



# Morbidity and Mortality

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WEEKLY REPORT

For Week Ending March 8, 1969

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

FATAL CASE OF MYIASIS AND A CASE OF CUTANEOUS MYIASIS  
Texas and Oklahoma

Recently two unassociated cases of myiasis were reported to the NCDC.

**Case 1:** On Nov. 3, 1968, a 41-year-old Mexican-American agricultural worker was admitted to a hospital in San Antonio for severe, continuous nosebleeds of 5 days duration accompanied by weakness and difficulty breathing. The patient reported a weight loss of approximately 50 lbs. during the previous 12 months. On examination, her temperature was 101°F, pulse 128, and respiration 22. Her nose, maxillary, ethmoidal, and sphenoidal sinuses, soft and hard palates, and tonsillar fossae were infested with screwworms. Scattered rales were heard in her lungs.

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Her hematocrit was 40 percent and WBC was 21,000 with 93 percent polymorphonuclear leukocytes. Urine glucose and acetone were 4+, blood glucose 445 mgm percent, and blood urea nitrogen 54 mgm percent.

After boric acid and chloroform were applied locally, approximately 200 screwworms were removed from her nose, (Continued on page 78)

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

DISEASE	10th WEEK ENDED		MEDIAN 1964 - 1968	CUMULATIVE, FIRST 10 WEEKS		
	March 8, 1969	March 9, 1968		1969	1968	MEDIAN 1964 - 1968
Aseptic meningitis . . . . .	25	28	28	293	266	267
Brucellosis . . . . .	-	2	5	16	10	37
Diphtheria . . . . .	-	-	3	22	28	28
Encephalitis, primary:						
Arthropod-borne & unspecified . . . . .	22	16	22	198	149	227
Encephalitis, post-infectious . . . . .	2	12	14	40	85	106
Hepatitis, serum . . . . .	101	85	901	977	664	8,187
Hepatitis, infectious . . . . .	990	951	901	8,751	8,176	8,187
Malaria . . . . .	25	54	4	447	465	52
Measles (rubeola) . . . . .	557	710	8,897	4,335	5,555	65,953
Meningococcal infections, total . . . . .	77	91	91	778	808	808
Civilian . . . . .	69	77	-	735	736	-
Military . . . . .	8	14	-	43	72	-
Mumps . . . . .	2,388	7,220	-	22,223	50,167	-
Poliomyelitis, total . . . . .	-	5	-	1	8	2
Paralytic . . . . .	-	5	-	1	8	2
Rubella (German measles) . . . . .	1,535	1,336	-	7,632	8,230	-
Streptococcal sore throat & scarlet fever . . . . .	12,745	12,936	12,936	113,579	115,123	112,127
Tetanus . . . . .	2	5	2	17	20	29
Tularemia . . . . .	1	-	3	22	15	42
Typhoid fever . . . . .	3	8	8	39	38	55
Typhus, tick-borne (Rky. Mt. spotted fever) . . . . .	-	-	-	1	3	6
Rabies in animals . . . . .	73	93	88	665	741	741

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax: . . . . .	-	Rabies in man: . . . . .	-
Botulism: . . . . .	1	Rubella congenital syndrome: . . . . .	1
Leptospirosis: . . . . .	9	Trichinosis: N.J. - 1, Va. - 1 . . . . .	15
Plague: . . . . .	-	Typhus, murine: . . . . .	2
Psittacosis: . . . . .	6		

## MYIASIS - (Continued from front page)

sinuses, and mouth. Screwworms continued to be expelled for several days. On November 5, the patient had difficulty swallowing and breathing and expectorated bloody mucous and screwworms. She developed nuchal rigidity, fever, and drowsiness, and chest X-rays showed infiltrates in the right lung field. She was given broad spectrum antibiotic therapy, but for the next 3 days, continued to decline. Her lung infiltrates progressed to involve almost the entire right lung and portions of the left lung. She died on November 8. During this period, urine glucose and acetone ranged between 0 and 1+.

At autopsy, screwworms were found in the frontal and ethmoidal sinuses and single worms were found in the esophagus and stomach. The walls of the nose and paranasal sinuses were necrotic and the respiratory epithelium was destroyed. There were two ulcerations of the palate and inflammation of the tracheal and esophageal mucosa. The lungs had severe bilateral bronchial and lobar involvement with necrosis and fibrinopurulent exudates. There was a 3 cm area of fibrosis with central caseous necrosis and multinucleated giant cells in the left apex. Tubercular organisms were not identified. Screwworms were not found in the lungs. The brain and meninges were normal, and there was no evidence that screwworms had migrated to the brain from the paranasal sinuses. The screwworms were identified as the larvae of *Cochliomyia hominivorax*, a blowfly commonly found in the Southwestern United States and in tropical areas of the western hemisphere.

**Case 2:** On Dec. 26, 1968, a 7-year-old boy from Cherokee, Oklahoma, was admitted to a hospital with subcutaneous swelling in the right inguinal area. His WBC was 12,700 with 46 percent eosinophils. Examination of stools for ova and parasites was negative. An excisional biopsy of the mass revealed the presence of a single screwworm surrounded by inflammatory tissue.

One month later, the boy's mother removed another screwworm from behind his left ear. This larva appeared to have migrated from his anterior scalp by a subcutaneous tract to behind the left ear. Both specimens were second stage larvae and could not be identified as to species. (Reported by M. S. Dickerson, M.D., Director, Communicable Disease Division, Texas State Department of Health; T. Christian, M.D., San Antonio; R. LeRoy Carpenter, M.D., Director, Division of Epidemiology, Oklahoma State Department of Health; C. R. Reinstein, M.D., Director, Garfield County Health Department; and two EIS Officers.)

**Editorial Comment:**

Myiasis is the infestation of living tissues of man and other mammals by dipterous larvae, commonly termed screwworms or maggots. Infestations can be cutaneous, intestinal or atrial (oral, nasal, ocular, sinus, vaginal, and urethral cavities) and commonly occur in wounds. The larvae can penetrate and destroy healthy tissue, including cartilage, and can invade the brain through the middle ear.<sup>1</sup> The larvae of numerous species of flies can cause myiasis. In the United States, *Cochliomyia hominivorax* is responsible for approximately 90 percent of screwworm infestations of wounds of mammals, especially cattle.<sup>2</sup> In 1968, the Mission Screwworm Eradication Program Laboratory in Texas reported 9,268 screwworm infections in animals in Texas which is approximately 10 times the incidence in 1967.

In the first case, it is possible that the patient's unrecognized and uncontrolled diabetes, perhaps through decreased sensory perception and poor defense mechanisms against infections, allowed this large infestation to progress unnoticed until the time of hemorrhage and ulceration.

**References:**

- <sup>1</sup>Belding, D. L.: *Textbook of Parasitology*, 3rd edition, Appleton-Century-Crofts, New York: 912-928, 1965.
- <sup>2</sup>Knipling, E. F.: A Key for Blowfly Larvae Concerned in Wound and Cutaneous Myiasis. *Ann Entom. Soc. Amer.*, 32:376, 1939.

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**SURVEILLANCE SUMMARY**  
**NEW ACTIVE CASES OF TUBERCULOSIS - United States 1968\***

During 1968, 42,758 new active cases of tuberculosis were reported in the United States for a new active case rate of 21.4 cases per 100,000 population (Table 1). This provisional total suggests that the final total of new active cases for 1968 will be approximately 6 percent lower than the total for 1967. The greater part of this reduction occurred outside the metropolitan areas. The decrease in metropolitan counties and large cities was 4 percent (688 cases) while the decrease in the rest of the country was 8 percent (2,201 cases).

In 42 states the 1968 provisional case rates were lower than the final 1967 rates, in five states the rates

were higher, and in three states there was no change. The case rates for the states ranged from a high of 40.4 in Alaska to a low of 4.3 in Iowa.

The provisional data for Puerto Rico also indicate a decrease in new active cases in 1968 from the final total in 1967.

(Reported by the Tuberculosis Branch, Division of State and Community Services, NCDC.)

\*Provisional data

Table 1  
New Active Tuberculosis Cases and Case Rates - United States, 1967 and 1968

State	1967 Provisional		1967 Final		1968 Provisional	
	Number	Rate*	Number	Rate*	Number	Rate*
U.S. Total	45,441	23.0	45,647	23.1	42,758	21.4
Continental United States	44,981	22.9	45,189	23.0	42,346	21.3
Alabama	1,515	42.8	1,379	38.9	1,338	37.5
Alaska	107	39.3	110	40.4	112	40.4
Arizona	436	26.7	436	26.5	471	28.2
Arkansas	498	25.3	497	24.9	564	28.0
California	4,228	22.1	4,171	22.1	3,754	19.5
Colorado	239	12.1	256	12.7	232(a)	11.3
Connecticut	418	14.3	411	14.1	368	12.4
Delaware	127	24.3	122	23.3	100	18.7
District of Columbia	477	59.0	423	52.4	420	51.9
Florida	1,601	26.7	1,601	26.5	1,620	26.3
Georgia	1,110	24.6	1,223	27.1	1,074	23.4
Hawaii	353	47.8	348	45.7	300	38.6
Idaho	55	7.9	55	7.8	63	8.9
Illinois	3,049	28.0	2,999	27.6	3,006	27.4
Indiana	1,033	20.7	1,069	21.3	1,006	19.9
Iowa	160	5.8	150	5.5	118	4.3
Kansas	219	9.6	223	9.8	226	9.8
Kentucky	1,086	34.1	1,071	33.4	1,037	32.1
Louisiana	912	24.9	966	26.3	910	24.4
Maine	120	12.3	120	12.2	100	10.2
Maryland	1,177	32.0	1,187	32.2	1,118	29.8
Massachusetts	910	16.8	910	16.8	908	16.7
Michigan	1,923	22.4	1,930	22.4	1,816	20.8
Minnesota	376	10.5	394	10.9	300	8.2
Mississippi	604	25.7	616	26.3	548	23.4
Missouri	888	19.3	882	19.2	815	17.6
Montana	87	12.4	109	15.6	102	14.7
Nebraska	128	8.9	121	8.4	120	8.4
Nevada	152	34.2	147	33.4	93	20.5
New Hampshire	42	6.1	44	6.4	43	6.1
New Jersey	1,448	20.7	1,455	20.9	1,327	18.7
New Mexico	248	24.7	248	24.5	193	19.0
New York	5,030	27.4	5,069	28.2	4,750	26.2
North Carolina	1,255	25.0	1,247	24.6	1,222	23.8
North Dakota	51	8.0	49	7.8	45	7.2
Ohio	1,525	14.6	1,548	14.7	1,258	11.9
Oklahoma	410	16.4	442	17.6	437	17.4
Oregon	322	16.1	322	16.3	290	14.4
Pennsylvania	2,716	23.4	2,736	23.4	2,429	20.7
Rhode Island	148	16.4	148	16.5	121	13.3
South Carolina	688	26.5	716	26.9	645	24.0
South Dakota	128	19.0	119	17.8	104	15.8
Tennessee	1,223	31.4	1,199	30.4	1,104	27.8
Texas	3,195	29.4	3,209	29.6	3,108	28.3
Utah	65	6.3	65	6.4	74	7.2
Vermont	44	10.6	44	10.6	30	7.1
Virginia	1,416	31.2	1,521	33.5	1,454	31.6
Washington	522	16.9	507	15.8	566	17.3
West Virginia	501	27.9	539	29.8	442	24.5
Wisconsin	445	10.6	463	11.0	453	10.8
Wyoming	31	9.8	31	9.7	24	7.6
Puerto Rico (b)	1,055	39.1	1,191	44.2	741	27.2

(a) Excludes 95 military cases.

(b) Not included in totals.

\*Cases per 100,000 population. Population based on U.S. Bureau of Census, Current Population Reports, Series P25, No. 403, September 19, 1968.

SURVEILLANCE SUMMARY  
SHIGELLOSIS - United States 1968

During 1968, 9,277 isolations of shigella were reported to NCDC. This is a decrease of 18.7 percent from the 11,405 isolations reported in 1967.\* The overall United States attack rate was 46.1 cases per million population in 1968 compared with 57.3 cases per million population in 1967. The attack rates by state are depicted in Figure 1. According to the age distribution of individuals from whom shigella was isolated in 1968, children 1-4 years and 5-9 years of age appeared at greatest risk with attack rates of 37.4 percent and 22.6 percent, respectively. A preponderance of isolates occurred in adult females, particularly in the childbearing years, compared with males in the same age group (Table 2). The usual seasonal increase of shigellosis in the autumn persisted in 1968 (Figure 2).

Figure 1  
ATTACK RATES OF SHIGELLOSIS BY STATE, 1968

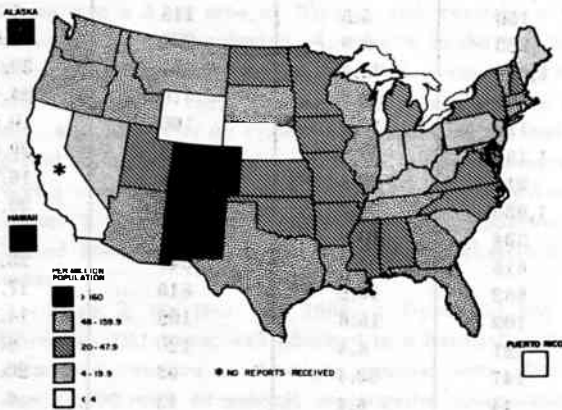
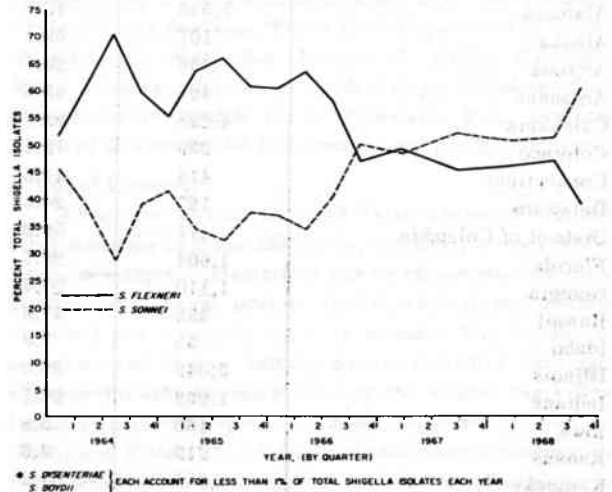
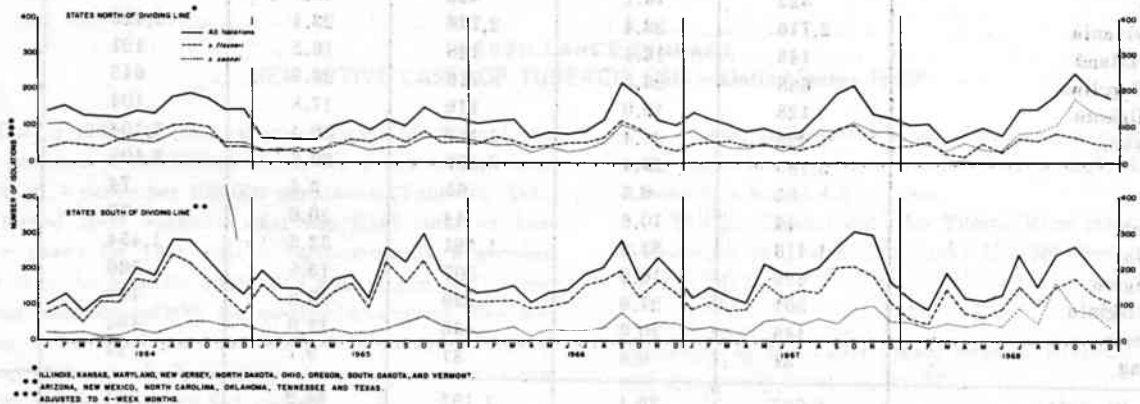


Figure 3  
RELATIVE IMPORTANCE OF SHIGELLA SUBGROUPS\* IN THE UNITED STATES, 1964-1968



Since the fourth quarter of 1967, *Shigella sonnei* has been the subgroup accounting for the most isolations reported to NCDC (Figure 3). The rising importance of *S. sonnei* is a trend which has been documented since 1964 in the United States. In 1968, 54.0 percent of all shigella isolates were *S. sonnei* (Table 3) versus 50.8 percent in 1967.

Figure 2  
SEASONAL DISTRIBUTION OF SHIGELLA ISOLATIONS BY SEROTYPE AND REGION 15 STATES WHICH HAVE REPORTED SINCE JANUARY 1964



\* ALABAMA, KANSAS, MARYLAND, NEW JERSEY, NORTH CAROLINA, OHIO, OREGON, SOUTH CAROLINA, AND VERMONT.  
\*\* ARIZONA, NEW MEXICO, NORTH CAROLINA, OKLAHOMA, TENNESSEE AND TEXAS.  
\*\*\* ADJUSTED TO 4-WEEK MONTHS.

Table 2  
Age and Sex Distribution of Individuals Infected with Shigellae in the United States, 1968

Age (Years)	Male	Female	Sex Unknown	Total	Percent	Cumulative Percent	Attack Rate/ Million Population*
1	251	227	3	481	7.5	7.5	135.9
1- 4	1,203	1,179	21	2,403	37.4	44.9	153.5
5- 9	730	717	6	1,453	22.6	67.5	69.5
10- 19	398	373	5	776	12.1	79.6	20.6
20- 29	234	362	5	601	9.4	89.0	22.0
30- 39	140	169	—	309	4.8	93.8	13.7
40- 49	67	77	1	145	2.3	96.1	6.0
50- 59	45	62	—	107	1.7	97.8	5.3
60- 69	32	59	—	91	1.4	99.2	6.3
70- 79	12	34	—	46	.7	99.9	5.1
80+	7	8	—	15	.2	100.1	4.5
Subtotal	3,119	3,267	41	6,427			
Child (unspec)	24	19	3	46			
Adult (unspec)	19	31	2	52			
Unknown	1,183	1,196	373	2,752			
Total	4,345	4,513	419	9,277			
Percent of Total	49.1	50.9					

\*Based on provisional data from Population Estimates, Series P25, No. 385, Feb. 14, 1968.

Table 3  
The Six Most Frequently Reported Serotypes of Shigella from Humans, 1968 and 1964-1968

Serotype	1968				Percent of Total Isolations 1964-68	
	Reported Number	Calculated* Number	Calculated* Percent	Rank	Percent	Rank
<i>S. sonnei</i>	4,976	5,016	54.0	1	45.3	1
<i>S. flexneri 2a</i>	686	1,616	17.4	2	22.8	2
<i>S. flexneri 3a</i>	377	978	10.5	3	10.2	3
<i>S. flexneri 6</i>	367	456	4.9	4	5.9	4
<i>S. flexneri 4a</i>	158	332	3.6	6	5.5	5
<i>S. flexneri 2b</i>	174	388	4.2	5	3.9	6
Subtotal	6,738	8,786	94.6		93.6	
Total	9,277	9,281				

\*Calculated number is derived by distributing the unspecified isolations in each group to their subgroups in the same proportions as the distribution of the specified isolations of that group.

During 1968, six common-source foodborne outbreaks of shigellosis were reported. These outbreaks caused illness in a total of 551 persons. In 1967, there were four common-source foodborne outbreaks and one waterborne outbreak with a total of 366 persons acquiring shigellosis. (Reported by Enteric Diseases Unit, Bacterial Diseases Section, and Statistics Section, Epidemiology Program, NCDC.)

\*No reports were received from California after March 1, 1968.

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

National Communicable Disease Center  
Atlanta, Georgia 30333

Attn: Chief, Enteric Diseases Unit  
Bacterial Diseases Section  
Epidemiology Program

## PARALYTIC POLIOMYELITIS - United States 1967

During 1967, 41 cases of paralytic poliomyelitis were reported to NCDC. This is the lowest annual total since national surveillance of poliomyelitis began in 1955 and is a significant decrease from the 102 cases in 1966 and the previous low of 61 cases in 1965. A trend towards lower incidence in 1967 was noted during the first 29 weeks of the year when only 15 cases were reported (MMWR, Vol. 16, No. 29).

Of the 41 cases with residual paralysis, 18 were type 1, eight were type 2, and seven were type 3, while in eight cases a type-specific etiology could not be established. In addition to these 41 cases, there was one other case reported as paralytic poliomyelitis but which had no residual muscular deficit. Of the 18 type 1 cases, 10 occurred in residents of the southwestern United States (Texas-5, New Mexico-1, and California-4). Of the California cases, three patients had traveled in Mexico in the 30 days prior to illness and one had had close contact with travelers from Mexico. Death occurred in six of the 41 cases. There was no apparent relationship between severity of paralytic involvement and type-specific etiology.

Consistent with a pattern noted during the last several years, in 1967 a majority of cases (25 of 41) occurred among preschool children from lower socioeconomic backgrounds. Only one case occurred in a school-age child and the remaining 15 cases occurred in adults among whom no single viral type clearly predominated.

Of the 41 patients, 29 were totally unimmunized. Only three of the vaccinated patients received what might be considered an adequate primary series by the current recommendation of the Public Health Service. Advisory Committee on Immunization Practices (MMWR, Vol. 16, No. 33). A 31-year-old man from New York had received 5 doses of inactivated poliovaccine (IPV); however, his last dose was administered 5 years before onset of illness and he had received no subsequent booster doses. He had serologic changes diagnostic for infection with type 2 poliovirus. A 15-year-old boy who contracted type 1 poliomyelitis had received a total of 4 doses of IPV and 1 dose of type 1 monovalent oral poliovaccine (MOPV) prior to 1963. A 5-year-old girl had an undocumented history of 3 doses of oral poliovaccine of unknown type; the etiologic type of poliovirus in her case was not determined. There were no reported cases of poliomyelitis following a fully adequate series of trivalent oral poliovaccine (TOPV). However, one 4-year-old girl with a history of 2 doses of TOPV and 3 doses of IPV contracted type 1 poliomyelitis.

In 1967, there were two reported cases of paralytic disease compatible with poliomyelitis in patients who had received oral poliovaccine from 4 to 30 days preceding illness. One was a 10-month-old infant with no history of prior inactivated poliovaccine, but who had received one dose of monovalent oral poliovaccine type 1. Ten days after receiving a dose of MOPV type 3, he developed a paralytic illness which left only minor residual deficit. The second was a 3 1/2-month-old infant who became

ill 14 days after a dose of MOPV type 3. He had received a previous dose of MOPV type 1. This infant suffered minor residual disability. In both cases, poliovirus type 3, antigenically vaccine-like but with a positive temperature marker, was isolated from stool.

In 1967, there were five cases of paralytic disease in patients who had had close contact with a recent recipient of oral poliovaccine. The cases were geographically unrelated. The only case in a child involved a 4-year-old girl from Michigan who had received 3 prior doses of IPV and 2 prior doses of TOPV. She became ill 27 days after a neighbor child had received a dose of TOPV. Type 1 poliovirus, antigenically characterized as vaccine-like, was recovered from her stool. She was left with minor residual disability. The remaining four cases were in adults. A 31-year-old man from New York became ill 28 days after his son had received TOPV. This man gave a history of 5 prior doses of IPV, the last of which was 5 years before onset. No poliovirus was recovered, but tests on paired sera demonstrated a fourfold rise in neutralizing antibody titer to poliovirus type 2. The man was left with significant residual disability 60 days after onset. A 32-year-old woman from Colorado with a history of 3 MOPV doses given 5 years prior to onset developed paralytic illness 22 days after her niece had received TOPV. An antigenically vaccine-like strain of poliovirus type 3 was recovered from a stool specimen. The patient's sera had a diagnostic antibody rise to poliovirus type 3. She was left with significant disability. The remaining two patients had never received any immunization against poliomyelitis. A 30-year-old man from Maryland became ill 35 days after his son had received TOPV. Poliovirus type 2, antigenically vaccine-like but with a positive temperature marker, was isolated from stool. A high neutralizing antibody titer to poliovirus type 2 was present. A 30-year-old woman from California became ill 22 days after her daughter had received MOPV type 1. No isolation of poliovirus was made. There was a neutralizing antibody titer of 1:512 to poliovirus type 1 on an acute specimen obtained 9 days after onset of illness. The titer on the second serum specimen obtained 14 days later was not significantly changed (1:1,024). This case actually occurred in December 1966, but was reported in 1967 and hence is included in the 1967 summary.

*(Reported by the Statistics Section, and the Neurotropic Viral Diseases Unit, Viral Diseases Section, Epidemiology Program, NCDC).*

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

National Communicable Disease Center  
Atlanta, Georgia 30333

Attn: Chief, Viral Diseases Section  
Epidemiology Program

SUMMARIES OF REPORTED CASES OF INFECTIOUS SYPHILIS

CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas January 1969 and January 1968 - Provisional Data

Reporting Area	January		Cumulative January		Reporting Area	January		Cumulative January	
	1969	1968	1969	1968		1969	1968	1969	1968
NEW ENGLAND.....	26	23	26	23	EAST SOUTH CENTRAL.....	106	112	106	112
Maine.....	1	-	1	-	Kentucky.....	27	13	27	13
New Hampshire.....	-	-	-	-	Tennessee.....	31	22	31	22
Vermont.....	-	-	-	-	Alabama.....	28	51	28	51
Massachusetts.....	18	14	18	14	Mississippi.....	20	26	20	26
Rhode Island.....	3	-	3	-	WEST SOUTH CENTRAL.....	238	268	238	268
Connecticut.....	4	9	4	9	Arkansas.....	10	10	10	10
MIDDLE ATLANTIC.....	312	269	312	269	Louisiana.....	50	62	50	62
Upstate New York.....	34	15	34	15	Oklahoma.....	10	6	10	6
New York City.....	219	162	219	162	Texas.....	168	190	168	190
Pa. (Excl. Phila.).....	10	22	10	22	MOUNTAIN.....	47	35	47	35
Philadelphia.....	6	27	6	27	Montana.....	-	1	-	1
New Jersey.....	43	43	43	43	Idaho.....	-	-	-	-
EAST NORTH CENTRAL.....	207	268	207	268	Wyoming.....	1	1	1	1
Ohio.....	35	33	35	33	Colorado.....	3	1	3	1
Indiana.....	30	19	30	19	New Mexico.....	18	10	18	10
Downstate Illinois.....	29	20	29	20	Arizona.....	23	20	23	20
Chicago.....	66	102	66	102	Utah.....	-	-	-	-
Michigan.....	47	94	47	94	Nevada.....	2	3	2	3
Wisconsin.....	-	-	-	-	PACIFIC.....	164	114	164	114
WEST NORTH CENTRAL.....	27	15	27	15	Washington.....	2	4	2	4
Minnesota.....	4	-	4	-	Oregon.....	8	1	8	1
Iowa.....	14	-	14	-	California.....	154	108	154	108
Missouri.....	2	7	2	7	Alaska.....	-	-	-	-
North Dakota.....	-	-	-	-	Hawaii.....	-	1	-	1
South Dakota.....	2	1	2	1	U. S. TOTAL.....	1,538	1,556	1,538	1,556
Nebraska.....	3	6	3	6	TERRITORIES.....	100	67	100	67
Kansas.....	2	1	2	1	Puerto Rico.....	100	59	100	59
SOUTH ATLANTIC.....	411	452	411	452	Virgin Islands.....	-	8	-	8
Delaware.....	1	-	1	-					
Maryland.....	46	47	46	47					
District of Columbia.....	44	79	44	79					
Virginia.....	25	16	25	16					
West Virginia.....	-	-	-	-					
North Carolina.....	41	52	41	52					
South Carolina.....	62	48	62	48					
Georgia.....	76	71	76	71					
Florida.....	116	139	116	139					

Note: Cumulative Totals include revised and delayed reports through previous months.

CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas February 1969 and February 1968 - Provisional Data

Reporting Area	February		Cumulative January-February		Reporting Area	February		Cumulative January-February	
	1969	1968	1969	1968		1969	1968	1969	1968
NEW ENGLAND.....	27	42	53	65	EAST SOUTH CENTRAL.....	80	111	186	223
Maine.....	-	-	1	-	Kentucky.....	12	8	39	21
New Hampshire.....	-	-	-	-	Tennessee.....	39	29	70	51
Vermont.....	-	-	-	-	Alabama.....	7	48	35	99
Massachusetts.....	14	34	32	48	Mississippi.....	22	26	42	52
Rhode Island.....	3	4	6	4	WEST SOUTH CENTRAL.....	298	280	536	548
Connecticut.....	10	4	14	13	Arkansas.....	9	11	19	21
MIDDLE ATLANTIC.....	271	267	583	542	Louisiana.....	50	62	100	124
Upstate New York.....	24	17	58	32	Oklahoma.....	2	8	12	14
New York City.....	180	175	399	337	Texas.....	237	199	536	389
Pa. (Excl. Phila.).....	8	24	18	46	MOUNTAIN.....	56	53	103	82
Philadelphia.....	24	28	30	55	Montana.....	-	-	-	1
New Jersey.....	35	29	78	72	Idaho.....	1	2	1	2
EAST NORTH CENTRAL.....	207	276	414	544	Wyoming.....	1	-	2	-
Ohio.....	30	57	65	90	Colorado.....	8	4	11	5
Indiana.....	29	27	59	46	New Mexico.....	25	11	43	21
Downstate Illinois.....	25	15	54	35	Arizona.....	17	26	40	46
Chicago.....	71	89	137	191	Utah.....	-	-	-	-
Michigan.....	51	86	98	180	Nevada.....	4	4	6	7
Wisconsin.....	1	2	1	2	PACIFIC.....	146	133	310	247
WEST NORTH CENTRAL.....	25	29	52	44	Washington.....	5	2	7	6
Minnesota.....	1	6	5	6	Oregon.....	2	5	10	6
Iowa.....	7	2	9	2	California.....	139	125	293	233
Missouri.....	15	16	29	23	Alaska.....	-	-	-	-
North Dakota.....	1	-	1	-	Hawaii.....	-	1	-	2
South Dakota.....	-	3	2	4	U. S. TOTAL.....	1,543	1,627	3,081	3,183
Nebraska.....	-	2	3	8	TERRITORIES.....	100	82	200	149
Kansas.....	1	1	3	1	Puerto Rico.....	97	73	197	132
SOUTH ATLANTIC.....	433	436	844	888	Virgin Islands.....	3	9	3	17
Delaware.....	2	5	3	5					
Maryland.....	39	42	85	89					
District of Columbia.....	34	49	78	128					
Virginia.....	17	18	42	33					
West Virginia.....	1	8	1	8					
North Carolina.....	44	65	85	117					
South Carolina.....	52	49	114	97					
Georgia.....	93	62	169	133					
Florida.....	151	139	267	278					

Note: Cumulative Totals include revised and delayed reports through previous months.

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED  
MARCH 8, 1969 AND MARCH 9, 1968 (10th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPHThERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary	including unsp. cases	Post- Infectious	Serum	Infectious		1969	Cum. 1969
								1969	1968		
UNITED STATES....	25	-	-	22	16	2	101	990	951	25	447
NEW ENGLAND.....	-	-	-	4	1	-	11	63	26	3	25
Maine.....	-	-	-	-	-	-	-	3	1	-	-
New Hampshire.*...	-	-	-	-	-	-	-	8	4	-	2
Vermont.....	-	-	-	-	-	-	-	-	-	-	-
Massachusetts.....	-	-	-	1	-	-	-	18	10	2	21
Rhode Island.....	-	-	-	3	1	-	1	19	4	-	-
Connecticut.....	-	-	-	-	-	-	10	15	7	1	2
MIDDLE ATLANTIC.....	8	-	-	2	2	-	30	161	137	4	43
New York City.....	1	-	-	-	-	-	16	53	48	-	-
New York, up-State.	2	-	-	2	2	-	8	20	18	3	9
New Jersey.....	4	-	-	-	-	-	4	26	47	-	17
Pennsylvania.....	1	-	-	-	-	-	2	62	24	1	17
EAST NORTH CENTRAL...	2	-	-	5	4	-	10	168	157	5	29
Ohio.....	-	-	-	3	1	-	3	65	45	1	2
Indiana.....	-	-	-	-	-	-	1	13	9	1	1
Illinois.....	1	-	-	-	2	-	1	26	60	2	12
Michigan*.....	1	-	-	2	1	-	5	52	31	1	13
Wisconsin.....	-	-	-	-	-	-	-	12	12	-	1
WEST NORTH CENTRAL...	-	-	-	-	1	-	2	41	54	4	31
Minnesota.....	-	-	-	-	-	-	-	12	8	2	3
Iowa.*.....	-	-	-	-	-	-	-	5	22	-	3
Missouri.....	-	-	-	-	1	-	-	7	16	1	7
North Dakota.....	-	-	-	-	-	-	-	1	1	-	1
South Dakota.....	-	-	-	-	-	-	-	1	-	-	-
Nebraska.....	-	-	-	-	-	-	-	1	1	1	3
Kansas.....	-	-	-	-	-	-	2	14	6	-	14
SOUTH ATLANTIC.....	6	-	-	2	3	-	6	107	83	4	158
Delaware.....	-	-	-	-	-	-	-	-	3	-	-
Maryland.....	2	-	-	1	-	-	1	22	13	1	4
Dist. of Columbia..	-	-	-	-	1	-	-	1	2	-	-
Virginia.....	-	-	-	-	2	-	-	3	6	-	8
West Virginia.....	-	-	-	-	-	-	-	4	4	-	-
North Carolina.....	3	-	-	1	-	-	-	11	5	-	76
South Carolina.....	-	-	-	-	-	-	-	11	-	-	15
Georgia.....	-	-	-	-	-	-	-	18	35	2	44
Florida.....	1	-	-	-	-	-	5	37	15	1	11
EAST SOUTH CENTRAL...	-	-	-	-	-	-	1	73	68	-	14
Kentucky.....	-	-	-	-	-	-	-	39	34	-	10
Tennessee.....	-	-	-	-	-	-	1	20	20	-	-
Alabama.....	-	-	-	-	-	-	-	7	7	-	4
Mississippi.....	-	-	-	-	-	-	-	7	7	-	-
WEST SOUTH CENTRAL...	1	-	-	1	1	1	1	70	76	3	12
Arkansas.....	-	-	-	-	-	-	-	4	5	-	4
Louisiana*.....	1	-	-	1	-	-	1	11	13	3	8
Oklahoma.....	-	-	-	-	1	-	-	7	6	-	-
Texas.....	-	-	-	-	-	1	-	48	52	-	-
MOUNTAIN.....	1	-	-	2	-	-	5	57	70	-	33
Montana.....	-	-	-	-	-	-	-	5	8	-	-
Idaho.....	-	-	-	1	-	-	-	7	2	-	1
Wyoming.*.....	-	-	-	-	-	-	-	-	-	-	-
Colorado.....	-	-	-	-	-	-	-	19	31	-	30
New Mexico.....	-	-	-	-	-	-	3	7	4	-	1
Arizona.....	1	-	-	-	-	-	-	8	10	-	1
Utah.....	-	-	-	-	-	-	2	10	11	-	-
Nevada.....	-	-	-	1	-	-	-	1	4	-	-
PACIFIC.....	7	-	-	6	4	1	35	250	280	2	102
Washington.....	-	-	-	-	-	-	-	35	21	-	2
Oregon.....	-	-	-	1	-	-	2	26	20	-	5
California.....	6	-	-	5	4	1	33	189	233	2	87
Alaska.....	-	-	-	-	-	-	-	-	-	-	-
Hawaii.....	1	-	-	-	-	-	-	-	6	-	8
Puerto Rico.....	-	-	-	-	-	-	-	18	14	-	-

\*Delayed reports: Encephalitis, primary: Iowa 1, La. 1 (1968), Wyo. 1  
Hepatitis, serum: Mich. 6  
Hepatitis, infectious: N.H. 1  
Malaria: N.H. delete 1 (1969) add 1 (1968)



TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

MARCH 8, 1969 AND MARCH 9, 1968 (10th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA	
	1969	Cumulative		1969	Cumulative			1969	Total	Paralytic		
		1969	1968		1969	1968				1969		Cum. 1969
UNITED STATES...	557	4,335	5,555	77	778	808	2,388	-	-	1	1,535	
NEW ENGLAND.....	43	217	215	3	24	42	371	-	-	-	143	
Maine*.....	-	2	10	-	1	2	38	-	-	-	7	
New Hampshire*.....	21	58	41	-	-	3	4	-	-	-	4	
Vermont.....	-	-	-	-	-	1	29	-	-	-	1	
Massachusetts.....	7	41	94	1	11	22	139	-	-	-	39	
Rhode Island.....	-	3	1	-	3	4	80	-	-	-	13	
Connecticut.....	15	113	69	2	9	10	81	-	-	-	79	
MIDDLE ATLANTIC.....	215	1,237	659	12	105	103	73	-	-	-	73	
New York City.....	136	813	122	1	19	20	45	-	-	-	19	
New York, Up-State.....	16	116	382	-	17	10	NN	-	-	-	5	
New Jersey.....	48	161	120	5	36	35	28	-	-	-	49	
Pennsylvania.....	15	147	35	6	33	38	NN	-	-	-	-	
EAST NORTH CENTRAL....	59	440	1,470	6	92	78	575	-	-	-	262	
Ohio.....	3	45	109	1	28	19	27	-	-	-	-	
Indiana.....	25	104	229	2	16	10	62	-	-	-	37	
Illinois.....	9	81	643	1	12	16	61	-	-	-	36	
Michigan.....	5	56	96	2	30	24	169	-	-	-	93	
Wisconsin.....	17	154	393	-	6	9	256	-	-	-	96	
WEST NORTH CENTRAL....	27	135	101	4	41	38	306	-	-	-	214	
Minnesota*.....	-	1	2	-	7	6	46	-	-	-	7	
Iowa.....	17	68	22	1	5	3	204	-	-	-	119	
Missouri.....	-	11	6	3	17	6	9	-	-	-	1	
North Dakota.....	-	2	47	-	-	2	17	-	-	-	4	
South Dakota.....	-	-	3	-	-	4	NN	-	-	-	-	
Nebraska.....	10	53	14	-	2	4	4	-	-	-	73	
Kansas.....	-	-	7	-	10	13	26	-	-	-	10	
SOUTH ATLANTIC.....	53	792	425	9	150	182	168	-	-	-	156	
Delaware.....	2	8	2	-	3	-	2	-	-	-	8	
Maryland.....	2	8	32	1	16	11	16	-	-	-	19	
Dist. of Columbia..	-	-	4	-	2	5	6	-	-	-	-	
Virginia*.....	36	279	87	-	22	14	14	-	-	-	13	
West Virginia.....	5	72	111	1	6	3	110	-	-	-	39	
North Carolina.....	1	47	45	1	19	41	NN	-	-	-	-	
South Carolina*.....	1	47	8	5	21	38	8	-	-	-	8	
Georgia.....	1	1	3	-	26	32	-	-	-	-	-	
Florida.....	5	330	133	1	35	38	12	-	-	-	69	
EAST SOUTH CENTRAL....	8	36	103	4	36	62	139	-	-	-	57	
Kentucky.....	5	13	37	-	8	24	74	-	-	-	25	
Tennessee.....	2	8	16	4	19	15	60	-	-	-	17	
Alabama.....	-	-	25	-	7	12	2	-	-	-	11	
Mississippi.....	1	15	25	-	2	11	3	-	-	-	4	
WEST SOUTH CENTRAL....	113	1,173	1,361	10	102	186	303	-	-	1	330	
Arkansas.....	-	2	-	-	11	10	-	-	-	-	-	
Louisiana*.....	6	8	1	1	31	44	-	-	-	-	-	
Oklahoma.....	1	102	56	2	6	39	31	-	-	-	146	
Texas.....	106	1,061	1,304	7	54	93	272	-	-	1	184	
MOUNTAIN.....	6	78	293	5	25	10	188	-	-	-	66	
Montana.....	1	3	54	1	2	1	14	-	-	-	4	
Idaho.....	-	-	10	-	3	2	-	-	-	-	-	
Wyoming.....	-	-	30	-	-	-	-	-	-	-	4	
Colorado.....	-	7	97	3	6	4	38	-	-	-	35	
New Mexico.....	4	34	32	1	5	-	37	-	-	-	10	
Arizona.....	1	32	67	-	6	1	90	-	-	-	8	
Utah.....	-	1	1	-	1	-	9	-	-	-	5	
Nevada.....	-	1	2	-	2	2	-	-	-	-	-	
PACIFIC.....	33	227	928	24	203	107	265	-	-	-	234	
Washington.....	10	20	254	2	12	16	-	-	-	-	85	
Oregon.....	4	34	207	-	6	10	18	-	-	-	15	
California.....	17	163	446	22	179	73	217	-	-	-	116	
Alaska.....	2	9	-	-	-	-	9	-	-	-	6	
Hawaii.....	-	1	21	-	6	8	21	-	-	-	12	
Puerto Rico.....	20	116	92	1	3	13	23	-	-	-	2	

\*Delayed reports: Measles: Minn. 1, Va. 4, S.C. 2  
Meningococcal infections: La. delete 1  
Mumps: Me. 8, N.H. 13  
Rubella: N.H. 2

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
 FOR WEEKS ENDED  
 MARCH 8, 1969 AND MARCH 9, 1968 (10th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969
UNITED STATES...	12,745	2	17	1	22	3	39	-	1	73	665
NEW ENGLAND.....	1,874	-	-	-	-	-	-	-	-	-	2
Maine.*.....	10	-	-	-	-	-	-	-	-	-	1
New Hampshire*.....	21	-	-	-	-	-	-	-	-	-	-
Vermont.....	29	-	-	-	-	-	-	-	-	-	1
Massachusetts.....	272	-	-	-	-	-	-	-	-	-	-
Rhode Island.....	145	-	-	-	-	-	-	-	-	-	-
Connecticut.....	1,397	-	-	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	508	1	2	-	1	2	7	-	-	2	10
New York City.....	33	-	-	-	1	1	5	-	-	-	-
New York, Up-State.....	294	1	2	-	-	-	1	-	-	2	10
New Jersey.....	NN	-	-	-	-	1	1	-	-	-	-
Pennsylvania.....	181	-	-	-	-	-	-	-	-	-	-
EAST NORTH CENTRAL...	1,358	-	3	1	2	-	1	-	-	5	29
Ohio.....	163	-	-	-	-	-	1	-	-	-	4
Indiana.....	323	-	-	-	1	-	-	-	-	1	4
Illinois.....	272	-	1	1	1	-	-	-	-	-	5
Michigan.....	400	-	2	-	-	-	-	-	-	1	1
Wisconsin.....	200	-	-	-	-	-	-	-	-	3	15
WEST NORTH CENTRAL...	674	-	-	-	3	-	-	-	-	9	113
Minnesota.....	141	-	-	-	-	-	-	-	-	4	31
Iowa.....	147	-	-	-	-	-	-	-	-	-	20
Missouri.....	9	-	-	-	3	-	-	-	-	3	40
North Dakota.....	153	-	-	-	-	-	-	-	-	-	16
South Dakota.....	18	-	-	-	-	-	-	-	-	-	-
Nebraska.....	95	-	-	-	-	-	-	-	-	-	-
Kansas.....	111	-	-	-	-	-	-	-	-	2	6
SOUTH ATLANTIC.....	1,634	1	5	-	10	1	4	-	-	25	226
Delaware.....	18	-	-	-	-	-	-	-	-	-	-
Maryland*.....	314	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia..	1	-	2	-	-	-	-	-	-	-	-
Virginia.....	548	-	-	-	-	-	-	-	-	17	155
West Virginia.....	279	-	-	-	2	-	-	-	-	2	27
North Carolina.....	26	-	1	-	4	-	1	-	-	1	1
South Carolina*....	209	-	1	-	-	-	1	-	-	-	-
Georgia.....	12	-	-	-	-	1	1	-	-	-	15
Florida*.....	227	1	1	-	4	-	1	-	-	5	28
EAST SOUTH CENTRAL...	1,548	-	-	-	2	-	4	-	1	15	124
Kentucky.....	248	-	-	-	-	-	-	-	-	7	78
Tennessee.....	1,136	-	-	-	2	-	3	-	1	5	37
Alabama.....	59	-	-	-	-	-	-	-	-	3	9
Mississippi.....	105	-	-	-	-	-	1	-	-	-	-
WEST SOUTH CENTRAL...	889	-	3	-	2	-	6	-	-	11	81
Arkansas.*.....	9	-	-	-	-	-	4	-	-	2	4
Louisiana.....	15	-	2	-	-	-	-	-	-	-	4
Oklahoma.....	74	-	1	-	2	-	-	-	-	1	11
Texas.....	791	-	-	-	-	-	2	-	-	8	62
MOUNTAIN.....	2,883	-	-	-	2	-	10	-	-	2	15
Montana.*.....	71	-	-	-	-	-	-	-	-	-	-
Idaho.....	290	-	-	-	-	-	-	-	-	-	-
Wyoming.....	314	-	-	-	-	-	5	-	-	-	3
Colorado.....	1,537	-	-	-	-	-	1	-	-	-	1
New Mexico.....	325	-	-	-	1	-	2	-	-	1	6
Arizona.....	156	-	-	-	-	-	1	-	-	1	2
Utah.....	190	-	-	-	1	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	1	-	-	-	3
PACIFIC.....	1,377	-	4	-	-	-	7	-	-	4	65
Washington.....	474	-	-	-	-	-	-	-	-	-	-
Oregon.....	118	-	-	-	-	-	-	-	-	-	-
California.....	661	-	4	-	-	-	7	-	-	4	65
Alaska.....	46	-	-	-	-	-	-	-	-	-	-
Hawaii.....	78	-	-	-	-	-	-	-	-	-	-
Puerto Rico.....	5	-	1	-	-	1	1	-	-	-	5

\*Delayed reports: SST: Me. 27, N.H. 4, Md. 187, S.C. 23, Mont. 22  
 Tularemia: Fla. 1  
 Typhoid fever: Ark. delete 1  
 Rabies in animals: Fla. delete 2

Week No.

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED MARCH 8, 1969

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

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	754	442	57	35	SOUTH ATLANTIC:	1,346	710	71	61
Boston, Mass.-----	214	111	13	8	Atlanta, Ga.-----	126	53	6	6
Bridgeport, Conn.-----	45	28	1	3	Baltimore, Md.-----	276	142	7	12
Cambridge, Mass.-----	33	23	2	1	Charlotte, N. C.-----	61	28	3	6
Fall River, Mass.-----	43	24	2	1	Jacksonville, Fla.-----	109	64	5	2
Hartford, Conn.-----	57	33	6	5	Miami, Fla.-----	106	60	1	1
Lowell, Mass.-----	24	15	6	2	Norfolk, Va.-----	74	38	10	3
Lynn, Mass.-----	23	17	2	-	Richmond, Va.-----	76	40	9	5
New Bedford, Mass.-----	30	23	1	-	Savannah, Ga.-----	36	16	2	4
New Haven, Conn.-----	50	27	-	6	St. Petersburg, Fla.-----	108	91	9	2
Providence, R. I.-----	82	44	7	4	Tampa, Fla.-----	81	48	7	3
Somerville, Mass.-----	12	9	2	-	Washington, D. C.-----	237	104	10	9
Springfield, Mass.-----	44	30	5	1	Wilmington, Del.-----	56	26	2	8
Waterbury, Conn.-----	34	17	-	1	EAST SOUTH CENTRAL:	672	391	50	35
Worcester, Mass.-----	63	41	4	3	Birmingham, Ala.-----	83	54	3	4
MIDDLE ATLANTIC:	3,335	1,988	178	136	Chattanooga, Tenn.-----	37	22	3	2
Albany, N. Y.-----	54	35	3	5	Knoxville, Tenn.-----	53	38	5	1
Allentown, Pa.-----	36	26	7	-	Louisville, Ky.-----	127	67	16	7
Buffalo, N. Y.-----	158	94	7	5	Memphis, Tenn.-----	145	79	10	11
Camden, N. J.-----	49	30	7	3	Mobile, Ala.-----	55	29	1	4
Elizabeth, N. J.-----	38	28	-	-	Montgomery, Ala.-----	57	32	7	1
Erie, Pa.-----	44	28	7	5	Nashville, Tenn.-----	115	70	5	5
Jersey City, N. J.-----	93	55	7	5	WEST SOUTH CENTRAL:	1,292	697	65	71
Newark, N. J.-----	65	28	4	5	Austin, Tex.-----	38	22	6	3
New York City, N. Y.-----	1,732	1,029	89	58	Baton Rouge, La.-----	38	22	5	3
Paterson, N. J.-----	43	34	3	-	Corpus Christi, Tex.-----	28	15	-	5
Philadelphia, Pa.-----	400	226	4	32	Dallas, Tex.-----	183	93	7	15
Pittsburgh, Pa.-----	179	102	17	6	El Paso, Tex.-----	53	20	2	12
Reading, Pa.-----	55	28	2	1	Fort Worth, Tex.-----	88	52	3	3
Rochester, N. Y.-----	122	72	8	2	Houston, Tex.-----	228	120	7	-
Schenectady, N. Y.-----	35	25	6	1	Little Rock, Ark.-----	72	42	6	2
Scranton, Pa.-----	40	22	1	1	New Orleans, La.-----	200	107	11	10
Syracuse, N. Y.-----	84	58	2	5	Oklahoma City, Okla.-----	112	51	3	10
Trenton, N. J.-----	42	24	3	-	San Antonio, Tex.-----	117	60	2	5
Utica, N. Y.-----	28	21	-	-	Shreveport, La.-----	78	54	8	-
Yonkers, N. Y.-----	38	23	1	2	Tulsa, Okla.-----	57	39	5	3
EAST NORTH CENTRAL:	2,638	1,483	111	141	MOUNTAIN:	469	278	32	33
Akron, Ohio-----	69	44	-	1	Albuquerque, N. Mex.-----	49	20	4	4
Canton, Ohio-----	28	15	4	1	Colorado Springs, Colo.-----	27	14	4	3
Chicago, Ill.-----	734	392	30	37	Denver, Colo.-----	127	71	8	8
Cincinnati, Ohio-----	144	82	6	15	Ogden, Utah-----	21	15	3	-
Cleveland, Ohio-----	240	128	8	13	Phoenix, Ariz.-----	112	64	2	13
Columbus, Ohio-----	142	81	4	6	Pueblo, Colo.-----	22	15	8	1
Dayton, Ohio-----	77	46	5	-	Salt Lake City, Utah-----	57	39	1	2
Detroit, Mich.-----	343	183	11	22	Tucson, Ariz.-----	54	40	2	2
Evansville, Ind.-----	56	31	4	2	PACIFIC:	1,804	1,108	66	66
Flint, Mich.-----	56	31	2	4	Berkeley, Calif.-----	26	17	-	-
Fort Wayne, Ind.-----	42	24	2	3	Fresno, Calif.-----	58	34	3	3
Gary, Ind.-----	19	11	3	1	Glendale, Calif.-----	38	26	1	1
Grand Rapids, Mich.-----	43	30	4	3	Honolulu, Hawaii-----	63	29	1	7
Indianapolis, Ind.-----	145	88	6	9	Long Beach, Calif.-----	96	56	3	4
Madison, Wis.-----	52	29	5	2	Los Angeles, Calif.-----	526	331	24	15
Milwaukee, Wis.-----	135	83	2	7	Oakland, Calif.-----	80	59	4	4
Peoria, Ill.-----	42	24	3	1	Pasadena, Calif.-----	42	36	2	1
Rockford, Ill.-----	38	20	3	3	Portland, Ore.-----	191	119	5	5
South Bend, Ind.-----	43	18	2	2	Sacramento, Calif.-----	55	29	1	2
Toledo, Ohio-----	123	75	6	7	San Diego, Calif.-----	104	50	3	7
Youngstown, Ohio-----	67	48	1	2	San Francisco, Calif.-----	221	137	6	6
WEST NORTH CENTRAL:	865	571	47	21	San Jose, Calif.-----	47	35	2	1
Des Moines, Iowa-----	71	51	1	1	Seattle, Wash.-----	156	85	9	5
Duluth, Minn.-----	13	9	-	1	Spokane, Wash.-----	56	33	1	4
Kansas City, Kans.-----	42	26	-	5	Tacoma, Wash.-----	45	32	1	1
Kansas City, Mo.-----	135	87	4	1	Total	13,175	7,668	677	599
Lincoln, Nebr.-----	29	21	2	1	Cumulative Totals				
Minneapolis, Minn.-----	124	83	6	3	including reported corrections for previous weeks				
Omaha, Nebr.-----	92	61	6	1	All Causes, All Ages-----	146,735			
St. Louis, Mo.-----	205	121	11	4	All Causes, Age 65 and over-----	85,046			
St. Paul, Minn.-----	81	59	5	1	Pneumonia and Influenza, All Ages-----	10,371			
Wichita, Kans.-----	73	53	12	3	All Causes, Under 1 Year of Age-----	6,545			

EPIDEMIOLOGIC NOTES AND REPORTS  
FOLLOW-UP FOOD POISONING – Morton, Mississippi

An outbreak of food poisoning occurred on Sept. 12, 1968, in Morton among students who ate their noon meal in the cafeteria of a consolidated public school (MMWR, Vol. 17, No. 38). Tuna fish salad was the incriminated vehicle on the basis of the differential food-specific attack rates calculated from food histories for those ill and not ill.

The tuna fish salad and nasopharyngeal cultures from nine of 11 food handlers grew coagulase positive *Staphylococcus aureus*. Cultures from three workers as well as the food were all phage type 86. The leftover salad and the positive cultures were analyzed for staphylococcal enterotoxin by means of hemagglutination tests and the immunodiffusion technique with Ouchterlony plates. Type C enterotoxin was identified in the tuna fish salad as well as from cultures of the salad and from the food handlers who prepared it.

(Reported by William G. Roessler, Ph.D., Chief, Bacteriology III Branch, Medical Bacteriology Division, Department of the Army, Fort Detrick, Frederick, Maryland; and the Bacterial Reference Unit, Epidemiologic Services Laboratory Section, Epidemiology Program, NCDC.)

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DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER

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IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE NATIONAL COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

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ATTN: THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT

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

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