10	-	-	-	-	2	-
Utah	61	354	15	-	8	10	-	176	-	-	37	-
Nevada	NA	28	200	-	1	4	NA	103	NA	NA	8	-
PACIFIC	16	5,781	1,309	5	164	134	85	9,232	2	14	2,019	13
Washington	-	300	83	-	23	19	38	4,675	1	6	365	1
Oregon	-	199	24	1	12	19	4	761	-	-	193	-
California	16	5,217	1,136	4	118	89	43	3,690	1	8	1,440	11
Alaska	-	-	-	-	9	4	-	52	-	-	-	-
Hawaii	-	65	66	-	2	3	-	54	-	-	21	1
Guam	-	27	20	-	2	2	-	32	-	-	8	-
Puerto Rico	11	744	674	-	1	6	16	1,178	3	-	30	17
Virgin Islands	-	8	35	-	-	-	-	250	-	-	3	3

NA: Not available.

*Delayed Reports: Measles: S.C. delete 1. Mumps: Maine 5. Pertussis: N.H. 2.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING DECEMBER 27, 1975 AND DECEMBER 28, 1974 (52nd WEEK) - Continued

AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (RMSF)		VENEREAL DISEASES (Civilian Cases Only)					RABIES IN ANIMALS	
	1975	Cum. 1975	Cum. 1975	1975	Cum. 1975	1975	Cum. 1975	GONORRHEA		SYPHILIS (Pri. & Sec.)			Cum. 1975	
								1975	Cumulative		1975	Cumulative		
									1975	1974		1975		1974
UNITED STATES	429	32,965	116	9	371	2	817	14,427	991,162	898,943	282	25,303	25,385	2,324
NEW ENGLAND	21	1,255	-	2	19	-	6	530	27,889	24,481	7	834	904	72
Maine	2	77	-	-	-	-	-	30	2,147	2,080	-	35	47	45
New Hampshire*	2	33	-	-	-	-	-	17	712	808	-	16	13	2
Vermont*	1	30	-	-	-	-	-	4	668	635	-	7	3	-
Massachusetts	11	717	-	-	11	-	2	147	13,039	11,255	4	545	638	12
Rhode Island	2	137	-	-	-	-	3	15	2,141	2,100	-	23	17	4
Connecticut*	3	261	-	2	8	-	1	317	9,182	7,603	3	208	186	9
MIDDLE ATLANTIC	47	5,897	4	3	70	1	89	1,801	112,914	111,069	61	4,598	5,433	60
Upstate New York	35	946	3	-	10	-	36	315	20,587	20,632	1	401	531	70
New York City	7	2,248	-	3	33	-	2	550	47,016	48,220	38	2,721	3,145	-
New Jersey	5	1,192	1	-	13	-	10	412	17,033	15,358	9	720	836	-
Pennsylvania	-	1,511	-	-	14	1	41	524	28,278	26,859	13	756	921	20
EAST NORTH CENTRAL	89	4,583	5	1	41	-	19	2,891	165,325	145,418	39	2,084	2,177	120
Ohio	18	1,245	-	-	14	-	16	607	46,102	37,952	10	518	329	5
Indiana	1	563	-	-	-	-	1	495	14,008	13,989	2	151	197	11
Illinois	22	1,348	-	-	16	-	1	979	57,880	48,471	25	1,001	1,116	24
Michigan	37	1,253	1	1	10	-	1	445	31,573	32,067	2	334	434	9
Wisconsin	11	174	4	-	1	-	-	365	15,762	12,939	-	80	101	71
WEST NORTH CENTRAL	21	1,181	22	-	17	-	32	693	50,283	47,186	17	639	651	501
Minnesota	5	184	-	-	4	-	-	119	9,994	9,510	5	115	88	144
Iowa*	-	128	1	-	1	-	-	86	7,219	6,184	9	93	39	97
Missouri	9	538	17	-	7	-	19	258	18,416	16,165	2	278	417	50
North Dakota	1	19	-	-	-	-	-	13	799	756	-	5	7	99
South Dakota	1	71	-	-	-	-	-	61	1,901	2,128	-	5	3	48
Nebraska	-	40	1	-	3	-	2	47	4,425	4,062	-	18	10	4
Kansas*	5	201	3	-	2	-	11	109	7,529	8,381	1	125	87	59
SOUTH ATLANTIC	97	7,272	19	-	49	-	405	4,057	241,330	229,575	31	7,628	7,888	345
Delaware	-	132	-	-	-	-	4	72	3,445	3,220	-	88	82	5
Maryland	12	1,173	1	-	11	-	30	594	29,696	24,590	9	568	767	7
District of Columbia	-	369	1	-	4	-	-	166	13,996	18,951	5	679	662	-
Virginia	5	860	8	-	7	-	111	312	23,554	21,386	-	597	705	102
West Virginia	6	269	-	-	4	-	4	28	3,150	2,676	-	57	21	3
North Carolina*	12	1,163	-	-	2	-	129	727	34,642	31,637	6	1,040	898	12
South Carolina	9	472	3	-	7	-	84	256	22,474	21,222	-	541	690	11
Georgia	17	1,042	5	-	3	-	37	842	45,238	44,387	4	1,056	1,148	167
Florida	36	1,792	1	-	11	-	6	1,060	65,095	61,506	7	3,002	2,915	38
EAST SOUTH CENTRAL	22	2,889	15	1	33	-	111	937	83,283	75,265	17	1,155	1,251	148
Kentucky	11	579	1	-	7	-	12	122	10,765	9,452	1	169	267	93
Tennessee	2	1,101	14	1	18	-	72	335	32,916	29,927	4	424	459	21
Alabama	NA	784	-	-	3	-	10	270	23,250	20,920	6	270	256	34
Mississippi*	9	425	-	-	5	-	17	210	16,352	14,966	6	292	269	-
WEST SOUTH CENTRAL	13	3,756	46	2	31	1	146	308	120,916	116,476	1	2,293	2,208	485
Arkansas	2	481	18	-	1	-	21	120	13,126	11,970	1	74	96	83
Louisiana	6	487	2	-	10	-	1	23	20,817	23,542	-	533	563	8
Oklahoma*	5	307	9	2	3	1	92	165	11,722	10,280	-	91	143	105
Texas	NA	2,481	17	-	17	-	32	NA	75,251	70,684	NA	1,595	1,406	289
MOUNTAIN	33	1,041	3	-	10	-	8	488	40,201	35,049	6	576	599	273
Montana	12	87	1	-	-	-	5	24	2,074	1,961	-	7	4	165
Idaho	3	35	-	-	-	-	2	41	2,094	1,765	-	16	13	1
Wyoming	1	31	1	-	1	-	-	14	974	827	-	10	2	9
Colorado	2	222	-	-	1	-	1	166	10,928	9,537	-	102	151	32
New Mexico	-	137	-	-	2	-	-	69	7,076	5,104	3	159	96	37
Arizona	15	428	-	-	6	-	-	133	10,557	9,843	2	207	258	26
Utah	-	53	1	-	-	-	-	41	2,513	2,197	1	19	13	3
Nevada	NA	48	-	NA	-	NA	-	NA	3,985	3,815	NA	56	62	-
PACIFIC	86	5,091	2	-	101	-	1	2,722	149,021	114,424	103	5,496	4,274	300
Washington	12	455	1	-	6	-	1	355	13,428	12,420	-	194	138	4
Oregon	7	205	-	-	-	-	-	218	11,265	11,704	6	153	117	7
California	62	3,805	1	-	92	-	-	2,072	118,309	84,991	97	5,087	3,976	282
Alaska	-	62	-	-	1	-	-	43	3,623	2,976	-	7	10	7
Hawaii	5	564	-	-	2	-	-	34	2,396	2,333	-	55	33	-
Guam	-	61	-	-	-	-	-	-	368	-	-	13	-	-
Puerto Rico	-	500	-	-	8	-	-	22	2,892	3,034	14	711	921	42
Virgin Islands	-	3	-	-	2	-	-	3	227	768	-	45	53	-

NA: Not available

*Delayed Reports: TB: Conn. 8, N.H. 1, Iowa delete 1, N.C. delete 3, Miss. delete 3, Kansas delete 1. GC: Vt. 31, Okla. 238 civ., 3 mil. Syphilis: Okla. 2.

Week No.
52

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING DECEMBER 27, 1975

(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	600	376	167	27	15	29	SOUTH ATLANTIC	965	537	292	74	23	33
Boston, Mass.	158	93	45	7	7	8	Atlanta, Ga.	124	51	42	20	4	2
Bridgeport, Conn.	82	57	21	-	2	6	Baltimore, Md.	221	115	79	14	2	2
Cambridge, Mass.	11	9	1	1	-	1	Charlotte, N. C.	32	22	8	1	1	2
Fall River, Mass.	36	26	8	2	-	1	Jacksonville, Fla.	52	28	13	4	2	1
Hartford, Conn.	43	24	12	4	2	-	Miami, Fla.	72	43	23	3	2	1
Lowell, Mass.	24	14	10	-	-	2	Norfolk, Va.	30	15	6	3	2	2
Lynn, Mass.	12	10	2	-	-	-	Richmond, Va.	98	56	35	4	1	12
New Bedford, Mass.	23	11	11	1	-	-	Savannah, Ga.	29	15	11	3	-	4
New Haven, Conn.	36	19	12	4	1	-	St. Petersburg, Fla.	72	58	9	5	-	3
Providence, R. I.	47	27	15	2	2	5	Tampa, Fla.	58	40	8	3	6	3
Somerville, Mass.	8	5	3	-	-	-	Washington, D. C.	117	63	34	13	3	1
Springfield, Mass.	42	31	6	3	1	4	Wilmington, Del.	60	31	24	1	-	-
Waterbury, Conn.	31	18	9	2	-	1							
Worcester, Mass.	47	32	12	1	-	1	EAST SOUTH CENTRAL	519	310	148	31	17	29
MIDDLE ATLANTIC	2,092	1,312	559	103	52	87	Birmingham, Ala.	65	41	16	4	2	3
Albany, N. Y.	35	21	11	1	1	-	Chattanooga, Tenn.	83	47	23	7	3	9
Allentown, Pa.	16	7	6	2	1	3	Knoxville, Tenn.	22	14	8	-	-	1
Buffalo, N. Y.	119	79	31	3	5	10	Louisville, Ky.	61	31	19	5	6	6
Camden, N. J.	18	13	4	-	1	1	Memphis, Tenn.	184	110	56	10	4	5
Elizabeth, N. J.	17	10	5	1	1	2	Mobile, Ala.	36	22	12	1	-	2
Erie, Pa.	37	24	10	-	-	3	Montgomery, Ala.	14	7	3	2	-	-
Jersey City, N. J.	74	41	25	2	1	4	Nashville, Tenn.	54	38	11	2	2	3
Newark, N. J.	55	23	20	6	1	-							
New York City, N. Y.* ..	1,044	664	265	57	22	42	WEST SOUTH CENTRAL	767	425	216	51	44	28
Paterson, N. J.	40	28	11	1	-	3	Austin, Tex.	28	17	10	-	-	2
Philadelphia, Pa.	198	123	51	12	9	2	Baton Rouge, La.	26	16	8	1	1	1
Pittsburgh, Pa.	122	68	42	6	4	9	Corpus Christi, Tex.	14	5	6	1	2	1
Reading, Pa.	43	25	13	4	1	2	Dallas, Tex.	122	62	36	9	8	2
Rochester, N. Y.	96	69	16	7	2	1	El Paso, Tex.	45	29	11	1	3	3
Schenectady, N. Y.	10	7	3	-	-	-	Fort Worth, Tex.	64	40	16	3	2	1
Scranton, Pa.	42	28	11	1	-	2	Houston, Tex.	203	93	67	21	8	6
Syracuse, N. Y.	59	40	14	-	1	1	Little Rock, Ark.	29	16	5	3	4	3
Trenton, N. J.	35	21	11	-	2	1	New Orleans, La.	100	58	26	5	10	1
Utica, N. Y.	16	9	6	-	-	1	San Antonio, Tex.	61	42	12	3	3	5
Yonkers, N. Y.	16	12	4	-	-	-	Shreveport, La.	17	11	4	1	1	-
							Tulsa, Okla.	58	36	15	3	2	3
EAST NORTH CENTRAL	1,849	1,098	473	135	76	42	MOUNTAIN	452	271	109	39	16	16
Akron, Ohio	61	40	14	2	3	-	Albuquerque, N. Mex.	49	27	10	8	-	3
Canton, Ohio	44	30	11	1	-	1	Colorado Springs, Colo.	21	11	5	3	1	3
Chicago, Ill.	537	301	142	52	26	7	Denver, Colo.	85	48	25	7	3	3
Cincinnati, Ohio	90	56	22	5	3	1	Las Vegas, Nev.	29	18	7	2	1	-
Cleveland, Ohio	140	76	42	14	5	2	Ogden, Utah	20	14	5	1	-	-
Columbus, Ohio	91	58	18	4	7	5	Phoenix, Ariz.	132	82	29	10	6	3
Dayton, Ohio	56	34	11	5	3	1	Pueblo, Colo.	17	14	1	-	2	2
Detroit, Mich.	260	153	68	22	9	4	Salt Lake City, Utah	37	19	10	3	2	1
Evansville, Ind.	30	23	6	-	-	-	Tucson, Ariz.	62	38	17	5	1	1
Fort Wayne, Ind.	29	14	12	2	1	2							
Gary, Ind.	8	6	1	-	1	-	PACIFIC	1,319	855	305	78	32	34
Grand Rapids, Mich.	41	30	10	1	-	1	Berkeley, Calif.	22	17	4	-	1	-
Indianapolis, Ind.	123	69	30	8	7	4	Fresno, Calif.	43	27	11	2	2	-
Madison, Wis.	21	13	8	-	-	-	Glendale, Calif.	28	21	5	2	-	-
Milwaukee, Wis.	93	54	27	5	3	3	Honolulu, Hawaii	59	34	18	4	-	3
Peoria, Ill.	41	26	6	-	4	-	Long Beach, Calif.	78	51	20	3	1	2
Rockford, Ill.	36	21	9	1	2	5	Los Angeles, Calif.	410	259	85	32	14	15
South Bend, Ind.	36	25	8	1	1	2	Oakland, Calif.	60	39	12	7	1	1
Toledo, Ohio	60	32	15	10	1	3	Pasadena, Calif.	27	22	3	1	1	1
Youngstown, Ohio	52	37	13	2	-	1	Portland, Oreg.	27	22	3	1	1	1
							Sacramento, Calif.	70	43	20	3	3	1
WEST NORTH CENTRAL	698	453	144	22	44	21	San Diego, Calif.	92	58	26	4	3	2
Des Moines, Iowa	32	22	5	2	1	2	San Francisco, Calif.	147	88	38	11	1	3
Duluth, Minn.	11	8	3	-	-	1	San Jose, Calif.	40	25	11	1	-	1
Kansas City, Kans.	23	16	4	1	1	1	Seattle, Wash.	147	103	34	5	3	4
Kansas City, Mo.	130	84	25	5	11	3	Spokane, Wash.	36	23	7	1	1	-
Lincoln, Nebr.	34	23	8	2	-	5	Tacoma, Wash.	33	23	8	1	-	-
Minneapolis, Minn.	90	58	18	3	7	3							
Omaha, Nebr.	73	46	16	2	5	-	Total	9,261	5,637	2,413	560	319	319
St. Louis, Mo.	162	94	37	5	14	2	Expected Number	12,734	7,786	3,316	787	405	470
St. Paul, Minn.	88	68	12	2	3	4							
Wichita, Kans.	55	34	16	-	2	-							

*Estimate based on average percent of division total.

SALMONELLA NEWPORT – Continued

outbreak's onset, however, and the vehicle of transmission was not identified.

The cases by date of onset from Maryland (Figure 1) suggest that contaminated beef reached that state during the first week of August, while in Colorado all contaminated beef could be traced to a lot produced in Dallas on a single day, August 13. Thus, it appears that contamination occurred on at least 2 separate days, 2 weeks apart, although the method of contamination remains unknown.

Frozen hamburger, collected by the chain's management from asymptomatic customers and employees in Colorado, has been processed by 3 independent laboratories. Laboratory analysis revealed the ground beef samples were pure beef. Bacteriological analysis showed 3 samples to be positive for *S. newport* with a most probable number of 8-23 viable organisms per 100 grams. Isolates from 2 of the 3 positive samples were identical in their antibiotic susceptibility patterns to the epidemic strain. Both samples also yielded multiply sensitive *S. newport*, but in fewer numbers.

(Reported by Silliker Laboratories, Carson, California; TM Vernon, MD, State Epidemiologist, Colorado State Dept of Health; KH Acree, MDCM, MPH, State Epidemiologist, Mary-

land State Dept of Health and Mental Hygiene; Meat and Poultry Inspection Program, Animal and Plant Health Inspection Service, U.S. Dept of Agriculture; Field Services Div, Enteric Diseases Branch, Bacterial Diseases Div, Bur of Epidemiology, CDC.)

Editorial Note

This is the second reported outbreak of salmonellosis related to ingestion of a raw ground beef (1) and the first in which the organism was isolated from the implicated meat. *S. newport* is the second most common serotype in the U.S., but just 6 states—Arkansas, California, Georgia, Louisiana, Oklahoma, and Texas—account for more than 50% of total reported isolates (2). In 1974, Colorado reported 29 and Maryland 13 isolates, representing 1.7% and 0.8%, respectively, of that year's *S. newport* isolates. This outbreak's recognition was facilitated by this serotype's relative rarity in Colorado and its unusual drug susceptibility pattern.

Investigations concerning the source of contamination are continuing.

References

1. MMWR 21(48):411, 1972
2. Center for Disease Control, Salmonella Surveillance Annual Summary, 1973, issued December 1974

Table 1
Eating and Marketing Habits of Cases vs Controls
S. newport Outbreaks, Colorado and Maryland

Habit	Colorado					Maryland				
	Cases (18)		Controls (35)		P. Value*	Cases (9)		Controls (18)		P. Value*
	No.	%	No.	%		No.	%	No.	%	
1. Eats raw or very rare ground beef from grocery chain A	11	61	9	26	0.02	3	33	0	0	0.03
2. Eats raw or very rare ground beef from any grocery chain	12	67	11	31	0.02	3	33	1	6	ns
3. Eats raw ground beef	9	50	2	6	<.001	2	22	1	6	ns
4. Buys most meat at grocery chain A	14	78	9	26	<.001	6	67	9	50	ns
5. Uses grocery Chain A	17	94	23	66	0.04	6	67	10	56	ns

*Fisher's exact test, two-tailed ns = not significant

TYPHOID FEVER – Galveston County, Texas

On October 15-16, 3 suspected cases of typhoid fever were reported to the Galveston County (Texas) health district. The patients were all females, 16-27 years old, living in the Texas City-La Marque area of the county. Each had eaten at a local Mexican restaurant 5-19 days before the onset of symptoms. On October 17, a fourth case was reported with a history of having eaten in the restaurant 9 days before onset. Eventually, 19 cases of typhoid fever reported between June and October 1975 were found to be associated with the restaurant; 13 of the cases were bacteriologically confirmed.

The restaurant was a member of a large chain which serviced establishments in the Houston-Galveston area from a central kitchen. The only items prepared locally were salads. On October 17, all personnel at the restaurant were placed on leave, all food was destroyed, and the kitchen surfaces were cleaned. At least 3 stool cultures were obtained from each of the 16 employees. *Salmonella typhi* was isolated from the

stool of 1 of the employees, a 38-year-old man who worked as a salad cook, preparing avocado, tomato, and lettuce for the guacamole and tacos. All 19 patients gave a history of having eaten 1 or more of these items.

The cook had no history of typhoid fever or other significant illness. His stools were repeatedly positive for *S. typhi*, and he was found to have cholecystolithiasis. He was treated by a cholecystectomy and with oral ampicillin. He is no longer working as a cook.

(Reported by the University of Texas Medical Branch, Galveston; MC Butler, RN, JR Hall, MD, MPH, HH Huntoon, MPH, WW Kemmerer, Jr, MD, MPH, T Logan, RN, C McClain, RS, Galveston County Health District; MS Dickerson, MD, State Epidemiologist, WB Hankins, RN, Texas State Dept of Health Resources; Field Services Div, Bur of Epidemiology, CDC.)

SURVEILLANCE SUMMARY
BRUCELLOSIS — United States, 1974

In 1974, 35 states and the District of Columbia reported 246 cases of human brucellosis to CDC. This is an increase of 78 cases over the 168 reported by 26 states in 1973 and is the largest number recorded since 1968. Five states—California, Illinois, Iowa, Texas, and Virginia each reported more than 20 cases and together accounted for 50% of the 1974 total. Greatest increases in cases were reported by Illinois and Virginia (both 22), while Texas reported the greatest decrease (11).

Contact with infected swine continued to be the most common source of brucellosis. However, the greatest increase in cases occurred among livestock producers who had contact with infected cattle. Four cases of *Brucella canis* infection were attributed to contact with dogs.

As in the past, brucellosis predominately affected adult males; 195 (83%) of the 235 cases in which sex was given were in males; 193 (85%) of 227 cases were in persons between 20 and 60 years of age. This is the age span of the working force in the United States and is the population at greatest risk of acquiring brucellosis in the meat packing and livestock industries.

Six of the cases were recrudescent brucellosis that the patients contacted prior to 1973. In 1 case, brucellosis was a contributing cause of death.

(Reported by Bacteriology Div, Bur of Laboratories, and Bacterial Zoonoses Section, Bacterial Diseases Div, Bur of Epidemiology, CDC.)

A Copy of the original report from which these data were derived is available on request from:

Center for Disease Control
Attn: Bacterial Zoonoses Section
Bacterial Diseases Division
Bureau of Epidemiology
Atlanta, Georgia 30333

Erratum Vol. 24, No. 49, p 420

In Relapsing Fever article, 1st paragraph, 6th line, delete albumin of 313 gm/dl, and insert albumin of 3.3 gm/dl.

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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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