Morbidity and Mortality Weekly Report

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Prepared by the COMMUNICABLE DISEASE CENTER *634-5131*

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PROVISIONAL INFORMATION ON SELECTED NOTIFIABLE DISEASES IN THE UNITED STATES AND ON DEATHS IN SELECTED CITIES FOR WEEK ENDED MAY 9, 1964

DIPHTHERIA

A total of 14 cases of diphtheria was reported for the week ended May 9. This brings to 88 the national cumulative total thus far in 1964. For the comparable period of 1963, 109 cases were reported. The 1964 total is the lowest ever recorded in this country for this period.

Four cases were reported from each of 3 States, Maine, Minnesota, and Washington, while single cases were reported from Georgia and Louisiana.

Maine's 4 cases bring to 7 its cumulative total for the year. All 7 cases occurred in a State mental institution in Augusta, and involved female patients aged 40 to 74. Two of the cases were fatal. The first case occurred March 25, the most recent one May 5. Two rounds of immunization have been held for patients and staff; cultures have been taken to detect carriers. Surveillance of additional cases is being conducted.

Minnesota's 4 cases occurred in the vicinity of Canby in Yellow Medicine County, which has reported 9 of the State's 10 cases this year. Six of the 9 cases have occurred in one family, which refused immunization and medical care, until late in the course of the disease. The cases involved children, aged 4 to 17, and occurred from March 31 through May 6. Two cases were fatal; a 4 year old died of respiratory failure despite a tracheotomy and administration of antitoxin late in the course of his illness, and an 11 year old died of myocardial failure. Three additional cases occurred in members of 3 other families which had school or community contact with this family of objectors.

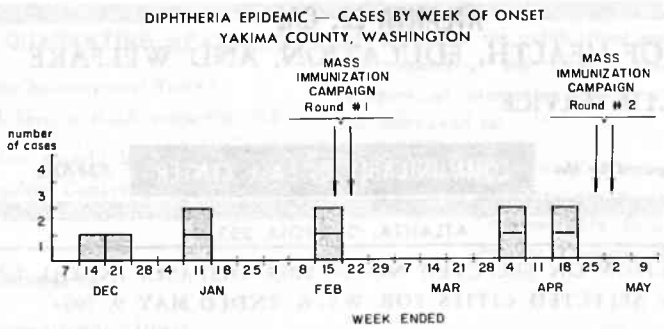
Washington's cases were reported from Yakima County, which has been the site of all 10 cases reported in the State for 1964 (see page 158).

Table 1. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

Disease	19th Week Ended			Cumulative, First 19 Weeks		
	May 9, 1964	May 11, 1963	Median 1959 - 1963	1964	1963	Median 1959 - 1963
Aseptic meningitis	22	17	---	511	409	---
Brucellosis	5	4	10	138	122	200
Diphtheria	14	2	9	88	109	264
Encephalitis, primary infectious	43	42	---	624	540	---
Encephalitis, post-infectious	31		---	312		---
Hepatitis, infectious including serum hepatitis	763	890	890	16,897	18,852	18,852
Measles	28,621	17,937	19,855	281,905	247,275	262,114
Meningococcal infections	52	55	46	1,144	1,136	1,046
Poliomyelitis, Total	1	3	10	25	51	146
Paralytic	1	2	8	19	45	96
Nonparalytic	-	-	---	5	2	---
Unspecified	-	1	---	1	4	---
Streptococcal Sore Throat and Scarlet fever	9,510	6,984	---	202,742	176,856	---
Tetanus	7	4	---	72	72	---
Tularemia	5	1	---	88	71	---
Typhoid fever	8	7	7	125	131	189
Rabies in Animals	97	105	85	1,716	1,485	1,511

Table 2. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Psittacosis:	13
Botulism:	6	Rabies in Man:	-
Leptospirosis:	7	Smallpox:	-
Malaria: N. Y. Upstate-1, Vt.-1, Okla.-1	33	Typhus-	
Plague:	-	Murine:	4
		Rky Mt. Spotted: Wyo.-1, Va.-1, N.C.-1, Okla-1, PR-2	11



DIPHTHERIA – Washington

Yakima County, Washington has experienced a smoldering epidemic of diphtheria, totalling 10 cases, over a 4 month period from December through April (see epidemic curve above). All cases occurred in the vicinity of the Yakima Indian Reservation in lower Yakima Valley; all but one case involved Indians.

The epidemic was discovered in early January when the diagnosis of diphtheria was made in a 19-year-old unemployed Indian male (case #2) who had become ill December 17 with a sore throat, dysphagia and hoarseness. Two days later he went to the U. S. Public Health Service Indian Clinic with a temperature of 100°F. A "dirty grayish membrane" covered his large red tonsils. He had cellulitis of his soft palate and oropharynx, as well as mild palatal paralysis. The clinical diagnosis was diphtheria or streptococcal pharyngitis; the patient received penicillin after culture. The following morning he appeared much improved; penicillin therapy was continued for 10 days. The patient disappeared from follow-up until New Year's Eve when he was seen at a hospital because of knee trauma, suffered secondary to alcoholic intoxication. At that time, the positive results of his throat culture became known and the patient was given 10,000 units of diphtheria antitoxin.

Investigation disclosed 3 other cases, as well as 7 diphtheria carriers among the household and classroom contacts of the 4 cases (see table below).

Because the cases and carriers were concentrated among the Indians, who had low levels of immunization, and who lived in crowded households, the health officials conducted a mass immunization campaign using jet injectors between February 13 and 22.

While the immunization campaign was in progress, 2 unimmunized Indian children experienced exudative pharyngitis and were later proved to be diphtheria (cases 5 and 6). By late April, 4 other cases were reported. Three additional carriers were detected from among the contacts of these 6 cases. None of the additional cases or carriers received vaccine in the first round.

Of the total 10 cases, 7 were mild and 3 moderately severe with evidence of nasopharyngeal paralysis but not of cardiac involvement, bull neck, pneumonia, or nephritis. No tracheostomies were performed. All survived; only case one received diphtheria antitoxin. Laboratory studies identified *gravis* strains in 9 cases, *mitis* in one.

Analysis of the carriers revealed that household contacts were more at risk than school contacts, as seen in the following table:

Type of Contact	No. Cultured	No. Positive	% Positive
Household	154	9	5.8
School	60	1	1.6
Total	214	10	4.6

Health officials held the second round of the mass immunization campaign April 28 through May 2. Approximately one-half of the county's Lower Valley population has responded to the 2 rounds.

(Reported by E. Ager, M.D., Chief, Division of Epidemiology, Washington State Department of Health, Leland S. Harris, M.D., District Health Officer, Yakima, and a team from CDC.)

Case No.	Age & Sex	Ethnic Group	Onset	Immunization Status			Symptoms		Signs		
				1°	Total	Date Last	Fever (max)	Sore Throat	Paralysis	Membrane	Exudate
1.	27/F	Indian	12/8	0	0	–	x	x	x	x	x
2.*	19/M	Indian	12/17	0	0	–	(103°)	x	x	x	x
3.**	11/F	Indian	1/7	yes	3	9/58	(101°)	x	o	o	x
4.*	13/F	Indian	1/8	no	1	3/62	x	x	o	Unk.	Unk.
5.**	2/F	Indian	2/12	0	0	–	x	x	o	x	x
6.**+	3/F	Indian	2/12	0	0	–	(102°)	x	o	o	x
7.	19/F	Indian	4/1	0	0	–	(99.6°)	x	x	x	x
8.***	10/F	Mexican	4/3	Unknown			(104.6°)	x	o	o	x
9.	15/M	Ind. Mex	4/12	0	0	–	x	x	o	o	x
10.	13/F	Indian	4/18	yes	3	1/60	(99.4°)	x	o	o	o

*Contact Case No. 1; **Contact Case No. 2; ***Contact Case No. 7; + – Bilateral Otitis Media; x – Yes; o – No

TETANUS – New Jersey

Two cases of tetanus, both fatal and diagnosed clinically, were reported from New Jersey for the week ended April 18. In neither case is the history of previous tetanus immunization known.

Case 1, a 29-year-old Negro female, consulted a physician April 2, because of a 3-day history of nuchal rigidity and increasing trismus to the point where she could not open her mouth. The patient gave no history of cuts, infections, or lacerations during the 3 months prior to onset; no evidence of such could be found on physical examination. She was admitted to a hospital, where laboratory studies, including spinal tap and blood cultures, were unrevealing. A throat culture grew streptococci. A diagnosis of tetanus was made on the basis of clinical evidence.

The patient was treated with 100,000 units of tetanus antitoxin intravenously daily, 10,000,000 units of Penicillin daily, sedatives and muscle relaxants. On April 3, a tracheostomy was performed because of respiratory difficulty; breathing was assisted with a respirator.

On April 6, the patient developed bronchopneumonia. A broad spectrum antibiotic was added to the above regimen. The patient became opisthotonic on April 7, and died later that day.

At autopsy there were no abnormal findings on gross examination. The results of the microscopic examination are not yet available. The uterus showed no evidence of a pregnancy; the diagnosis of a septic abortion appears doubtful. A post-mortem vaginal culture was negative for Clostridia.

Case 2, a 58-year-old Negro female, sustained a 6-inch cut on her left knee, after falling on outdoor stairs April 2. She was taken to a hospital where the cut was cleaned and repaired with cat gut and wire suture. She was given tetanus toxoid and Penicillin. Four days later, the patient saw a private doctor who described the wound as red and inflamed. He treated her with a broad spectrum antibiotic and Varidase, hot soaks and elevation of the extremity. On April 7, the patient complained of trismus and nuchal rigidity; she was hospitalized with a diagnosis of tetanus.

On admission, the wound was opened and bathed with a hydrogen peroxide solution. She received 20,000 units of tetanus antitoxin intramuscularly and an equal amount intravenously, administered over a 12 hour period. She also received 1,200,000 units of Penicillin. In the evening the patient was sedated. She died the following morning, April 8. The patient had no respiratory difficulty or seizures during her hospitalization.

Gross examination at autopsy showed minimal cerebral edema and basilar congestion in both lungs. A smear of the wound taken at autopsy showed gram positive rods; a culture grew *Clostridium welchii. Cl. tetani* could not be identified.

(Reported by William J. Dougherty, M.D., M.P.H., Director, Division of Preventable Disease Control, New Jersey State Health Department.)

Editor's Note: Fifty percent of wounds contaminated by Clostridial organisms yielded more than one type of Clostridia[1]; the average number of species cultured per contaminated wound was 2.62. *C. tetani* is more difficult to isolate in the laboratory than *C. welchii*.

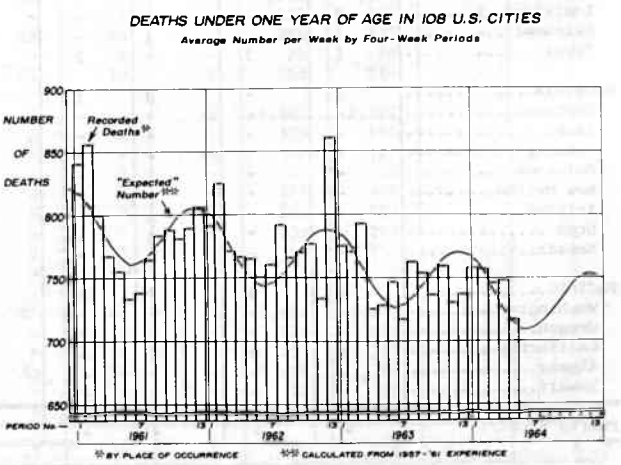
[1]MacLennan, J. D., Anaerobic Infections of War Wounds, Lancet 2:94-99, 1943.

INFANT DEATHS IN 108 CITIES

The weekly average number of infant deaths in 108 cities for the four-week period ending May 9 was 717 as compared with an expected 716 weekly average.

Total Deaths Under One Year of Age Recorded in 108 Cities

	Week Ending				4 Week	Weekly
	4/18	4/25	5/2	5/9	Total	Average
Observed	665	737	747	720	2,869	717
Expected	720	717	715	713	2,865	716
Excess	– 55	20	32	7	4	1



(See Table, page 163)

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
MAY 9, 1964 AND MAY 11, 1963 (19th WEEK)

Area	Aseptic Meningitis		Encephalitis Primary	Encephalitis Post-Inf.	Poliomyelitis, Total Cases		Cumulative		Poliomyelitis, Paralytic		Cumulative	
	1964	1963	1964	1964	1964	1963	1964	1963	1964	1963	1964	1963
UNITED STATES...	22	17	43	31	1	3	25	51	1	2	19	45
NEW ENGLAND.....	-	-	3	-	-	1	-	1	-	1	-	1
Maine.....	-	-	-	-	-	1	-	1	-	1	-	1
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts.....	-	-	3	-	-	-	-	-	-	-	-	-
Rhode Island.....	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut.....	-	-	-	-	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	3	1	1	3	-	-	4	5	-	-	4	5
New York City.....	-	-	-	-	-	-	1	-	-	-	1	-
New York, Up-State.	2	-	1	-	-	-	2	4	-	-	2	4
New Jersey.....	1	-	-	-	-	-	1	-	-	-	1	-
Pennsylvania.....	-	1	-	3	-	-	-	1	-	-	-	1
EAST NORTH CENTRAL...	4	4	8	6	-	1	3	14	-	-	3	11
Ohio.....	1	1	2	-	-	-	2	4	-	-	2	3
Indiana.....	-	-	1	-	-	1	-	1	-	-	-	-
Illinois.....	2	-	2	5	-	-	1	6	-	-	1	5
Michigan.....	1	3	3	1	-	-	-	3	-	-	-	3
Wisconsin.....	-	-	-	-	-	-	-	-	-	-	-	-
WEST NORTH CENTRAL...	-	2	4	-	-	-	-	1	-	-	-	1
Minnesota.....	-	2	2	-	-	-	-	1	-	-	-	1
Iowa.....	-	-	2	-	-	-	-	-	-	-	-	-
Missouri.....	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota.....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota.....	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska.....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas.....	-	-	-	-	-	-	-	-	-	-	-	-
SOUTH ATLANTIC.....	-	1	14	2	1	1	12	6	1	1	9	5
Delaware.....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland.....	-	-	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia..	-	1	-	-	-	-	-	-	-	-	-	-
Virginia.....	-	-	1	2	-	1	-	1	-	1	-	1
West Virginia.....	-	-	-	-	-	-	1	-	-	-	1	-
North Carolina.....	-	-	1	-	-	-	5	2	-	-	2	2
South Carolina.....	-	-	-	-	-	-	1	-	-	-	1	-
Georgia.....	-	-	-	-	-	-	1	1	-	-	1	-
Florida.....	-	-	12	-	1	-	4	2	1	-	4	2
EAST SOUTH CENTRAL...	2	-	2	-	-	-	2	3	-	-	1	2
Kentucky.....	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee.....	-	-	1	-	-	-	1	1	-	-	-	1
Alabama.....	2	-	-	-	-	-	1	2	-	-	1	1
Mississippi.....	-	-	1	-	-	-	-	-	-	-	-	-
WEST SOUTH CENTRAL...	4	3	1	3	-	-	2	10	-	-	1	10
Arkansas.....	-	-	-	1	-	-	-	-	-	-	-	-
Louisiana.....	2	-	-	-	-	-	-	8	-	-	-	8
Oklahoma.....	1	-	1	-	-	-	-	-	-	-	-	-
Texas.....	1	3	-	2	-	-	2	2	-	-	1	2
MOUNTAIN.....	1	-	3	1	-	-	2	1	-	-	1	1
Montana.....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho.....	-	-	-	-	-	-	-	1	-	-	-	1
Wyoming.....	-	-	-	-	-	-	-	-	-	-	-	-
Colorado.....	-	-	1	-	-	-	1	-	-	-	1	-
New Mexico.....	-	-	-	-	-	-	1	-	-	-	-	-
Arizona.....	1	-	1	-	-	-	-	-	-	-	-	-
Utah.....	-	-	-	1	-	-	-	-	-	-	-	-
Nevada.....	-	-	1	-	-	-	-	-	-	-	-	-
PACIFIC.....	8	6	7	16	-	-	-	10	-	-	-	9
Washington.....	-	-	-	-	-	-	-	1	-	-	-	1
Oregon.....	-	-	-	-	-	-	-	1	-	-	-	1
California.....	8	6	7	16	-	-	-	8	-	-	-	7
Alaska.....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii.....	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	2	-	-	-	2

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

MAY 9, 1964 AND MAY 11, 1963 (19th WEEK) - Continued

Area	Brucellosis		Diphtheria		Infectious Hepatitis including Serum Hepatitis						Typhoid Fever	
		Cum.		Cum.	Total	Under 20 years	20 years and over	Age Unknown	Cumulative			Cum.
	1964	1964	1964	1964	1964	1964	1964	1964	1964	1963	1964	1964
UNITED STATES...	5	138	14	88	763	403	296	64	16,897	18,852	8	125
NEW ENGLAND.....	-	2	4	10	68	26	38	4	1,778	2,177	-	7
Maine.....	-	-	4	7	18	10	7	1	615	1,012	-	-
New Hampshire.....	-	-	-	-	3	-	2	1	134	151	-	-
Vermont.....	-	-	-	-	10	6	2	2	222	29	-	-
Massachusetts.....	-	2	-	3	6	1	5	-	345	640	-	4
Rhode Island.....	-	-	-	-	5	-	5	-	86	50	-	3
Connecticut.....	-	-	-	-	26	9	17	-	376	295	-	-
MIDDLE ATLANTIC.....	-	2	-	4	151	79	72	-	3,844	3,628	-	20
New York City.....	-	-	-	1	15	4	11	-	552	473	-	6
New York, Up-State.	-	1	-	-	74	48	26	-	1,703	1,620	-	4
New Jersey.....	-	-	-	2	35	9	26	-	709	570	-	1
Pennsylvania.....	-	1	-	1	27	18	9	-	880	965	-	9
EAST NORTH CENTRAL...	-	17	-	6	143	83	52	8	2,579	3,003	3	28
Ohio.....	-	-	-	-	39	20	15	4	679	881	-	17
Indiana.....	-	1	-	-	5	4	1	-	220	275	1	4
Illinois.....	-	12	-	6	46	25	18	3	418	660	1	4
Michigan.....	-	2	-	-	48	31	17	-	1,082	1,037	1	3
Wisconsin.....	-	2	-	-	5	3	1	1	180	150	-	-
WEST NORTH CENTRAL...	4	74	4	18	35	20	7	8	973	856	-	10
Minnesota.....	-	2	4	10	6	4	1	1	85	147	-	-
Iowa.....	2	42	-	-	4	1	3	-	143	156	-	3
Missouri.....	-	4	-	-	12	9	2	1	247	334	-	3
North Dakota.....	-	2	-	-	1	-	1	-	38	21	-	-
South Dakota.....	1	12	-	1	-	-	-	-	97	36	-	1
Nebraska.....	-	10	-	-	-	-	-	-	20	64	-	-
Kansas.....	1	2	-	7	12	6	-	6	343	98	-	3
SOUTH ATLANTIC.....	-	8	1	20	56	37	16	3	1,618	2,018	3	29
Delaware.....	-	-	-	-	1	1	-	-	35	27	-	-
Maryland.....	-	-	-	-	17	13	4	-	317	216	-	1
Dist. of Columbia..	-	-	-	-	-	-	-	-	27	62	-	-
Virginia.....	-	2	-	-	7	2	4	1	236	451	1	7
West Virginia.....	-	-	-	-	3	3	-	-	275	307	-	-
North Carolina.....	-	1	-	-	11	7	4	-	311	530	1	10
South Carolina.....	-	-	-	3	-	-	-	-	56	79	-	2
Georgia.....	-	3	1	15	3	2	1	-	39	84	-	1
Florida.....	-	2	-	2	14	9	3	2	322	262	1	8
EAST SOUTH CENTRAL...	-	8	-	4	54	38	14	2	1,165	1,949	1	16
Kentucky.....	-	3	-	-	12	8	2	2	501	574	-	8
Tennessee.....	-	1	-	1	20	18	2	-	404	790	1	5
Alabama.....	-	3	-	2	14	6	8	-	163	278	-	2
Mississippi.....	-	1	-	1	8	6	2	-	97	307	-	1
WEST SOUTH CENTRAL...	1	10	1	14	71	46	23	2	1,232	1,266	1	8
Arkansas.....	1	2	-	-	2	-	2	-	131	149	1	4
Louisiana.....	-	1	1	4	25	15	10	-	261	233	-	-
Oklahoma.....	-	1	-	-	1	-	1	-	72	70	-	3
Texas.....	-	6	-	10	43	31	10	2	768	814	-	1
MOUNTAIN.....	-	10	-	1	52	9	7	36	1,101	1,282	-	1
Montana.....	-	-	-	-	3	3	-	-	105	191	-	-
Idaho.....	-	-	-	-	14	-	-	14	97	197	-	-
Wyoming.....	-	-	-	-	3	1	2	-	37	20	-	-
Colorado.....	-	-	-	-	5	-	1	4	327	258	-	-
New Mexico.....	-	1	-	1	6	3	2	1	168	158	-	-
Arizona.....	-	1	-	-	10	-	-	10	233	293	-	1
Utah.....	-	7	-	-	4	2	2	-	98	155	-	-
Nevada.....	-	1	-	-	7	-	-	7	36	10	-	-
PACIFIC.....	-	7	4	11	133	65	67	1	2,607	2,673	-	6
Washington.....	-	-	4	10	7	4	3	-	274	447	-	1
Oregon.....	-	1	-	-	15	6	8	1	297	367	-	-
California.....	-	6	-	1	109	55	54	-	1,908	1,784	-	5
Alaska.....	-	-	-	-	1	-	1	-	78	59	-	-
Hawaii.....	-	-	-	-	1	-	1	-	50	16	-	-
Puerto Rico	-	-	-	3	9	9	-	-	280	266	-	6

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

MAY 9, 1964 AND MAY 11, 1963 (19th WEEK) - Continued

Area	Measles	Meningococcal Meningitis			Streptococcal Sore Throat and Scarlet Fever		Tetanus		Tularemia		Rabies in Animals	
			Cumulative					Cum.		Cum.		Cum.
	1964	1964	1964	1963	1964	1963	1964	1964	1964	1964	1964	1964
UNITED STATES...	28,621	52	1,144	1,136	9,510	6,984	7	72	5	88	97	1,716
NEW ENGLAND.....	721	1	32	74	933	820	-	-	-	-	2	12
Maine.....	90	-	3	12	23	133	-	-	-	-	2	10
New Hampshire.....	6	-	-	2	10	4	-	-	-	-	-	1
Vermont.....	37	-	1	2	12	17	-	-	-	-	-	1
Massachusetts.....	157	-	13	36	153	136	-	-	-	-	-	-
Rhode Island.....	80	-	2	6	57	61	-	-	-	-	-	-
Connecticut.....	351	1	13	16	678	469	-	-	-	-	-	-
MIDDLE ATLANTIC.....	2,849	6	108	161	566	523	-	3	-	-	4	36
New York City.....	652	-	19	22	37	31	-	-	-	-	-	-
New York, Up-State.	617	4	42	53	370	303	-	-	-	-	4	35
New Jersey.....	827	-	14	23	71	85	-	2	-	-	-	-
Pennsylvania.....	753	2	33	63	88	104	-	1	-	-	-	1
EAST NORTH CENTRAL...	7,368	9	181	186	1,484	921	1	5	-	8	7	203
Ohio.....	1,053	3	51	52	257	123	-	1	-	1	4	105
Indiana.....	2,130	1	31	23	155	174	1	1	-	-	-	9
Illinois.....	1,228	3	40	29	149	160	-	2	-	5	-	48
Michigan.....	1,933	1	43	60	549	278	-	1	-	1	2	17
Wisconsin.....	1,024	1	16	22	374	186	-	-	-	1	1	24
WEST NORTH CENTRAL...	2,082	4	70	70	392	229	-	3	1	22	46	564
Minnesota.....	25	1	14	12	34	17	-	-	-	1	12	168
Iowa.....	1,596	-	3	3	125	89	-	1	-	1	11	190
Missouri.....	23	3	39	26	24	4	-	2	-	13	8	101
North Dakota.....	377	-	5	3	144	63	-	-	-	-	7	30
South Dakota.....	-	-	-	4	23	3	-	-	-	-	3	48
Nebraska.....	61	-	4	17	4	-	-	-	-	-	3	14
Kansas.....	NN	-	5	5	38	53	-	-	1	7	2	13
SOUTH ATLANTIC.....	2,035	6	248	215	745	814	6	35	1	16	13	254
Delaware.....	11	-	3	1	2	8	-	-	-	-	-	-
Maryland.....	101	-	18	30	95	39	-	2	-	-	-	-
Dist. of Columbia..	4	-	7	4	8	1	-	-	-	-	-	-
Virginia.....	830	2	29	52	234	418	-	4	-	3	6	163
West Virginia.....	299	1	19	12	217	152	1	1	-	-	2	15
North Carolina.....	20	-	42	33	14	15	2	10	-	4	-	2
South Carolina.....	230	1	40	13	29	76	-	3	-	-	-	-
Georgia.....	2	-	18	11	3	2	-	1	1	9	5	44
Florida.....	538	2	72	59	143	103	3	14	-	-	-	30
EAST SOUTH CENTRAL...	4,331	3	115	90	1,539	892	-	9	-	16	8	254
Kentucky.....	448	2	41	20	110	87	-	1	-	1	1	36
Tennessee.....	1,532	-	38	41	1,316	779	-	4	-	11	7	208
Alabama.....	1,723	1	19	13	14	11	-	3	-	3	-	10
Mississippi.....	628	-	17	16	99	15	-	1	-	1	-	-
WEST SOUTH CENTRAL...	4,142	4	105	117	626	623	-	8	3	20	10	255
Arkansas.....	63	-	10	7	1	-	-	2	3	8	4	68
Louisiana.....	4	1	80	49	2	-	-	3	-	-	3	28
Oklahoma.....	53	1	4	22	33	24	-	-	-	11	3	35
Texas.....	4,022	2	11	39	590	599	-	3	-	1	-	124
MOUNTAIN.....	1,028	1	43	40	1,460	1,053	-	2	-	6	-	55
Montana.....	146	-	-	3	69	34	-	-	-	1	-	-
Idaho.....	97	-	1	3	123	92	-	-	-	-	-	-
Wyoming.....	23	-	3	1	14	50	-	1	-	2	-	-
Colorado.....	183	-	9	11	591	412	-	-	-	-	-	-
New Mexico.....	6	1	19	2	308	210	-	1	-	-	-	25
Arizona.....	451	-	3	6	174	145	-	-	-	-	-	30
Utah.....	122	-	2	11	180	100	-	-	-	3	-	-
Nevada.....	-	-	6	3	1	10	-	-	-	-	-	-
PACIFIC.....	4,065	18	242	183	1,765	1,109	-	7	-	-	7	83
Washington.....	1,506	1	19	15	747	418	-	-	-	-	-	-
Oregon.....	450	-	16	10	17	26	-	-	-	-	-	1
California.....	2,059	17	194	148	813	612	-	7	-	-	7	82
Alaska.....	32	-	6	5	103	39	-	-	-	-	-	-
Hawaii.....	18	-	7	5	85	14	-	-	-	-	-	-
Puerto Rico	284	1	15	4	8	21	-	26	-	-	-	9

Table 4 (C). TOTAL DEATHS UNDER 1 YEAR OF AGE IN REPORTING CITIES

(Tables 4(A), 4(B), 4(C), and 4(D) will be published in sequence covering a four-week period.)°

Area	For weeks ending			
	4/18	4/25	5/2	5/9
NEW ENGLAND:				
Boston, Mass.	18	23	7	10
Bridgeport, Conn.	2	1	4	3
Cambridge, Mass.	-	-	-	1
Fall River, Mass.	3	1	-	1
Hartford, Conn.	4	11	9	4
Lowell, Mass.	2	-	-	-
Lynn, Mass.	1	-	-	-
New Bedford, Mass.	1	-	-	1
New Haven, Conn.	3	-	2	4
Providence, R.I.	4	5	-	5
Somerville, Mass.	1	-	2	-
Springfield, Mass.	2	3	4	-
Waterbury, Conn.	-	1	3	-
Worcester, Mass.	4	-	2	1
MIDDLE ATLANTIC:				
Albany, N.Y.	1	4	3	2
Allentown, Pa.	1	2	1	1
Buffalo, N.Y.	7	8	16	6
Camden, N.J.	1	2	5	5
Elizabeth, N.J.	3	1	9	2
Erie, Pa.	2	2	4	2
Jersey City, N.J.	5	8	12	6
Newark, N.J.	3	4	6	3
New York City, N.Y.	75	113	86	81
Paterson, N.J.	2	2	1	3
Philadelphia, Pa.	23	32	21	25
Pittsburgh, Pa.	11	5	4	11
Reading, Pa.	1	1	3	-
Rochester, N.Y.	12	7	10	5
Schenectady, N.Y.	1	2	4	1
Scranton, Pa.	1	-	3	1
Syracuse, N.Y.	3	5	4	2
Trenton, N.J.	1	1	2	-
Utica, N.Y.	2	-	1	-
Yonkers, N.Y.	-	3	1	-
EAST NORTH CENTRAL:				
Akron, Ohio	-	5	5	6
Canton, Ohio	2	5	-	-
Chicago, Ill.	41	34	48	36
Cincinnati, Ohio	13	10	8	14
Cleveland, Ohio	25	3	12	26
Columbus, Ohio	7	5	8	7
Dayton, Ohio	4	8	5	9
Detroit, Mich.	18	23	25	40
Evansville, Ind.	1	1	1	-
Flint, Mich.	4	1	5	5
Fort Wayne, Ind.	5	6	2	1
Gary, Ind.	2	3	7	1
Grand Rapids, Mich.	-	2	3	3
Indianapolis, Ind.	11	12	12	9
Madison, Wis.	5	1	3	3
Milwaukee, Wis.	11	11	7	11
Peoria, Ill.	1	3	2	1
Rockford, Ill.	2	-	-	-
South Bend, Ind.	1	2	-	4
Toledo, Ohio	4	6	4	4
Youngstown, Ohio	1	1	2	-
WEST NORTH CENTRAL:				
Des Moines, Iowa	2	4	2	5
Duluth, Minn.	-	3	1	-
Kansas City, Kans.	3	4	3	5
Kansas City, Mo.	6	14	4	14
Lincoln, Nebr.	-	1	2	4
Minneapolis, Minn.	9	7	4	2
Omaha, Nebr.	10	15	4	4
St. Louis, Mo.	17	7	17	11
St. Paul, Minn.	2	4	4	4
Wichita, Kans.	6	2	5	4
SOUTH ATLANTIC:				
Atlanta, Ga.	6	14	2	10
Baltimore, Md.	17	11	21	21
Charlotte, N.C.	2	2	5	5
Jacksonville, Fla.	6	5	2	7
Miami, Fla.	4	6	4	3
Norfolk, Va.	7	1	3	9
Richmond, Va.	3	7	5	3
Savannah, Ga.	1	6	2	2
St. Petersburg, Fla.	3	-	3	2
Tampa, Fla.	2	5	2	3
Washington, D.C.	8	21	26	25
Wilmington, Del.	3	2	3	2
EAST SOUTH CENTRAL:				
Birmingham, Ala.	4	8	4	4
Chattanooga, Tenn.	2	-	5	4
Knoxville, Tenn.	2	-	4	3
Louisville, Ky.	5	10	13	9
Memphis, Tenn.	14	10	6	12
Mobile, Ala.	1	5	5	2
Montgomery, Ala.	2	-	3	1
Nashville, Tenn.	6	6	5	6
WEST SOUTH CENTRAL:				
Austin, Tex.	1	3	5	2
Baton Rouge, La.	2	4	-	4
Corpus Christi, Tex.	-	3	-	1
Dallas, Tex.	9	14	12	13
El Paso, Tex.	3	4	3	7
Fort Worth, Tex.	6	4	5	7
Houston, Tex.	14	21	15	11
Little Rock, Ark.	9	2	2	3
New Orleans, La.	16	14	26	17
Oklahoma City, Okla.	9	6	7	3
San Antonio, Tex.	11	14	9	7
Shreveport, La.	4	3	-	3
Tulsa, Okla.	2	2	1	4
MOUNTAIN:				
Albuquerque, N. Mex.	6	2	2	2
Colorado Springs, Colo.	4	1	2	2
Denver, Colo.	12	10	10	15
Ogden, Utah	-	2	1	3
Phoenix, Ariz.	5	6	3	2
Pueblo, Colo.	1	1	1	-
Salt Lake City, Utah	5	2	3	1
Tucson, Ariz.	1	-	6	2
PACIFIC:				
Berkeley, Calif.	-	-	1	-
Fresno, Calif.	5	6	3	3
Glendale, Calif.	1	-	1	1
Honolulu, Hawaii	3	8	3	7
Long Beach, Calif.	3	5	5	7
Los Angeles, Calif.	28	37	55	33
Oakland, Calif.	4	1	6	6
Pasadena, Calif.	1	1	-	2
Portland, Oreg.	2	3	7	5
Sacramento, Calif.	1	2	4	4
San Diego, Calif.	7	7	4	3
San Francisco, Calif.	6	3	9	8
San Jose, Calif.	2	4	1	8
Seattle, Wash.	4	6	4	10
Spokane, Wash.	-	1	4	1
Tacoma, Wash.	-	3	4	1
San Juan, P.R.	3	1	(---)	(---)

*Estimate - based on average percent of divisional total.
Totals for previous weeks include reported corrections.

NOTE: All deaths by place of occurrence.

°Current Week Mortality for 108 Selected Cities

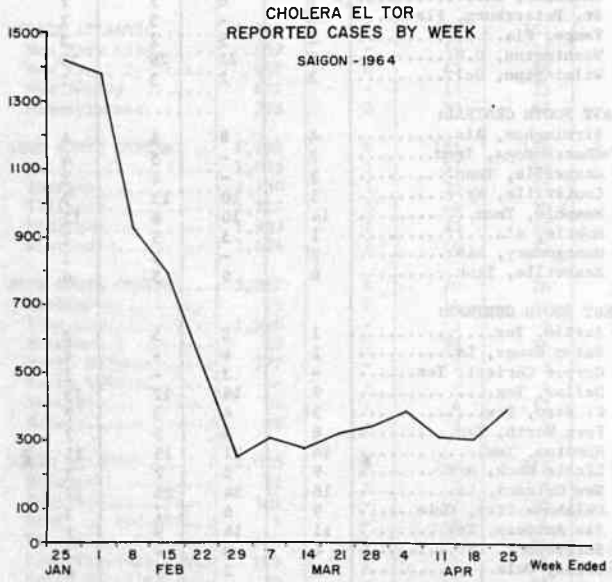
4(A) Total Mortality, all ages..... 11,180
4(B) Pneumonia-Influenza Deaths, all ages..... 437
4(C) Total Deaths under 1 Year of Age..... 720
4(D) Total Deaths, Persons 65 years and over..... 6,260

INTERNATIONAL NOTES – QUARANTINE MEASURES

CHOLERA – Viet Nam

As of April 25, a total of 10,981 cases of cholera El Tor, including 607 deaths, has been reported throughout the Republic of Viet Nam. Laboratory confirmation was obtained in 2,094 cases, including 120 fatal cases.

The epidemic began in January and the disease has since spread successively to most of the local areas of the country. The ports of Saigon, Nhatrang, and Danang (Tourane) are infected.



An epidemic curve of the cases of cholera reported in Saigon since January is shown above. During the first 2 weeks of January, 197 cases were reported; the graph depicts weekly reports after January 19.

(Reported in Weekly Epidemiological Record, No. 18, World Health Organization, May 1, 1964.)

In addition to the established procedures for reporting morbidity and mortality, the Communicable Disease Center welcomes accounts of interesting outbreaks or cases. Such accounts should be addressed to:

Lawrence K. Altman, M.D., Editor
Morbidity and Mortality Weekly Report
Communicable Disease Center
Atlanta, Georgia 30333

Notes: These provisional data are based on weekly telegrams to the Communicable Disease Center by the individual State health departments.
Symbols: - - - Data not available
- Quantity zero
Procedures for construction of various mortality curves may be obtained from Statistics Section, Communicable Disease Center, Public Health Service, U. S. Department of Health, Education, and Welfare, Atlanta, Georgia 30333.

The Morbidity and Mortality Weekly Report, with a circulation of 11,000 is published by the Communicable Disease Center, Atlanta, Georgia.

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