

COMMUNICABLE DISEASE CENTER

Morbidity and Mortality



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REPORT

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

PUBLIC HEALTH SERVICE

EPIDEMIOLOGIC NOTES AND REPORTS ENCEPHALOPATHY - Maryland

Between March 1 and March 9, 1966, four children in Baltimore, Maryland, developed severe encephalopathy of unknown etiology. The patients lived in widely separated areas in and around Baltimore and, other than the dates of onset being within a 9-day period of time, there appears to have been no common relationship. As shown in Table 1, the ages of the patients were 5 years, 8 years, 9 years, and 11 years respectively; the last was the only female. Three of the patients died within 3 days of the onset of the illness; the fourth patient died 13 days after onset, following 8 days in coma.

CONTENTS

Epidemiologic Notes and Reports	
Encephalopathy - Maryland	117
Current Trends - Influenza	119
International Notes - Quarantine Measures	124

Characteristically, the patients were previously healthy children who experienced a mild prodromal illness, lasting 2 to 5 days, which consisted of fever, headache, general malaise, nausea and vomiting. Two of the patients then experienced a distinct period of improvement during

(Continued on page 118)

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

DISEASE	14th WEEK ENDED		MEDIAN 1961 - 1965	CUMULATIVE, FIRST 14 WEEKS		
	APRIL 9, 1966	APRIL 10, 1965		1966	1965	MEDIAN 1961 - 1965
Aseptic meningitis	23	29	29	389	415	324
Brucellosis	4	4	10	50	54	91
Diphtheria	5	5	6	40	62	91
Encephalitis, primary:						
Arthropod-borne & unspecified	28	28	---	327	417	---
Encephalitis, post-infectious	20	17	---	229	204	---
Hepatitis, serum	39	725	892	335	11,036	14,697
Hepatitis, infectious	621			9,825		
Measles (rubeola)	7,561	11,920	15,907	101,694	128,735	166,302
Poliomyelitis, Total (including unspecified)	---	---	2	6	6	40
Paralytic	---	---	2	5	4	35
Nonparalytic	---	---	---	---	2	---
Meningococcal infections, Total	121	78	58	1,423	1,212	844
Civilian	107	70	---	1,232	1,115	---
Military	14	8	---	191	97	---
Rubella (German measles)	1,753	---	---	18,935	---	---
Streptococcal sore throat & Scarlet fever	10,510	11,553	9,790	164,878	157,837	139,570
Tetanus	1	1	---	25	51	---
Tularemia	---	1	---	47	55	---
Typhoid fever	4	5	8	72	94	94
Typhus, tick-borne (Rky. Mt. Spotted fever)	---	---	---	9	6	---
Rabies in Animals	95	114	101	1,184	1,432	1,112

NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Botulism:	1
Leptospirosis:	9	Trichinosis: N.Y.C.-1, Pa.-1, Ind.-1, Minn.-1, Iowa-1	31
Malaria: N.J.-1, N.C.-2, Va.-1, Ky.-1, Calif.-1	83	Rabies in Man: Colo.-1	1
Psittacosis: N.C.-1	14	Rubella, Congenital Syndrome: Minn.-1	10
Typhus, murine: Ark.-1, Texas-1, P.R.-1	6		

EPIDEMIOLOGIC NOTES AND REPORTS

ENCEPHALOPATHY - Maryland

(Continued from front page)

one day. All four patients subsequently developed lethargy, disorientation, delirium, stupor and convulsions. A rapid downhill course within 24-36 hours resulted in respiratory arrest and death in three instances; the patient who survived for 13 days was in a respirator for 8 days (Table 1).

The white blood counts among the four patients were 10, 15, 16 and 20 thousand, respectively. None of the patients were hypoglycemic on hospital admission. Three of the four patients had atraumatic spinal taps, and less than 7 white blood cells were seen in each sample of cerebrospinal fluid. Serum transaminase determinations were performed on one of the patients, and values ranged from 200 to 300 Karmen Units. That patient's bilirubin was normal. None of the four patients had palpable livers or were clinically jaundiced.

On postmortem examination marked cerebral edema with flattening of the cerebral convolutions was found in all cases. The brain tissue has since been examined microscopically in three of the cases but infiltration of inflammatory cells was not observed. The liver of one of the patients on gross examination was pale and swollen, and on microscopic examination there was extensive fatty infiltration. This fatty change also appeared in the proximal tubules of the kidney. The fatty change in both organs was uniformly distributed in fine droplets. Two other patients, however, showed only minimal fatty changes in these organs. To date, only the liver of the fourth patient has been examined microscopically and it has shown no fatty infiltration. Histological studies are continuing.

Virological and toxicological studies are currently in progress, although there is neither a uniform history of exposure to other illnesses nor any history of common exposure to drugs or potential toxic agents.

(Reported by Dr. John H. Janney, State Epidemiologist, Maryland State Health Department; and an EIS Officer.)

Editorial Note:

These cases bear a striking similarity to a syndrome that has recently been reported from many parts of the

world¹⁻⁴. This syndrome is characterized by an initial febrile illness with upper respiratory symptoms, vomiting, lethargy, convulsions, diffuse nonlocalizing neurological signs, progressing rapidly into coma with disturbed respiratory rhythm and death. Laboratory findings frequently include hypoglycemia and low CSF glucose. There is usually an absence of cells in the cerebrospinal fluid. On postmortem examination there is massive cerebral edema without the inflammatory changes in the brain tissue characteristic of viral encephalitis. There is extensive fatty infiltration of the liver and proximal renal tubules. In spite of the marked fatty change observed in these organs, the cellular architecture is usually retained without the presence of areas of necrosis.

While clinical courses and physical findings of the four Maryland cases closely resembled this syndrome, they were not characterized by low blood or CSF glucose. There was marked cerebral edema without inflammatory changes in the brain tissue, but only one case showed the fatty infiltration of the liver and the proximal renal tubules. The uniform occurrence of a prodromal febrile illness and a subsequent course compatible with clinical encephalitis both support the hypothesis of infectious etiology. However, absence of inflammatory changes in the brain tissue and the lack of uniform success of viral isolation attempts does not support this hypothesis. Likewise no evidence has been elicited of a common toxic exposure. The etiology of this syndrome remains obscure.

References

1. Golden, G. S., and Duffell, D.: Encephalopathy and fatty change in the liver and kidney. *Pediatrics* 36:67, 1965.
2. Randolph, M., and others: Encephalopathy, hepatitis and fatty accumulation in viscera. *Amer J Dis Child* 110:95, July 1965.
3. Reye, R. D. K., and others: Encephalopathy and fatty degeneration of the viscera: A disease entity in childhood. *Lancet*:749, Oct. 12, 1963.
4. Utian, H. L., and others: "White liver" disease. *Lancet*: 1042, Nov. 14, 1964.

Table 1

Patient	Age and Sex	Onset	Death	Fever	Headache	Nausea	Vomiting	Cough	Rhinorrhea	Diarrhea	Abdominal Pains	Nuchal Rigidity	Convulsions
1.	8M	3/1	3/4	+	+	+	+	+	+	-	-	-	+
2.	9M	3/6	3/19	+	+	+	+	-	+	+	+	-	+
3.	5M	3/8	3/11	+	-	+	+	-	-	+	+	-	+
4.	11F	3/10	3/13	+	+	+	+	-	-	-	-	-	+

CURRENT TRENDS - INFLUENZA

Several additional States have reported laboratory confirmed influenza outbreaks during the past week. Oregon and Utah have both reported type A2 virus isolations. The Arizona and Montana outbreaks have been confirmed serologically as due to type A. In Nebraska a type B epidemic in a rural area has been confirmed with several isolates also obtained from sporadic cases in Omaha. In California where a major A2 outbreak has been occurring this year, there have been several isolates of type B virus made simultaneously in the San Francisco area which are not associated with outbreaks otherwise confirmed as type B. The influenza-like illness which occurred in eastern Tennessee has now been confirmed serologically as type B influenza (MMWR, Vol. 15, No. 11).

Excess mortality due to influenza and pneumonia deaths as measured in 122 United States cities continues to decline, although still remaining above the epidemic threshold. Correlating with this is the decline in mortality in the Mountain and Pacific Regions.

(Reported by the Influenza-Respiratory Disease Unit, CDC.)

Nebraska

An outbreak of influenza-like illness occurred in the school district of Polk, approximately 60 miles west of Lincoln, Nebraska, during the last week of February and the first 2 weeks of March. Common symptoms were malaise, aching of the muscles of the neck, arms and legs, with fever, chills and headache; rhinorrhea, ocular pain and conjunctivitis occurred later in some instances. Some of the children affected had headache, fever and mild sore throat for one day, felt well enough to return to school the next day and then had a relapse. Generally the illness lasted for 4 days to one week and there was some residual fatigue thereafter.

The most striking feature of the outbreak was the excessive rate of absenteeism from the high school. From March 7 through March 10, 55 of 105 high school students were absent with a peak of 39 absences on March 10. There was much less absenteeism in the elementary school where an additional factor was an outbreak of chickenpox in the primary grades.

On March 12 and 13 a telephone survey of 73 families was made to determine the extent of the epidemic. Table 2 shows the attack rate by age of the 233 individuals covered by the survey. The overall attack rate was 23 percent; the highest rate, 57 percent, occurred in the 15 to 19 year age group.

Type B influenza virus has been isolated from this outbreak.

(Reported by Dr. E.A. Rogers, Director of Health, Nebraska Department of Health; and EIS Officers from the CDC Kansas City Field Station.)

Table 2
Attack Rates By Age From A Telephone Survey
of 73 Families
Polk, Nebraska, 1966

Age Group	Number Ill	Number Persons	Percent Ill
0-4	2	14	14
5-9	9	22	41
10-14	9	24	37
15-19	17	30	57
20-39	3	39	8
40-59	8	59	14
60+	5	45	11
Total	53	233	23

Maine

A small outbreak of type B influenza occurred at the U.S. Naval Air Station in Cumberland County, Maine, in February 1966. The outbreak was first suspected during the week of February 6 when increased numbers of febrile respiratory illness were seen in the Station's medical clinics serving both military personnel and their dependents. Although the total number of clinic visits by military personnel increased only slightly, the proportion of individuals with illnesses suggestive of influenza accounted for approximately one-third of these visits. During the following week, the prevalence of the influenza-like disease persisted at the increased level and thereafter declined.

Epidemiological investigations, which included a review of medical records, of 492 of 720 (68.3 percent) military personnel who reported to sick call between February 1 and 28, showed that 195 (20.5 percent) had an oral temperature of 100° F. or more at the time of the first visit to the clinic. Approximately two-thirds of the total 492 individuals had received influenza vaccine. The same proportion of vaccination was observed both among persons reporting influenza-like illnesses and those reporting non-respiratory diseases.

Specimens for virus isolation and serological testing were collected from 23 suspect influenza cases during the acute phase of illness. Type B influenza virus has been identified from one of the specimens and serological evidence of type B infection demonstrated in 9 of 16 patients from whom acute-convalescent serum specimens were obtained.

(Reported by Captain R.J. Martin, M.C., Senior Medical Officer, Naval Air Station Hospital, Brunswick, Maine; Captain Jack Millar, Director, Preventive Medicine Division, Department of the Navy, Washington, D.C., and an epidemiological team from CDC.)

Morbidity and Mortality Weekly Report

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

APRIL 9, 1966 AND APRIL 10, 1965 (14th WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	ENCEPHALITIS			DIPHTHERIA		HEPATITIS		
				Primary including unap. cases		Post- Infectious			Serum	Infectious	Both Types
	1966	1965		1966	1966	1965	1966	1966	1965	1966	1966
UNITED STATES...	23	29	4	28	28	20	5	5	39	621	725
NEW ENGLAND.....	-	1	-	2	4	1	-	-	-	28	25
Maine.....	-	-	-	-	-	-	-	-	-	1	5
New Hampshire.....	-	-	-	-	-	1	-	-	-	4	3
Vermont.....	-	-	-	-	-	-	-	-	-	1	-
Massachusetts.....	-	1	-	-	3	-	-	-	-	12	9
Rhode Island.....	-	-	-	2	1	-	-	-	-	4	3
Connecticut.....	-	-	-	-	-	-	-	-	-	6	5
MIDDLE ATLANTIC.....	4	3	-	8	11	3	-	-	20	86	134
New York City.....	1	1	-	1	5	-	-	-	11	20	24
New York, Up-State.....	-	1	-	1	2	1	-	-	-	25	52
New Jersey.....	-	-	-	6	3	-	-	-	5	15	34
Pennsylvania.....	3	1	-	-	1	2	-	-	4	26	24
EAST NORTH CENTRAL...	2	1	-	3	3	1	-	-	2	137	155
Ohio.....	-	-	-	1	-	-	-	-	-	33	63
Indiana.....	-	-	-	1	-	-	-	-	-	8	10
Illinois.....	1	1	-	1	-	-	-	-	-	26	30
Michigan.....	1	-	-	-	3	1	-	-	2	62	45
Wisconsin.....	-	-	-	-	-	-	-	-	-	8	7
WEST NORTH CENTRAL...	-	-	2	-	3	1	-	3	2	67	41
Minnesota.....	-	-	-	-	2	1	-	-	2	7	6
Iowa.....	-	-	1	-	1	-	-	-	-	19	18
Missouri.....	-	-	-	-	-	-	-	-	-	29	11
North Dakota.....	-	-	1	-	-	-	-	-	-	3	1
South Dakota.....	-	-	-	-	-	-	-	2	-	-	-
Nebraska.....	-	-	-	-	-	-	-	-	-	3	2
Kansas.....	-	-	-	-	-	-	-	1	-	6	3
SOUTH ATLANTIC.....	5	3	1	7	1	1	3	1	-	68	47
Delaware.....	2	1	-	-	-	-	-	-	-	3	1
Maryland.....	-	-	-	-	-	-	-	-	-	18	7
Dist. of Columbia..	-	-	-	-	-	-	1	-	-	3	-
Virginia.....	1	-	1	5	1	-	-	-	-	7	18
West Virginia.....	-	-	-	-	-	-	-	-	-	2	7
North Carolina.....	-	-	-	1	-	-	-	-	-	5	2
South Carolina.....	-	1	-	-	-	-	-	-	-	1	5
Georgia.....	-	-	-	-	-	-	-	-	-	13	-
Florida.....	2	1	-	1	-	1	2	1	-	16	7
EAST SOUTH CENTRAL...	-	4	-	1	-	3	-	1	-	43	55
Kentucky.....	-	4	-	-	-	-	-	-	-	17	23
Tennessee.....	-	-	-	-	-	3	-	-	-	16	15
Alabama.....	-	-	-	1	-	-	-	1	-	6	11
Mississippi.....	-	-	-	-	-	-	-	-	-	4	6
WEST SOUTH CENTRAL...	1	3	-	3	1	4	2	-	1	39	62
Arkansas.....	-	-	-	1	-	1	-	-	-	1	3
Louisiana.....	-	1	-	-	1	-	-	-	-	3	13
Oklahoma.....	-	-	-	-	-	-	-	-	-	6	1
Texas.....	1	2	-	2	-	3	2	-	1	29	45
MOUNTAIN.....	1	2	1	1	2	-	-	-	-	38	58
Montana.....	1	-	-	-	-	-	-	-	-	-	1
Idaho.....	-	-	-	-	-	-	-	-	-	1	20
Wyoming.....	-	-	-	-	-	-	-	-	-	3	1
Colorado.....	-	1	-	1	-	-	-	-	-	11	8
New Mexico.....	-	-	-	-	-	-	-	-	-	8	12
Arizona.....	-	-	1	-	-	-	-	-	-	8	6
Utah.....	-	1	-	-	2	-	-	-	-	7	10
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	10	12	-	3	3	6	-	-	14	115	148
Washington.....	-	-	-	-	1	-	-	-	1	5	18
Oregon.....	-	-	-	-	1	-	-	-	-	9	5
California.....	10	12	-	3	-	6	-	-	13	101	121
Alaska.....	-	-	-	-	-	-	-	-	-	-	4
Hawaii.....	---	-	---	---	1	---	---	-	---	---	-
Puerto Rico.....	1	-	-	-	-	-	1	-	-	18	34

Morbidity and Mortality Weekly Report

121

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

APRIL 9, 1966 AND APRIL 10, 1965 (14th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			POLIOMYELITIS				RUBELLA
	1966	Cumulative		1966	Cumulative		Total		Paralytic		
		1966	1965		1966	1965	1966	1965	1966	Cumulative 1966	
UNITED STATES...	7,561	101,694	128,735	121	1,423	1,212	-	-	-	5	1,753
NEW ENGLAND.....	107	1,245	25,746	7	71	63	-	-	-	-	195
Maine.....	3	146	1,936	1	7	8	-	-	-	-	18
New Hampshire.....	8	20	325	-	7	4	-	-	-	-	2
Vermont.....	32	198	377	1	3	1	-	-	-	-	3
Massachusetts.....	40	472	14,360	3	29	21	-	-	-	-	75
Rhode Island.....	3	56	2,855	-	5	11	-	-	-	-	44
Connecticut.....	21	353	5,893	2	20	18	-	-	-	-	53
MIDDLE ATLANTIC.....	666	12,482	5,056	17	149	159	-	-	-	-	128
New York City.....	372	6,388	480	-	23	25	-	-	-	-	32
New York, Up-State.....	79	1,283	1,691	4	36	37	-	-	-	-	94
New Jersey.....	56	1,351	873	5	46	54	-	-	-	-	-
Pennsylvania.....	159	3,460	2,012	8	44	43	-	-	-	-	2
EAST NORTH CENTRAL...	2,640	39,087	24,122	21	209	145	-	-	-	-	675
Ohio.....	275	2,975	5,038	7	58	41	-	-	-	-	40
Indiana.....	113	2,380	989	1	30	19	-	-	-	-	82
Illinois.....	425	8,075	935	2	40	37	-	-	-	-	110
Michigan.....	509	6,363	12,849	6	60	25	-	-	-	-	104
Wisconsin.....	1,318	19,294	4,311	5	21	23	-	-	-	-	339
WEST NORTH CENTRAL...	457	4,744	9,746	7	74	65	-	-	-	-	135
Minnesota.....	40	1,233	313	4	19	14	-	-	-	-	6
Iowa.....	385	2,440	5,283	1	12	1	-	-	-	-	121
Missouri.....	11	314	1,442	2	29	34	-	-	-	-	4
North Dakota.....	21	712	2,426	-	3	3	-	-	-	-	1
South Dakota.....	-	3	55	-	2	2	-	-	-	-	-
Nebraska.....	-	42	227	-	3	4	-	-	-	-	3
Kansas.....	NN	NN	NN	-	6	7	-	-	-	-	-
SOUTH ATLANTIC.....	388	7,844	15,474	19	233	243	-	-	-	1	93
Delaware.....	5	104	286	1	3	3	-	-	-	-	-
Maryland.....	63	1,251	552	2	23	26	-	-	-	-	15
Dist. of Columbia..	-	295	20	-	6	4	-	-	-	-	2
Virginia.....	54	751	2,362	2	31	27	-	-	-	-	15
West Virginia.....	119	3,106	9,549	-	8	16	-	-	-	-	23
North Carolina.....	3	138	170	5	46	36	-	-	-	-	-
South Carolina.....	51	384	607	3	33	35	-	-	-	-	14
Georgia.....	15	167	430	5	39	33	-	-	-	1	-
Florida.....	78	1,648	1,498	1	44	63	-	-	-	-	24
EAST SOUTH CENTRAL...	621	11,265	7,546	5	116	76	-	-	-	-	94
Kentucky.....	167	3,558	953	-	53	29	-	-	-	-	24
Tennessee.....	425	6,450	4,537	2	35	23	-	-	-	-	65
Alabama.....	17	766	1,492	2	21	18	-	-	-	-	5
Mississippi.....	12	491	564	1	7	6	-	-	-	-	-
WEST SOUTH CENTRAL...	1,283	11,211	17,605	16	221	204	-	-	-	3	8
Arkansas.....	53	375	825	-	12	10	-	-	-	-	1
Louisiana.....	-	59	43	4	88	114	-	-	-	-	-
Oklahoma.....	52	231	111	2	9	16	-	-	-	1	-
Texas.....	1,178	10,546	16,626	10	112	64	-	-	-	2	7
MOUNTAIN.....	586	5,431	10,130	1	42	44	-	-	-	-	146
Montana.....	89	818	2,615	-	3	1	-	-	-	-	14
Idaho.....	50	587	1,511	-	1	7	-	-	-	-	-
Wyoming.....	-	72	539	-	1	2	-	-	-	-	-
Colorado.....	50	600	1,849	-	22	10	-	-	-	-	13
New Mexico.....	66	302	335	-	6	6	-	-	-	-	-
Arizona.....	309	2,867	389	-	7	11	-	-	-	-	118
Utah.....	5	161	2,808	-	-	5	-	-	-	-	1
Nevada.....	17	24	84	1	2	2	-	-	-	-	-
PACIFIC.....	813	8,385	13,310	28	308	213	-	-	-	1	279
Washington.....	83	1,710	3,943	1	17	15	-	-	-	1	77
Oregon.....	52	661	1,921	1	13	17	-	-	-	-	48
California.....	654	5,911	5,906	25	262	174	-	-	-	-	148
Alaska.....	24	50	97	1	13	4	-	-	-	-	6
Hawaii.....	---	53	1,443	---	3	3	---	-	---	-	---
Puerto Rico.....	167	1,268	830	-	2	3	-	-	-	-	1

Morbidity and Mortality Weekly Report

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

APRIL 9, 1966 AND APRIL 10, 1965 (14th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966
UNITED STATES...	10,510	1	25	-	47	4	72	-	9	95	1,184
NEW ENGLAND.....	1,665	-	2	-	1	-	3	-	-	-	12
Maine.....	113	-	-	-	-	-	-	-	-	-	-
New Hampshire.....	66	-	-	-	-	-	-	-	-	-	5
Vermont.....	37	-	-	-	-	-	-	-	-	-	7
Massachusetts.....	326	-	2	-	1	-	-	-	-	-	-
Rhode Island.....	197	-	-	-	-	-	-	-	-	-	-
Connecticut.....	926	-	-	-	-	-	3	-	-	-	-
MIDDLE ATLANTIC.....	483	-	4	-	-	1	17	-	1	4	86
New York City.....	35	-	3	-	-	1	8	-	-	-	-
New York, Up-State.....	310	-	-	-	-	-	3	-	-	4	81
New Jersey.....	NN	-	-	-	-	-	3	-	-	-	-
Pennsylvania.....	138	-	1	-	-	-	3	-	1	-	5
EAST NORTH CENTRAL...	1,686	-	-	-	12	1	12	-	-	11	164
Ohio.....	117	-	-	-	3	1	6	-	-	8	95
Indiana.....	233	-	-	-	3	-	2	-	-	1	29
Illinois.....	406	-	-	-	5	-	1	-	-	1	13
Michigan.....	558	-	-	-	-	-	1	-	-	-	12
Wisconsin.....	372	-	-	-	1	-	2	-	-	1	15
WEST NORTH CENTRAL...	389	-	1	-	3	-	7	-	1	24	265
Minnesota.....	15	-	-	-	-	-	-	-	-	4	48
Iowa.....	205	-	-	-	-	-	2	-	-	5	66
Missouri.....	10	-	1	-	1	-	4	-	-	7	102
North Dakota.....	108	-	-	-	-	-	-	-	-	-	4
South Dakota.....	9	-	-	-	-	-	-	-	-	3	26
Nebraska.....	9	-	-	-	-	-	-	-	-	-	6
Kansas.....	33	-	-	-	2	-	1	-	1	5	13
SOUTH ATLANTIC.....	998	1	8	-	6	1	14	-	6	8	156
Delaware.....	124	-	-	-	-	-	-	-	-	-	-
Maryland.....	116	-	-	-	-	-	4	-	-	-	-
Dist. of Columbia..	24	-	-	-	-	-	-	-	-	-	-
Virginia.....	367	-	-	-	2	-	6	-	-	-	-
West Virginia.....	305	-	-	-	1	-	1	-	2	3	105
North Carolina.....	13	-	-	-	2	1	2	-	3	-	19
South Carolina.....	26	-	1	-	1	-	-	-	-	-	-
Georgia.....	16	-	3	-	-	-	-	-	1	4	19
Florida.....	7	1	4	-	-	-	1	-	-	1	13
EAST SOUTH CENTRAL...	1,388	-	1	-	12	1	6	-	-	12	171
Kentucky.....	70	-	-	-	2	-	1	-	-	4	25
Tennessee.....	1,147	-	-	-	6	1	4	-	-	7	142
Alabama.....	90	-	1	-	4	-	1	-	-	1	4
Mississippi.....	81	-	-	-	-	-	-	-	-	-	-
WEST SOUTH CENTRAL...	768	-	6	-	11	-	3	-	1	26	250
Arkansas.....	2	-	-	-	9	-	-	-	1	7	36
Louisiana.....	4	-	3	-	1	-	1	-	-	2	16
Oklahoma.....	80	-	-	-	-	-	1	-	-	9	50
Texas.....	682	-	3	-	1	-	1	-	-	8	148
MOUNTAIN.....	1,735	-	-	-	1	-	6	-	-	1	15
Montana.....	76	-	-	-	-	-	-	-	-	1	2
Idaho.....	217	-	-	-	-	-	-	-	-	-	-
Wyoming.....	31	-	-	-	-	-	-	-	-	-	-
Colorado.....	994	-	-	-	-	-	2	-	-	-	1
New Mexico.....	157	-	-	-	-	-	-	-	-	-	3
Arizona.....	109	-	-	-	-	-	1	-	-	-	9
Utah.....	146	-	-	-	1	-	3	-	-	-	-
Nevada.....	5	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	1,398	-	3	-	1	-	4	-	-	9	65
Washington.....	404	-	-	-	-	-	-	-	-	-	-
Oregon.....	27	-	-	-	-	-	1	-	-	-	-
California.....	883	-	3	-	1	-	3	-	-	9	65
Alaska.....	84	-	-	-	-	-	-	-	-	-	-
Hawaii.....	---	---	---	---	---	---	---	---	---	---	---
Puerto Rico.....	3	-	10	-	-	-	3	-	-	-	2

Week No.

DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED APRIL 9, 1966

14

(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:	759	451	41	42	SOUTH ATLANTIC:	1,202	625	61	65
Boston, Mass.-----	244	130	10	16	Atlanta, Ga.-----	137	63	4	9
Bridgeport, Conn.-----	33	18	3	3	Baltimore, Md.-----	271	138	7	12
Cambridge, Mass.-----	19	12	-	-	Charlotte, N. C.-----	63	32	2	1
Fall River, Mass.-----	31	17	1	2	Jacksonville, Fla.-----	67	28	1	3
Hartford, Conn.-----	57	34	1	5	Miami, Fla.-----	88	50	3	3
Lowell, Mass.-----	30	22	2	1	Norfolk, Va.-----	65	23	6	10
Lynn, Mass.*-----	24	16	1	1	Richmond, Va.-----	88	46	3	5
New Bedford, Mass.-----	27	19	1	1	Savannah, Ga.-----	34	14	2	1
New Haven, Conn.-----	49	29	2	3	St. Petersburg, Fla.-----	81	72	3	1
Providence, R. I.-----	77	46	3	4	Tampa, Fla.-----	79	43	10	4
Somerville, Mass.-----	16	11	1	-	Washington, D. C.-----	197	95	17	14
Springfield, Mass.-----	64	39	7	1	Wilmington, Del.-----	32	21	3	2
Waterbury, Conn.-----	27	16	1	2					
Worcester, Mass.-----	61	42	8	3	EAST SOUTH CENTRAL:	535	298	26	22
					Birmingham, Ala.-----	100	46	5	5
MIDDLE ATLANTIC:	3,393	2,011	193	129	Chattanooga, Tenn.-----	34	21	2	1
Albany, N. Y.-----	29	17	-	-	Knoxville, Tenn.-----	29	19	1	1
Allentown, Pa.-----	34	25	3	2	Louisville, Ky.-----	78	46	8	2
Buffalo, N. Y.-----	145	88	9	6	Memphis, Tenn.-----	113	67	3	4
Camden, N. J.-----	44	26	2	2	Mobile, Ala.-----	32	14	1	-
Elizabeth, N. J.-----	30	18	2	2	Montgomery, Ala.-----	61	33	5	6
Erie, Pa.-----	43	28	5	3	Nashville, Tenn.-----	88	52	1	3
Jersey City, N. J.-----	62	33	4	2					
Newark, N. J.-----	98	54	5	6	WEST SOUTH CENTRAL:	1,114	600	50	82
New York City, N. Y.-----	1,832	1,063	117	69	Austin, Tex.-----	27	14	2	1
Paterson, N. J.-----	28	19	-	2	Baton Rouge, La.-----	40	23	1	2
Philadelphia, Pa.-----	490	287	15	20	Corpus Christi, Tex.-----	24	16	-	1
Pittsburgh, Pa.-----	174	107	4	5	Dallas, Tex.-----	163	79	9	16
Reading, Pa.-----	38	25	1	1	El Paso, Tex.-----	46	23	3	4
Rochester, N. Y.-----	110	73	12	1	Fort Worth, Tex.-----	75	39	4	6
Schenectady, N. Y.-----	26	15	-	1	Houston, Tex.-----	188	86	8	15
Scranton, Pa.-----	36	26	5	-	Little Rock, Ark.-----	68	37	4	2
Syracuse, N. Y.-----	82	42	3	6	New Orleans, La.-----	184	101	8	15
Trenton, N. J.-----	38	22	1	1	Oklahoma City, Okla.-----	80	48	2	1
Utica, N. Y.-----	21	15	2	-	San Antonio, Tex.-----	102	65	4	8
Yonkers, N. Y.-----	33	28	3	-	Shreveport, La.-----	48	32	-	1
					Tulsa, Okla.-----	69	37	5	10
EAST NORTH CENTRAL:	2,491	1,442	110	143					
Akron, Ohio-----	63	40	-	5	MOUNTAIN:	471	272	37	17
Canton, Ohio-----	34	21	1	1	Albuquerque, N. Mex.-----	40	24	9	1
Chicago, Ill.-----	666	376	33	42	Colorado Springs, Colo.-----	36	19	5	1
Cincinnati, Ohio-----	145	79	6	13	Denver, Colo.-----	144	87	11	6
Cleveland, Ohio-----	191	108	1	8	Ogden, Utah-----	13	4	1	-
Columbus, Ohio-----	109	63	1	8	Phoenix, Ariz.-----	121	69	10	5
Dayton, Ohio-----	71	42	9	3	Pueblo, Colo.-----	13	11	-	2
Detroit, Mich.-----	384	214	16	20	Salt Lake City, Utah-----	53	31	1	2
Evansville, Ind.-----	38	26	2	1	Tucson, Ariz.-----	51	27	-	2
Flint, Mich.-----	59	34	1	5					
Fort Wayne, Ind.-----	45	28	6	4	PACIFIC:	1,688	1,036	70	60
Gary, Ind.-----	29	15	1	2	Berkeley, Calif.-----	14	12	3	-
Grand Rapids, Mich.-----	75	52	6	2	Fresno, Calif.-----	57	38	1	2
Indianapolis, Ind.-----	169	105	9	7	Glendale, Calif.-----	30	19	2	2
Madison, Wis.-----	40	22	1	2	Honolulu, Hawaii-----	42	23	-	4
Milwaukee, Wis.-----	120	71	4	4	Long Beach, Calif.-----	75	52	2	1
Peoria, Ill.-----	44	23	-	4	Los Angeles, Calif.-----	492	284	15	26
Rockford, Ill.-----	31	16	6	1	Oakland, Calif.-----	76	48	2	3
South Bend, Ind.-----	24	12	2	2	Pasadena, Calif.-----	48	34	-	1
Toledo, Ohio-----	98	65	3	5	Portland, Oreg.-----	163	109	5	1
Youngstown, Ohio-----	56	30	2	4	Sacramento, Calif.-----	61	31	1	1
					San Diego, Calif.-----	107	66	5	3
WEST NORTH CENTRAL:	861	533	17	39	San Francisco, Calif.-----	169	96	6	5
Des Moines, Iowa-----	49	33	-	2	San Jose, Calif.-----	50	26	1	3
Duluth, Minn.*-----	28	20	-	1	Seattle, Wash.-----	197	122	19	5
Kansas City, Kans.-----	31	16	3	4	Spokane, Wash.-----	60	49	2	2
Kansas City, Mo.-----	141	96	4	4	Tacoma, Wash.-----	47	27	6	1
Lincoln, Nebr.-----	30	16	1	2					
Minneapolis, Minn.*-----	121	77	1	6	Total	12,514	7,268	605	599
Omaha, Nebr.-----	69	35	1	5					
St. Louis, Mo.-----	264	161	3	9					
St. Paul, Minn.-----	78	52	-	4					
Wichita, Kans.-----	50	27	4	2					

Cumulative Totals

including reported corrections for previous weeks

All Causes, All Ages-----	186,349
All Causes, Age 65 and over-----	108,473
Pneumonia and Influenza, All Ages-----	9,242
All Causes, Under 1 Year of Age-----	9,498

*Estimate - based on average percent of divisional total.

INTERNATIONAL NOTES—QUARANTINE MEASURES

Immunization Information for International Travel

1965-66 edition—Public Health Service Publication No. 384

The following change should be made in the list of Yellow Fever Vaccination Centers in Section 6:

Page 82

Delete

City: Corpus Christi, Texas

Center: Corpus Christi-Nueces County
Health Department
1811 Shoreline Blvd.
Telephone: TU 2-6577

Clinic Hours: Friday, 2 p.m.

Fee: Yes

Add

City: Corpus Christi, Texas

Center: Corpus Christi-Nueces County
Health Department
1811 Shoreline Blvd.
Telephone: TU 2-6577

Clinic Hours: Friday, 10:30 – 11:30 a.m.

Fee: Yes

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 15,600, IS PUBLISHED AT THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

CHIEF, COMMUNICABLE DISEASE CENTER
CHIEF, EPIDEMIOLOGY BRANCH
ACTING CHIEF, STATISTICS SECTION

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THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT
COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

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