CENTER FOR DISEASE CONTROL

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WEEKLY REPORT

For Week Ending October 30, 1971

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE / HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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EPIDEMIOLOGIC NOTES AND REPORTS

BOTULISM – California

On Sept. 11, 1971, a Mexican-American family of seven in Bakersfield, California, ate a home-prepared dinner. Fourteen hours later, the 23-year-old son experienced a sore throat which was rapidly followed by progressive cranial nerve palsy and quadriplegia. Within the next 22 hours, three other family members had onset of similar neurologic symptoms. One other experienced only a dry sore throat and abdominal cramps. The other two family members remained well.

All seven persons were hospitalized on September 12 and 13 for suspected botulism. The two well persons were purged and put under observation. The five symptomatic patients were purged and treated with trivalent (ABE) botulism antitoxin. Four of these patients with neurologic symptoms required tracheostomies. One person died with pneumonia 3 days after admission. The others are showing continuing neurologic improvement, although one still requires a respirator.

Food histories implicated the chili sauce served at the dinner on September 11. The sauce had been prepared from a bottle of red and green chili peppers which had been home-canned approximately 6 weeks earlier using carrots, garlic, and onions. No acid, such as vinegar, was added to the chili peppers, and they were inadequately heat treated. The peppers used in the chili sauce were reportedly foamy and malodorous when opened for dinner. Of four other bottles of chili peppers canned at the same time, one had been con-

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

DISEASE	43rd WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 43 WEEKS		
	October 30, 1971	October 31, 1970	1966 - 1970	1971	1970	MEDIAN 1966 - 1970
Aseptic meningitis	128	164	101	4,410	5,103	2,866
Brucellosis	3	3	4	135	172	198
Diphtheria	3	9	5	150	378	165
Encephalitis, primary: Arthropod-borne & unspecified	29	35	47	1,266	1,309	1,309
Encephalitis, post-infectious	5	2	7	297	339	413
Hepatitis, serum	147	152	116	7,133	5,991	3,750
Hepatitis, infectious	988	1,105	980	50,089	46,528	37,335
Malaria	46	46	49	2,567	2,812	1,923
Measles (rubeola)	269	551	300	71,179	41,291	41,291
Meningococcal infections, total	33	36	36	1,923	2,039	2,188
Civilian	31	22	25	1,715	1,826	2,002
Military	2	14	1	208	213	207
Mumps	1,030	1,645	- - -	104,853	82,240	- - -
Poliomyelitis, total	–	–	1	11	23	29
Paralytic	–	–	–	8	23	25
Rubella (German measles)	248	276	276	40,620	51,422	45,452
Tetanus	3	2	2	90	104	146
Tularemia	3	–	3	161	128	150
Typhoid fever	12	13	12	335	285	326
Typhus, tick-borne (Rky. Mt. spotted fever)	5	1	1	387	326	292
Rabies in animals	57	49	46	3,370	2,559	2,881

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	4	Psittacosis: Calif.-1, Minn.-1	33
Botulism:	15	Rabies in Man:	1
Leprosy:	99	Rubella congenital syndrome: Calif.-1	46
Leptospirosis:	27	Trichinosis: . Fla.-1, N.J.-1, N.Y. Ups.-1, R.I.-1	81
Plague:	1	Typhus, murine:	18

BOTULISM – *(Continued from front page)*

sumed several weeks earlier without incident, two were still unopened, and one had been discarded previously by a relative because it looked spoiled.

Laboratory studies revealed type A botulism toxin in the peppers used on September 11, in the chili sauce, and in the sera from one symptomatic patient. No toxin was found in the two unused bottles of chili peppers or in the sera from the other four symptomatic patients; sera from two of these patients were obtained after antitoxin therapy had been initiated.

(Reported by R. Kemp Carter, M.D., intern, Frank B. Armstrong, M.D., Chief of Department of Medicine, Kern County General Hospital, Bakersfield, California; Lucy Krammes, Public Health Nurse, Saeb Dajani, R.S., William Buss, M.D., Director, Division of Preventive Medicine, Owen A. Kearns, M.D., Health Officer, Kern County Health Department, Bakersfield, California; Abel Gonzalez, M.D., PAHO Fellow assigned to the California State Department of Public Health; Thaddeus Midura, Ph.D., Food Microbiologist, Ronald Wood, Ph.D., Chief, Microbial Diseases Laboratory, S. Benson Werner, M.D., Medical Epidemiologist, Bureau of Communicable Disease Control, California State Department of Public Health; and an EIS Officer.)

Editorial Note

This is the tenth outbreak of botulism reported in 1971 and the largest since 1965. Five of the outbreaks this year were due to home-canned foods, one to commercially canned food (vichyssoise) (MMWR, Vol. 20, No. 26), two to wound infections, and in two instances, the vehicle was not discovered. While botulism due to commercially processed products receives the greatest publicity, more cases are due to improperly home-canned foods.

This outbreak serves to point out the importance of collecting serum prior to the administration of antitoxin, since once antitoxin treatment has started, circulating toxin will be neutralized. The only means of confirming a diagnosis of botulism is by laboratory demonstration of the toxin.

RECOMMENDATION OF THE PUBLIC HEALTH SERVICE ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

DIPHTHERIA AND TETANUS TOXOIDS AND PERTUSSIS VACCINE

INTRODUCTION

Routine immunization against diphtheria, tetanus, and pertussis in infancy or childhood has been widely advocated and generally practiced in the United States for the past 25 years. Its effectiveness is reflected in the marked decrease in cases and deaths from these three diseases.

Diphtheria

The reported annual incidence of diphtheria in the United States has remained relatively constant since 1962, although there was an increase (to 435 cases) in 1970 due to a few focal epidemics. While diphtheria is generally uncommon, localized outbreaks continue to occur in many parts of the United States. Many of the reported cases are severe, and 10 percent are fatal.

Although diphtheria cases occur primarily in children, cases and deaths are reported in all age groups. Diphtheria toxoid does not change pharyngeal carriage of the organism, but it does significantly reduce the occurrence and severity of clinical disease when administered according to recommended schedules. Most cases occur in unimmunized or inadequately immunized persons. With adequate immunization, antitoxin persists at protective levels for 10 years or more.

Tetanus

Although its incidence in the United States has declined in recent years, tetanus remains an important health problem. In 1970, 148 cases of tetanus were reported; all occurred in unimmunized persons or ones whose immunization history was vague. More than half of the reported cases were in persons 50 years of age or older, and more than 60 percent were fatal.

Since there is no natural immunity to the tetanus toxin and since the tetanus organism is ubiquitous, immunization is a universal requirement regardless of age.

Tetanus toxoid is an almost ideal immunizing agent. It is highly effective and provides long-lasting protection. Hypersensitivity reactions, though uncommon with primary immunization, occur frequently in persons who have received an excessive number of booster injections.

Pertussis

The severe complications and high mortality from pertussis in infancy are the major reasons for immunization early in life. The disease is highly communicable, and attack rates of up to 90 percent are reported for unimmunized household contacts. Most cases occur in infants and young children. In 1968, a typical year, nearly 75 percent of pertussis deaths occurred in infants less than 1 year old, and 40 percent of the total occurred in infants 3 months old or younger.

Cases and consequently deaths from pertussis have declined dramatically with increasingly widespread use of standardized pertussis vaccines beginning in the late 1940's. Because the incidence, severity, and fatality of pertussis decrease with age, pertussis immunization is not generally recommended for persons more than 6 years old.

PREPARATIONS USED FOR IMMUNIZATION

Diphtheria and tetanus toxoids are prepared by formaldehyde treatment of the respective toxins. Pertussis vaccine is made from a killed suspension of bacteria or a bacterial fraction.

The toxoids are available in both fluid and adsorbed forms. Comparative tests have shown that the adsorbed toxoids are clearly superior in inducing high antitoxin titers and achieving durable protection. The promptness of antibody responses to booster doses of either fluid or adsorbed toxoid is not sufficiently different to be of clinical importance. Therefore, adsorbed toxoids are the agents of choice for both primary and booster immunization.

The toxoids and pertussis vaccine are available in various combinations and concentrations for specific purposes. Three preparations are important for public health use:

1. Diphtheria and Tetanus Toxoids and Pertussis Vaccine (DTP)

2. Tetanus and Diphtheria Toxoids, Adult Type (Td)
3. Tetanus Toxoid (T)

All preparations contain comparable amounts of tetanus toxoid, but the diphtheria component in the adult type of tetanus and diphtheria toxoids (Td) is only about 15 to 20 percent of that contained in the standard DTP preparation for infants and young children.

VACCINE USAGE

Schedule and dose

The concentration of antigens varies in different manufacturers' products. The labeling provides specific information on the proper volume of a single dose.

Primary Immunization

Children 2 months through 6 years: The manufacturer's recommended dose of DTP given intramuscularly on four occasions, three doses at 4 to 6 week intervals with a fourth dose approximately 1 year after the third injection. Ideally, immunization should begin at 2 to 3 months of age or at the time of a 6-week "check-up" if that is an established routine.

Schoolchildren and adults: A series of three doses of Td* given intramuscularly with the second dose 4 to 6 weeks after the first, and the third dose 6 months to 1 year after the second.

Booster Doses

Children 3 through 6 years (preferably at time of school entrance – kindergarten or elementary school): One injection of the recommended dose of DTP intramuscularly.

Thereafter and for all other persons: The recommended dose of Td (adult) intramuscularly every 10 years. If a dose is administered sooner as part of wound management (see specific recommendations), the next booster is not needed for another 10 years. More frequent booster doses are not indicated and may be associated with increased incidence and severity of reactions.

TETANUS PROPHYLAXIS IN WOUND MANAGEMENT

The physician is often faced with questions concerning the use of tetanus toxoid, Tetanus Immune Globulin (Human) (TIG), or tetanus antitoxin of animal origin as part of his management of a patient with a wound.

Available evidence shows that complete primary immunization with tetanus toxoid provides long-lasting protective antitoxin levels. Additionally, protective antitoxin develops rapidly in response to a booster dose in persons who have previously received at least two doses of tetanus toxoid. Therefore, passive protection with TIG or antitoxin need be considered only when the patient has had less than two previous injections of tetanus toxoid or when the wound has been untended for more than 24 hours.

A review of tetanus in the United States in recent years fails to reveal documented cases occurring in individuals with adequate primary immunization. Available evidence shows antitoxin persisting at protective levels for at least 5 years after four doses of tetanus toxoid. Ability to react promptly to booster injections persists for a longer time. In wound management, it is therefore unnecessary to use booster injections more than every 5 years. For persons whose immunizations are still incomplete following wound management, the remainder of the recommended series should be given.

The following table is a conservative guide to active and passive tetanus immunization at the time of wound cleansing or debridement. It presumes a reliable knowledge of the patient's immunization history.

Guide to Tetanus Prophylaxis in Wound Management

History of Tetanus Immunization (Doses)	Clean, Minor Wounds		All Other Wounds	
	Td	TIG	Td	TIG
Uncertain	Yes	No	Yes	Yes
0–1	Yes	No	Yes	Yes
2	Yes	No	Yes	No[1]
3 or more	No[2]	No	No[3]	No

1. Unless wound more than 24 hours old.
2. Unless more than 10 years since last dose.
3. Unless more than 5 years since last dose.

If passive immunization is to be used, TIG is preferable to animal antitoxin. It offers the advantages of longer protection and freedom from undesirable reactions. The currently recommended prophylactic dose of TIG is 250 units for wounds of average severity. When tetanus toxoid and globulin are given concurrently, separate syringes and separate sites should be used.

Should TIG be unavailable, equine or bovine antitoxin may be used, but there is a risk that serious antiphylactic or serum sickness reactions will follow. Its administration should always be preceded by careful screening for sensitivity in accordance with instructions accompanying the antitoxin. The usual dose is 3,000 to 5,000 units.

*Td (adult) is considered the agent of choice for immunization of school-age children on the basis of data regarding its adequacy in primary immunization of older children and adults and because of increasing frequency of reactions to full doses of diphtheria toxoid with age.

EPIDEMIOLOGIC NOTES AND REPORTS

SHIGELLOSIS RELATED TO AN AIRPLANE MEAL – Northeastern United States

On Sept. 28, 1971, 78 persons traveled from Bermuda to New York on a jet airliner. Approximately 3 weeks later, it was learned that several passengers became ill after the flight. A telephone survey of 43 passengers revealed that at least 19 (44 percent) had experienced gastroenteritis, with an average incubation period of 48 hours after deplaning. Their symptoms included diarrhea (100 percent) and abdominal cramps (94 percent) (Table 1). Nine patients consulted physicians, and two were treated with antibiotics. No one was hospitalized, and there were no deaths. Stool specimens were obtained from three patients; two were positive for *Shigella sonnei.*

Passengers were questioned regarding possible exposure to a contaminated vehicle in Bermuda or on the flight. The cases were not related to any common lodging or food serving establishment in Bermuda. A dinner was served on the flight, however, and food-specific attack rates strongly implicated the seafood cocktail as the vehicle of infection (p=0.003) (Table 2). The cocktail contained crab and shrimp with a mayonnaise-based dressing.

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

OCTOBER 30, 1971 AND OCTOBER 31, 1970 (43rd WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post Infectious	Serum	Infectious			
	1971	1971	1971	1971	1970	1971	1971	1971	1970	1971	Cum. 1971
UNITED STATES.....	128	3	3	29	35	5	147	988	1,105	46	2,567
NEW ENGLAND.....	18	–	–	2	–	–	9	85	127	2	73
Maine.....	–	–	–	–	–	–	2	17	27	–	4
New Hampshire*.....	–	–	–	–	–	–	–	4	3	–	–
Vermont.....	–	–	–	–	–	–	–	9	6	–	1
Massachusetts.....	2	–	–	2	–	–	4	33	49	–	51
Rhode Island.....	15	–	–	–	–	–	1	10	16	2	8
Connecticut.....	1	–	–	–	–	–	2	12	26	–	9
MIDDLE ATLANTIC.....	12	–	–	3	7	1	25	95	226	7	252
New York City.....	---	---	---	---	–	---	---	---	63	---	24
New York, Up-State...	5	–	–	3	2	–	8	39	76	2	70
New Jersey.....	2	–	–	–	–	–	14	37	45	4	104
Pennsylvania.....	5	–	–	–	5	1	3	19	42	1	54
EAST NORTH CENTRAL.....	15	1	–	11	13	1	29	184	192	–	159
Ohio.....	3	1	–	6	6	–	7	35	43	–	21
Indiana.....	2	–	–	–	2	1	–	12	8	–	14
Illinois.....	4	–	–	3	1	–	9	71	36	–	47
Michigan.....	6	–	–	–	4	–	12	58	84	–	52
Wisconsin.....	–	–	–	2	–	–	1	8	21	–	25
WEST NORTH CENTRAL.....	–	2	–	2	5	1	5	33	34	1	224
Minnesota.....	–	1	–	–	–	1	–	7	2	–	23
Iowa.....	–	1	–	1	3	–	–	2	4	–	26
Missouri.....	–	–	–	–	–	–	1	6	7	–	27
North Dakota.....	–	–	–	–	1	–	–	–	10	–	3
South Dakota.....	–	–	–	–	–	–	–	15	1	–	2
Nebraska.....	–	–	–	–	–	–	–	–	6	–	14
Kansas.....	–	–	–	1	1	–	4	3	4	1	129
SOUTH ATLANTIC.....	15	–	–	2	4	–	18	160	162	3	389
Delaware.....	–	–	–	1	–	–	–	1	2	–	1
Maryland.....	1	–	–	–	–	–	3	22	22	1	52
Dist. of Columbia....	–	–	–	–	–	–	–	–	1	–	4
Virginia.....	–	–	–	–	2	–	4	22	26	–	64
West Virginia.*.....	1	–	–	1	–	–	–	10	21	–	7
North Carolina.....	6	–	–	–	1	–	8	47	22	1	134
South Carolina.....	–	–	–	–	1	–	–	5	13	1	20
Georgia.....	–	–	–	–	–	–	–	22	13	–	67
Florida.....	7	–	–	–	–	–	3	31	42	–	40
EAST SOUTH CENTRAL.....	15	–	–	1	1	1	4	58	49	26	289
Kentucky.....	2	–	–	–	–	–	2	27	22	23	259
Tennessee.....	6	–	–	–	1	1	–	20	16	–	–
Alabama.....	5	–	–	–	–	–	1	7	6	–	21
Mississippi.....	2	–	–	1	–	–	1	4	5	3	9
WEST SOUTH CENTRAL.....	33	–	2	3	–	–	21	101	69	–	508
Arkansas.....	–	–	–	–	–	–	–	1	2	–	19
Louisiana.....	28	–	2	–	–	–	14	30	11	–	38
Oklahoma.....	1	–	–	3	–	–	–	11	15	–	70
Texas.....	4	–	–	–	–	–	7	59	41	–	381
MOUNTAIN.....	2	–	1	3	1	–	2	58	45	–	144
Montana.....	–	–	–	–	–	–	–	1	3	–	1
Idaho.....	2	–	–	–	–	–	–	18	2	–	5
Wyoming.....	–	–	–	–	–	–	–	–	–	–	3
Colorado.....	–	–	–	3	–	–	–	9	16	–	110
New Mexico.....	–	–	1	–	1	–	1	9	1	–	11
Arizona.....	–	–	–	–	–	–	1	16	16	–	9
Utah.....	–	–	–	–	–	–	–	5	7	–	3
Nevada.....	–	–	–	–	–	–	–	–	–	–	2
PACIFIC.....	18	–	–	2	4	1	34	214	201	7	529
Washington.....	---	---	---	---	–	---	---	---	41	---	2
Oregon.....	1	–	–	–	–	–	–	32	28	–	20
California.....	17	–	–	2	4	1	34	180	126	7	447
Alaska.*.....	---	---	---	---	–	---	---	---	2	---	7
Hawaii.....	–	–	–	–	–	–	–	2	4	–	53
Puerto Rico.*.....	–	–	–	–	–	–	2	24	23	–	23
Virgin Islands.....	–	–	–	–	–	–	–	–	–	–	–

*Delayed reports: Hepatitis, serum: W. Va. 1, Alaska 3
Hepatitis, infectious: N.H. 1, W. Va. 3, P.R. 3

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

OCTOBER 30, 1971 AND OCTOBER 31, 1970 (43rd WEEK) — CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		POLIOMYELITIS		
		Cumulative			Cumulative			Cum.	Total	Paralytic	
	1971	1971	1970	1971	1971	1970	1971	1971	1971	1971	Cum. 1971
UNITED STATES.....	269	71,179	41,291	33	1,923	2,039	1,030	104,853	–	–	8
NEW ENGLAND.....	5	3,482	922	2	89	87	55	6,331	–	–	–
Maine.....	–	1,466	230	–	8	3	5	1,218	–	–	–
New Hampshire.....	–	211	60	–	18	8	–	660	–	–	–
Vermont.....	–	118	8	–	–	7	6	391	–	–	–
Massachusetts.*.....	4	263	406	1	33	38	14	1,551	–	–	–
Rhode Island.....	–	238	120	–	3	6	3	1,213	–	–	–
Connecticut.....	1	1,186	98	1	27	25	27	1,298	–	–	–
MIDDLE ATLANTIC.....	5	7,581	5,000	2	261	379	8	6,413	–	–	–
New York City.....	---	3,780	949	---	55	84	---	1,846	---	---	–
New York, Up-State...	4	684	323	1	79	72	NN	NN	–	–	–
New Jersey.....	–	1,197	1,712	1	58	153	4	1,701	–	–	–
Pennsylvania.....	1	1,920	2,016	–	69	70	4	2,866	–	–	–
EAST NORTH CENTRAL.....	86	15,745	9,973	3	222	239	289	42,053	–	–	–
Ohio.....	5	4,016	3,840	2	72	89	59	7,939	–	–	–
Indiana.....	2	2,754	273	–	18	20	22	5,213	–	–	–
Illinois.....	7	3,031	3,093	–	60	59	16	4,442	–	–	–
Michigan.....	31	2,427	1,781	1	57	61	38	9,749	–	–	–
Wisconsin.....	41	3,517	986	–	15	10	154	14,710	–	–	–
WEST NORTH CENTRAL.....	20	6,936	3,887	1	138	107	178	7,449	–	–	–
Minnesota.....	–	55	40	1	24	16	11	1,192	–	–	–
Iowa.....	18	2,361	1,156	–	12	13	139	3,644	–	–	–
Missouri.....	1	2,604	1,276	–	47	58	–	1,039	–	–	–
North Dakota.....	–	238	320	–	6	5	7	351	–	–	–
South Dakota.....	1	218	96	–	6	1	1	250	–	–	–
Nebraska.....	–	66	931	–	15	7	6	142	–	–	–
Kansas.....	–	1,394	68	–	28	7	14	831	–	–	–
SOUTH ATLANTIC.....	50	8,638	7,301	3	340	397	78	7,590	–	–	1
Delaware.....	–	42	264	–	2	3	1	175	–	–	–
Maryland.....	1	551	1,377	–	49	41	2	703	–	–	–
Dist. of Columbia....	–	15	343	–	13	3	1	93	–	–	–
Virginia.....	2	1,602	2,014	1	40	41	6	994	–	–	–
West Virginia.....	6	533	320	1	11	10	33	2,054	–	–	–
North Carolina.....	2	1,938	885	–	57	85	NN	NN	–	–	–
South Carolina.....	5	916	599	–	20	45	5	880	–	–	–
Georgia.....	–	1,128	17	–	24	35	–	11	–	–	1
Florida.....	34	1,913	1,482	1	124	134	30	2,680	–	–	–
EAST SOUTH CENTRAL.....	14	8,298	1,422	4	176	148	56	8,007	–	–	–
Kentucky.....	10	3,961	802	2	53	52	8	2,395	–	–	–
Tennessee.....	–	1,023	390	1	67	61	43	4,542	–	–	–
Alabama.....	4	1,901	140	1	30	24	3	921	–	–	–
Mississippi.....	–	1,413	90	–	26	11	2	149	–	–	–
WEST SOUTH CENTRAL.....	46	12,589	8,189	9	165	269	160	8,592	–	–	3
Arkansas.....	–	778	30	–	5	22	1	93	–	–	–
Louisiana.....	21	1,699	148	6	62	65	3	142	–	–	–
Oklahoma.....	–	756	580	–	7	21	–	183	–	–	–
Texas.....	25	9,356	7,431	3	91	161	156	8,174	–	–	3
MOUNTAIN.....	5	3,294	1,641	1	57	47	70	4,276	–	–	2
Montana.....	–	925	100	–	6	1	2	407	–	–	–
Idaho.....	–	272	69	–	11	7	1	144	–	–	–
Wyoming.....	–	85	11	–	2	2	1	304	–	–	–
Colorado.....	1	836	187	–	7	16	34	1,426	–	–	1
New Mexico.....	2	396	240	–	4	1	17	666	–	–	–
Arizona.....	2	441	977	–	8	16	15	1,162	–	–	–
Utah.....	–	332	36	1	16	3	–	167	–	–	–
Nevada.....	–	7	21	–	3	1	–	–	–	–	1
PACIFIC.....	38	4,616	2,956	8	475	366	136	14,142	–	–	2
Washington.....	---	1,059	579	---	27	44	---	5,592	---	---	1
Oregon.....	–	375	373	3	39	29	13	1,408	–	–	1
California.....	29	2,679	1,674	5	400	290	123	6,152	–	–	–
Alaska.....	---	55	141	---	1	–	---	91	---	---	–
Hawaii.....	9	448	189	–	8	3	–	899	–	–	–
Puerto Rico.....	12	553	958	–	10	5	12	1,113	–	–	–
Virgin Islands.....	–	17	6	–	–	1	–	67	–	–	–

*Delayed reports: Measles: Mass. delete 4

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

OCTOBER 30, 1971 AND OCTOBER 31, 1970 (43rd WEEK) — CONTINUED

AREA	RUBELLA		TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1971	Cum. 1971	1971	Cum. 1971	1971	Cum. 1971	1971	Cum. 1971	1971	Cum. 1971	1971	Cum. 1971
UNITED STATES.....	248	40,620	3	90	3	161	12	335	5	387	57	3,370
NEW ENGLAND.....	10	1,773	–	6	–	1	–	16	–	5	–	196
Maine.....	4	269	–	–	–	–	–	1	–	–	–	172
New Hampshire.....	–	46	–	2	–	–	–	–	–	–	–	3
Vermont.....	1	100	–	–	–	–	–	–	–	–	–	12
Massachusetts.....	1	838	–	1	–	–	–	11	–	3	–	8
Rhode Island.....	2	100	–	–	–	–	–	–	–	2	–	1
Connecticut.....	2	420	–	3	–	1	–	4	–	–	–	–
MIDDLE ATLANTIC.....	6	2,597	–	8	–	–	–	72	2	37	2	144
New York City.....	---	569	---	5	---	–	---	18	---	1	---	–
New York, Up-State..	3	429	–	1	–	–	–	14	–	17	2	124
New Jersey.....	–	587	–	1	–	–	–	8	1	9	–	–
Pennsylvania.....	3	1,012	–	1	–	–	–	32	1	10	–	20
EAST NORTH CENTRAL....	57	8,777	–	11	–	5	5	51	–	19	11	352
Ohio.....	6	996	–	1	–	1	1	20	–	14	8	105
Indiana.*.....	11	2,100	–	2	–	–	–	6	–	–	1	74
Illinois.....	7	1,306	–	6	–	1	2	13	–	3	–	67
Michigan.....	23	2,749	–	2	–	1	1	7	–	2	2	44
Wisconsin.....	10	1,626	–	–	–	2	1	5	–	–	–	62
WEST NORTH CENTRAL....	7	3,255	–	6	–	18	–	4	–	8	18	939
Minnesota.....	1	278	–	3	–	–	–	–	–	–	11	210
Iowa.....	6	700	–	1	–	–	–	–	–	2	2	209
Missouri.....	–	1,369	–	2	–	14	–	4	–	4	2	133
North Dakota.....	–	96	–	–	–	–	–	–	–	–	1	160
South Dakota.....	–	98	–	–	–	1	–	–	–	–	–	120
Nebraska.....	–	93	–	–	–	–	–	–	–	–	1	6
Kansas.....	–	621	–	–	–	3	–	–	–	2	1	101
SOUTH ATLANTIC.....	31	3,211	1	21	–	23	2	47	3	202	2	372
Delaware.....	1	50	–	–	–	–	–	1	–	2	–	–
Maryland.....	–	159	–	1	–	4	–	4	–	31	–	1
Dist. of Columbia...	–	8	1	1	–	–	1	2	–	–	–	–
Virginia.....	2	217	–	3	–	9	–	15	–	34	–	70
West Virginia.....	11	683	–	–	–	–	–	4	–	4	–	116
North Carolina.....	–	46	–	1	–	4	1	4	3	106	–	7
South Carolina.....	–	439	–	1	–	–	–	1	–	14	–	–
Georgia.....	–	1	–	2	–	4	–	2	–	11	2	127
Florida.....	17	1,608	–	12	–	2	–	14	–	–	–	51
EAST SOUTH CENTRAL....	18	3,903	–	13	1	12	2	40	–	63	6	307
Kentucky.....	1	1,719	–	2	–	2	1	9	–	13	3	156
Tennessee.....	16	1,905	–	6	1	7	1	22	–	34	1	97
Alabama.....	1	206	–	4	–	2	–	8	–	9	2	50
Mississippi.*.....	–	73	–	1	–	1	–	1	–	7	–	4
WEST SOUTH CENTRAL....	33	4,851	1	14	1	58	–	33	–	41	14	667
Arkansas.....	–	337	–	1	–	23	–	10	–	5	2	87
Louisiana.....	3	286	1	3	1	8	–	6	–	1	4	32
Oklahoma.....	–	73	–	1	–	17	–	3	–	27	3	266
Texas.....	30	4,155	–	9	–	10	–	14	–	8	5	282
MOUNTAIN.....	19	1,989	–	2	1	39	–	9	–	12	1	68
Montana.....	2	116	–	–	–	1	–	–	–	3	–	–
Idaho.....	1	40	–	1	–	1	–	–	–	4	–	–
Wyoming.....	–	860	–	–	–	–	–	–	–	–	–	11
Colorado.....	8	297	–	–	–	–	–	2	–	2	–	11
New Mexico.....	5	234	–	–	–	–	–	5	–	1	–	9
Arizona.....	2	361	–	1	–	–	–	2	–	–	1	23
Utah.....	1	66	–	–	1	37	–	–	–	1	–	10
Nevada.....	–	15	–	–	–	–	–	–	–	1	–	4
PACIFIC.....	67	10,264	1	9	–	5	3	63	–	–	3	325
Washington.....	---	1,395	---	1	---	–	---	–	---	–	---	–
Oregon.....	7	766	–	1	–	3	–	–	–	–	–	9
California.....	59	7,887	1	7	–	2	3	58	–	–	3	282
Alaska.....	---	50	---	–	---	–	---	1	---	–	---	34
Hawaii.....	1	166	–	–	–	–	–	4	–	–	–	–
Puerto Rico.....	–	62	–	7	–	–	–	3	–	–	2	69
Virgin Islands.....	–	1	–	–	–	–	–	–	–	–	–	–

*Delayed reports: Typhoid fever: Ind. delete 1, Miss. 1

Week No. 43

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED OCTOBER 30, 1971

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

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
NEW ENGLAND:	691	414	30	21
Boston, Mass.	202	113	10	6
Bridgeport, Conn.	42	29	3	–
Cambridge, Mass.	17	12	5	–
Fall River, Mass.	27	18	–	1
Hartford, Conn.	55	27	–	2
Lowell, Mass.	32	22	2	–
Lynn, Mass.	17	9	–	–
New Bedford, Mass.	35	27	3	–
New Haven, Conn.	62	42	2	–
Providence, R. I.	56	30	3	4
Somerville, Mass.	6	2	–	–
Springfield, Mass.	59	32	1	6
Waterbury, Conn.	32	20	–	–
Worcester, Mass.	49	31	1	2
MIDDLE ATLANTIC:	3,427	2,042	118	118
Albany, N. Y.	59	31	–	5
Allentown, Pa.	32	21	3	–
Buffalo, N. Y.††	158	94	3	5
Camden, N. J.	33	20	2	1
Elizabeth, N. J.	31	19	–	–
Erie, Pa.	41	23	2	2
Jersey City, N. J.	62	41	4	5
Newark, N. J.	84	36	4	6
New York City, N. Y.†	1,718	1,032	61	52
Paterson, N. J.	43	23	2	3
Philadelphia, Pa.	498	270	6	19
Pittsburgh, Pa.	217	133	7	9
Reading, Pa.	70	51	1	–
Rochester, N. Y.	123	87	10	6
Schenectady, N. Y.	24	14	–	1
Scranton, Pa.	37	25	–	–
Syracuse, N. Y.	87	53	2	3
Trenton, N. J.	39	22	3	1
Utica, N. Y.	30	23	5	–
Yonkers, N. Y.	41	24	3	–
EAST NORTH CENTRAL:	2,547	1,453	60	118
Akron, Ohio	67	37	–	3
Canton, Ohio	38	27	–	2
Chicago, Ill.	681	359	10	34
Cincinnati, Ohio	183	107	5	6
Cleveland, Ohio	182	100	4	7
Columbus, Ohio	139	91	4	5
Dayton, Ohio	101	53	3	3
Detroit, Mich.	332	176	7	24
Evansville, Ind.	43	28	2	–
Flint, Mich.	42	19	–	5
Fort Wayne, Ind.	44	28	–	1
Gary, Ind.	26	13	1	2
Grand Rapids, Mich.	56	38	7	2
Indianapolis, Ind.	134	71	3	3
Madison, Wis.	35	22	6	1
Milwaukee, Wis.	133	84	2	3
Peoria, Ill.	41	25	–	4
Rockford, Ill.	34	24	1	2
South Bend, Ind.	61	36	4	3
Toledo, Ohio	107	70	–	7
Youngstown, Ohio	68	45	1	1
WEST NORTH CENTRAL:	787	456	13	46
Des Moines, Iowa	48	29	1	2
Duluth, Minn.	27	16	–	2
Kansas City, Kans.	36	18	–	7
Kansas City, Mo.	124	73	3	8
Lincoln, Nebr.	41	24	1	–
Minneapolis, Minn.	105	60	2	12
Omaha, Nebr.	70	41	–	2
St. Louis, Mo.	218	128	4	11
St. Paul, Minn.	63	37	–	1
Wichita, Kans.	55	30	2	1
Las Vegas, Nev.*	13	7	1	–

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
SOUTH ATLANTIC:	1,115	602	54	40
Atlanta, Ga.	112	53	6	4
Baltimore, Md.	219	129	6	8
Charlotte, N. C.	52	27	1	7
Jacksonville, Fla.	106	51	3	3
Miami, Fla.	102	53	2	1
Norfolk, Va.	53	31	4	1
Richmond, Va.	85	44	7	3
Savannah, Ga.	27	18	2	2
St. Petersburg, Fla.	75	57	10	–
Tampa, Fla.	81	50	7	4
Washington, D. C.	152	64	5	3
Wilmington, Del.	51	25	1	4
EAST SOUTH CENTRAL:	647	348	22	40
Birmingham, Ala.	87	41	1	5
Chattanooga, Tenn.	86	40	3	1
Knoxville, Tenn.	32	24	–	1
Louisville, Ky.	89	51	7	8
Memphis, Tenn.	142	76	3	9
Mobile, Ala.	55	30	1	9
Montgomery, Ala.	48	25	6	4
Nashville, Tenn.	108	61	1	3
WEST SOUTH CENTRAL:	1,216	626	42	90
Austin, Tex.	22	11	–	2
Baton Rouge, La.	43	22	4	3
Corpus Christi, Tex.	31	13	2	3
Dallas, Tex.	174	92	1	12
El Paso, Tex.	66	30	7	11
Fort Worth, Tex.	72	45	1	5
Houston, Tex.	217	93	4	22
Little Rock, Ark.	69	43	2	6
New Orleans, La.	173	84	8	10
Oklahoma City, Okla.	87	45	1	5
San Antonio, Tex.	121	74	2	6
Shreveport, La.	63	34	6	2
Tulsa, Okla.	78	40	4	3
MOUNTAIN:	464	268	17	19
Albuquerque, N. Mex.	33	20	2	1
Colorado Springs, Colo.	35	19	3	2
Denver, Colo.	125	74	3	7
Ogden, Utah	21	13	1	2
Phoenix, Ariz.	110	69	–	3
Pueblo, Colo.	24	11	5	–
Salt Lake City, Utah	63	37	2	3
Tucson, Ariz.	53	25	1	1
PACIFIC:	1,454	879	20	42
Berkeley, Calif.	25	18	–	–
Fresno, Calif.	46	27	1	3
Glendale, Calif.	30	24	–	–
Honolulu, Hawaii	51	29	–	1
Long Beach, Calif.	91	57	6	3
Los Angeles, Calif.	371	226	8	16
Oakland, Calif.	66	38	–	1
Pasadena, Calif.	34	21	–	1
Portland, Oreg.	118	73	–	5
Sacramento, Calif.	55	35	1	–
San Diego, Calif.	87	46	–	3
San Francisco, Calif.	193	108	3	3
San Jose, Calif.	48	32	1	–
Seattle, Wash.	149	85	–	3
Spokane, Wash.	58	40	–	1
Tacoma, Wash.	32	20	–	2
Total	12,348	7,088	376	534
Expected Number	12,474	7,111	434	573
Cumulative Total (includes reported corrections for previous weeks)	547,454	313,940	19,851	24,642

*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.

†Delayed Report for week ended Oct. 23, 1971
††Estimate based on average per cent of divisional total

SHIGELLOSIS – *(Continued from page 397)*

Table 1
Symptoms of 19 Ill Passengers
Bermuda to New York Flight – September 1971

Symptoms	Percent Affected
Diarrhea	100
Abdominal cramps	94
Chills	56
Fever	53
Nausea	41
Vomiting	33
Bloody diarrhea	6

Table 2
Food-Specific Attack Rates for 43 Persons
on Bermuda to New York Flight
September 1971

Food	Ate			Did Not Eat		
	Ill	Not Ill	Attack Rate (Percent)	Ill	Not Ill	Attack Rate (Percent)
Seafood cocktail	18	13	58	0	8	0
Steak	17	15	53	1	6	14
Peas	13	11	54	3	11	21
Potatoes	15	15	50	2	7	22
Cake	11	11	50	5	10	33
Cheese	9	9	50	5	10	33
Water	2	1	67	21	21	36
Milk	0	1	0	14	21	40
Cream	8	8	50	5	11	31

(Reported by Howard Rosenfeld, V.M.D., Division of Laboratories and Epidemiology, Ronald Altman, M.D., Director, Division of Preventable Diseases, New Jersey State Department of Health; and an EIS Officer.)

Editorial Note

All common-source outbreaks of shigellosis reported to the Shigella Surveillance Activity at CDC have involved either water or food. The implicated foods in these outbreaks, like the seafood cocktail implicated in the present outbreak, involved considerable hand contact.

This is the first reported outbreak of shigellosis in the United States related to an airplane meal. At least 11 airplane-associated foodborne outbreaks of varying etiology have been reported to CDC since January 1970. Such outbreaks often involve certain unique problems. For instance, a single catering service supplies many different planes with identical meals, and therefore, passengers sharing such a meal may conclude their travels in widely separated communities. Furthermore, unless the incubation period is particularly short, passengers on one plane may be unaware of each other's illness. The outbreak described above was detected because one patient with a positive culture was investigated by the New Jersey State Department of Health.

Patients who suffer from enteric infections should be questioned about recent travel not only to clarify the differential diagnosis but to alert health authorities of the possible occurrence of outbreaks.

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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.

Address all correspondence to: Center for Disease Control
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