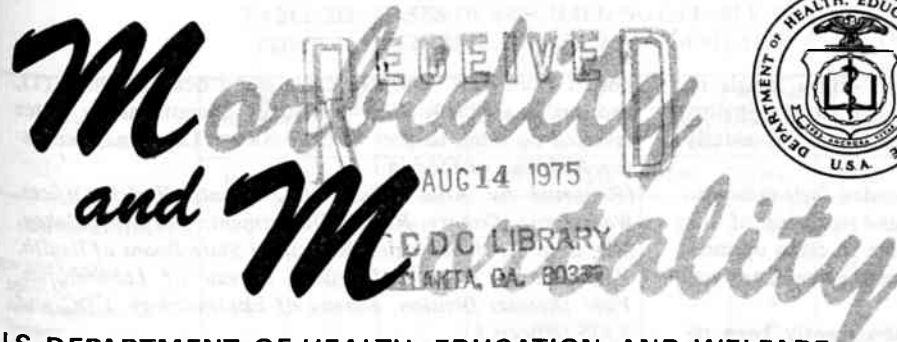


CENTER FOR DISEASE CONTROL



Vol. 24, No. 32

WEEKLY
REPORT

For
Week Ending
August 9, 1975

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE
DATE OF RELEASE: AUGUST 15, 1975 - ATLANTA, GEORGIA 30333

EPIDEMIOLOGIC NOTES AND REPORTS ST. LOUIS ENCEPHALITIS - Mississippi

From June 24 through August 8, 1975, a total of 141 cases of possible central nervous system infection with St. Louis Encephalitis (SLE) virus was reported to the Mississippi Health Department from 26 counties throughout the state. Twenty-four of these cases have been confirmed by 4-fold hemagglutination inhibition (HI) antibody titer rises to SLE, and 30 others are considered probable cases on the basis of single elevated HI titers. With the exception of 5 cases from the city of Jackson and 2 from counties contiguous with Alabama, all confirmed and probable cases have been reported from 7 counties in the northwest quadrant of the state.

The area most extensively involved has been Washington County, which has experienced an outbreak with 74

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possible cases of aseptic meningitis or encephalitis reported through August 8. Most of these cases have occurred in residents of Greenville, a town with a population of approximately 40,000 located on the Mississippi River. Cases have been concentrated in the relatively poor northwest section of the town. The median age of all cases is 70 years, and only 7 cases have occurred in persons less than 40 years old. A

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

DISEASE	32nd WEEK ENDING		MEDIAN 1970-1974	CUMULATIVE, FIRST 32 WEEKS		
	August 9, 1975	August 10, 1974		August 9, 1975	August 10, 1974	MEDIAN 1970-1974
Aseptic meningitis	70	116	193	1,589	1,495	1,930
Brucellosis	7	3	3	143	101	-
Chickenpox	551	395	-	115,548	98,291	-
Diphtheria	1	1	2	200	160	114
Encephalitis	Primary	29	33	474	532	762
	Post-Infectious	8	7	211	172	193
	Type B	240	159	7,011	5,814	5,190
	Type A	751	690	21,576	26,130	-
Hepatitis, Viral	Type unspecified	170	1,060	4,991	5,149	33,971
Malaria	13	10	10	244	119	646
Measles (rubeola)	133	150	213	20,836	19,406	26,349
Meningococcal infections, total	21	20	21	1,000	903	986
Civilian	21	18	18	979	878	961
Military	-	2	2	21	25	37
Mumps	388	309	466	45,563	43,252	55,294
Pertussis	48	58	-	838	942	-
Rubella (German measles)	77	120	164	14,531	9,332	25,569
Tetanus	-	3	2	49	53	63
Tuberculosis	716	626	-	20,602	18,810	-
Tularemia	4	2	4	75	88	88
Typhoid fever	6	7	8	186	231	197
Typhus, tick-borne (Rky. Mt. spotted fever)	41	41	27	557	546	327
Venereal Diseases:						
Gonorrhea	21,839	18,068	-	591,144	534,970	-
Civilian	851	626	-	18,102	17,965	-
Military	447	508	-	15,555	15,430	-
Syphilis, primary and secondary	9	10	-	227	284	-
Civilian	9	10	-	227	284	-
Military	42	48	64	1,547	1,798	2,303
Rabies in animals **	42	48	64	1,547	1,798	2,303

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	-	Poliomyelitis, total:	2
Botulism:	14	Paralytic:	2
Congenital rubella syndrome:	16	Psittacosis:	24
Leprosy:	107	Rabies in man:	1
Leptospirosis:	25	Trichinosis:	52
Plague:	7	Typhus, murine:	21

**Correction: Rabies in animals: Cumulative first 31 weeks should be 1505.

ENCEPHALITIS – Continued

female predominance has been observed, with a female to male case ratio of 3:2. Twelve deaths due to encephalitis have occurred in Washington County, all among elderly persons.

On July 19, Greenville officials expanded their mosquito control program to include daily ground spraying of the entire city with malathion and a campaign to clean up mosquito breeding sites. In addition, mosquito surveillance was begun.

Confirmed cases of SLE have subsequently been re-

ported from New Jersey (2 cases and 1 death), Illinois (1), and Arkansas (1). A telephone survey of southeastern states revealed no other suspect SLE cases from Louisiana, Tennessee, Alabama, or Florida.

(Reported by Alfio Rausa, MD, County Health Officer, Washington County Health Department; Durward Blakey, MD, State Epidemiologist, Mississippi State Board of Health; Vector-Borne Diseases Division, Bureau of Laboratories, Viral Diseases Division, Bureau of Epidemiology, CDC, and 3 EIS Officers.)

WESTERN EQUINE ENCEPHALITIS – Minnesota, North Dakota

In early summer of this year, the Red River flooded into the valley area of eastern North Dakota and northwestern Minnesota. Subsequently, health officials initiated a mosquito surveillance program that indicated an unusually high mosquito-population density in the area. Ninety-six mosquito pools collected in 3 North Dakota counties in mid-July yielded 9 isolations of Western Equine Encephalitis (WEE) virus. Because of the predominance of the vector, *Culex tarsalis*, and the resultant increased risk of virus transmission, officials intensified disease surveillance in horses and humans.

Horse Surveillance

Cases of equine encephalitis were first observed in early June, and a total of 192 cases of clinical encephalitis were reported through August 9, 1975. Of the 192 ill horses, 24 unvaccinated ones had sera collected, and 17 of these horses had high hemagglutination inhibition (HI) and serum neutralization (SN) antibody titers to WEE and no titers to eastern equine encephalitis. Paired sera from 2 of the 192 ill horses showed a 4-fold rise in HI antibody titer to WEE. Of 165 ill horses, 3 (1.8%) were known to have been vaccinated more than 2 weeks before onset of clinical encephalitis.

Human Surveillance

Surveillance in North Dakota and Minnesota has uncovered 27 cases of acute, febrile central nervous system (CNS) disease, with onset dates from July 10 to August 6, 1975. All cases have been associated with cerebrospinal fluid pleocytosis, and most have been reported from hospitals in the Red River Valley. Of the 27 cases, 15 were diagnosed as aseptic meningitis and 12 as clinical encephalitis (Table 1). Four deaths from suspected encephalitis have occurred, all in North Dakota. In 3 cases, including 2 of the deaths, the diagnosis of WEE infection has been serologically confirmed by 4-fold or greater HI antibody titer rises.

In addition to the intensive local and state mosquito control measures that were begun in Minnesota July 26, aerial spraying of ultra low volume malathion over population centers was begun August 1. Twelve counties in eastern North

Dakota have received 2 applications of insecticide, and spraying of 11 western Minnesota counties began August 12. The gradual natural reduction of breeding sites in the post-flood period, combined with spraying, has resulted in a substantially decreased mosquito population; but levels remain greater than normal.

Other states reporting seropositive cases of WEE in horses are: Colorado (20), Kansas (18), South Dakota (16), Oklahoma (13), Nebraska (11), Oregon (2), Montana (1), and Iowa (1). To date, no cases of WEE in humans have been reported from these states.

(Reported by DH Lawrence, MD, Fargo City Health Officer, Fargo Health Department, North Dakota; Dean Flagg, DVM, Executive Officer and State Veterinarian, Livestock Sanitary Board, Bismark, North Dakota; Kenneth Tardif, Director, Division of Environmental Sanitation, Kenneth Mosser, Director, Division of Communicable Disease, Willis Van Heuvelen, Executive Officer, North Dakota State Department of Health; Jack G Flint, DVM, Secretary and Executive Officer, Livestock Sanitary Board, St. Paul, Minnesota; Fred Heisel, Director, and Charles Schneider, Division of Environmental Health, and Barry Levy, MD, Acting State Epidemiologist, Minnesota State Health Department; James E Pearson, DVM, Veterinary Services Laboratory, APHIS, USDA, Ames, Iowa; and an EIS Officer.)

TYPHOID FEVER – Michigan, Canada

On August 1, 1975, a 24-year-old resident of Pontiac, Michigan, was hospitalized with fever and chills; a blood culture was positive for *Salmonella typhi*. Because this individual had attended a church camp near Kingston, Ontario, in mid-July, Michigan State Health authorities contacted the Ontario Ministry of Health. Subsequent investigation revealed 40 additional suspected cases in Canadian citizens, 27 of which have been confirmed.

All patients had attended the same camp between July

10 and 27. Follow-up investigation of the camp revealed that the water chlorinator for the camp's well had malfunctioned between July 10 and 20. Canadian health authorities are actively investigating the outbreak and are notifying all persons known to have stayed at the camp. No additional cases in U.S. citizens have been reported.

(Reported by V Soudek, MD, Acting Medical Officer of Health, RA Kelley, MD, Medical Officer of Health and Di-

(Continued on page 275)

Table 1
Classification of Cases of Acute CNS Disease,
July 10 - August 6, 1975, North Dakota and Minnesota

	State		Total
	North Dakota	Minnesota	
Aseptic Meningitis	11	4	15
Encephalitis	6	6	12
Total	17	10	27

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING AUGUST 9, 1975 AND AUGUST 10, 1974 (32nd WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
						1975	1974	1975	1975	1975	1975	1975	Cum. 1975
UNITED STATES	70	7	551	1	200	29	28	8	240	751	170	13	244
NEW ENGLAND	8	-	65	-	-	-	-	1	12	28	9	1	10
Maine *	-	-	1	-	-	-	-	-	-	-	-	-	1
New Hampshire *	2	-	-	-	-	-	-	-	-	2	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	3	-	-	3
Massachusetts *	6	-	10	-	-	-	-	-	5	5	9	-	2
Rhode Island	-	-	36	-	-	-	-	-	1	4	-	-	1
Connecticut	-	-	18	-	-	-	-	1	6	14	-	1	3
MIDDLE ATLANTIC	2	-	25	-	-	1	10	-	42	72	39	3	60
Upstate New York	1	-	4	-	-	-	8	-	6	19	15	-	5
New York City	-	-	20	-	-	-	-	-	12	24	-	-	15
New Jersey *	-	-	NN	-	-	-	1	-	15	8	19	-	8
Pennsylvania *	1	-	1	-	-	1	1	-	9	21	5	3	32
EAST NORTH CENTRAL	10	-	142	-	4	4	6	2	35	117	11	1	5
Ohio	1	-	6	-	1	-	3	1	4	36	-	-	1
Indiana	1	-	11	-	-	-	-	-	2	4	-	-	-
Illinois	2	-	9	-	2	-	3	1	15	24	4	1	4
Michigan	2	-	39	-	1	-	-	-	13	45	7	-	-
Wisconsin	4	-	77	-	-	4	-	-	1	8	-	-	-
WEST NORTH CENTRAL	2	-	16	-	6	1	-	-	10	36	13	2	10
Minnesota	1	-	-	-	-	1	-	-	3	7	-	-	4
Iowa	-	-	13	-	-	-	-	-	-	1	-	-	-
Missouri *	1	-	3	-	-	-	-	-	6	15	6	1	5
North Dakota *	-	-	-	-	6	-	-	-	1	2	-	1	1
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	-	-	-	1	1	-	-
Kansas	-	-	-	-	-	-	-	-	-	10	6	-	-
SOUTH ATLANTIC	14	3	53	-	-	3	2	4	48	147	30	2	34
Delaware	-	-	-	-	-	-	-	-	2	-	-	-	-
Maryland	-	-	3	-	-	-	-	1	9	6	1	-	4
District of Columbia	-	-	1	-	-	1	-	-	-	2	-	-	9
Virginia	-	2	4	-	-	-	-	-	6	18	6	-	5
West Virginia *	-	-	32	-	-	-	-	-	1	4	-	-	1
North Carolina	3	-	NN	-	-	2	-	-	11	21	8	-	3
South Carolina	1	-	4	-	-	-	-	-	-	6	4	-	1
Georgia	-	-	-	-	-	-	-	-	-	18	-	1	6
Florida	10	1	9	-	-	-	2	3	19	72	11	1	5
EAST SOUTH CENTRAL	4	-	38	-	-	14	2	1	18	65	3	-	8
Kentucky	-	-	38	-	-	-	-	-	4	30	3	-	3
Tennessee	1	-	NN	-	-	1	1	-	9	26	-	-	-
Alabama	2	-	-	-	-	-	-	-	3	3	-	-	4
Mississippi	1	-	-	-	-	13	1	1	2	6	-	-	1
WEST SOUTH CENTRAL	22	3	36	-	6	6	2	-	17	75	16	1	19
Arkansas	5	1	-	-	-	3	1	-	1	12	-	-	1
Louisiana	1	-	NN	-	-	-	1	-	6	10	3	-	-
Oklahoma	4	-	2	-	-	1	-	-	4	2	4	-	1
Texas	12	2	34	-	6	2	-	-	6	51	9	1	17
MOUNTAIN	2	-	14	1	15	-	-	-	12	45	24	-	13
Montana	-	-	8	-	-	-	-	-	2	14	-	-	-
Idaho	2	-	-	-	-	-	-	-	-	-	1	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	-	-	6	-	-	-	-	-	8	4	13	-	8
New Mexico	-	-	-	1	2	-	-	-	-	9	-	-	-
Arizona	-	-	-	-	13	-	-	-	1	9	4	-	3
Utah	-	-	-	-	-	-	-	-	1	2	6	-	2
Nevada	-	-	-	-	-	-	-	-	-	7	-	-	-
PACIFIC	6	1	162	-	169	-	6	-	46	166	25	3	85
Washington	-	-	1	-	160	-	1	-	6	28	10	-	4
Oregon	-	-	1	-	-	-	-	-	10	24	1	-	6
California *	6	1	-	-	4	-	5	-	29	89	14	3	72
Alaska	-	-	-	-	5	-	-	-	-	7	-	-	-
Hawaii	-	-	160	-	-	-	-	-	1	18	-	-	3
Guam *	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-	-	-	-	-	1
Virgin Islands	-	-	2	-	-	-	-	-	-	-	-	-	-

NN: Not notifiable.

*Delayed reports: Aseptic meningitis: W. Va. 3, N.H. 1
Chickenpox: Calif. 6, N.H. 1, Guam 9
Encephalitis, prim.: Mo. delete 1

Hepatitis A: Me. 4, Mo. delete 1, Guam 4, N. Dak. delete 1

Hepatitis B: Pa. delete 10, Me. 1, Guam 1

Hepatitis unspec.: Mo. delete 1, Guam 1

Malaria: Mass. 1

Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING AUGUST 9, 1975 AND AUGUST 10, 1974 (32nd WEEK) — Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1975	Cumulative		1975	Cumulative		1975	Cum. 1975	1975	1975	Cum. 1975	Cum. 1975
		1975	1974		1975	1974						
UNITED STATES	133	20,836	19,406	21	1,000	903	388	45,563	48	77	14,531	49
NEW ENGLAND	7	309	906	1	57	45	11	1,553	—	16	2,019	2
Maine *	—	11	41	—	6	2	—	72	—	—	34	—
New Hampshire	—	20	207	—	2	7	—	69	—	—	303	—
Vermont	—	49	56	—	—	2	—	16	—	—	67	—
Massachusetts	1	120	369	1	20	14	1	191	—	13	1,187	1
Rhode Island	—	3	61	—	3	7	1	582	—	—	26	—
Connecticut	6	106	172	—	26	13	9	623	—	3	402	1
MIDDLE ATLANTIC	15	1,694	7,890	2	102	129	33	2,397	3	3	1,661	9
Upstate New York	6	528	902	—	28	51	4	897	1	2	264	1
New York City	2	134	561	1	29	21	21	684	1	1	152	2
New Jersey	1	458	5,500	—	17	42	1	325	—	—	978	3
Pennsylvania *	6	574	927	1	28	15	7	491	1	—	267	3
EAST NORTH CENTRAL	52	6,178	7,500	2	135	107	128	18,972	3	30	4,030	2
Ohio	1	107	3,019	2	34	38	12	2,121	—	1	607	—
Indiana	5	352	215	—	6	9	12	1,961	—	1	916	—
Illinois	26	1,735	1,937	—	19	10	17	2,198	—	1	278	2
Michigan	11	2,992	1,891	—	58	34	20	7,938	1	12	1,392	—
Wisconsin	9	992	438	—	18	16	67	4,754	2	15	837	—
WEST NORTH CENTRAL	4	4,955	681	2	59	69	15	3,231	1	—	1,456	1
Minnesota	—	180	83	—	14	22	—	37	—	—	37	—
Iowa	1	564	134	—	5	13	3	1,000	—	—	30	—
Missouri	—	267	257	2	29	16	3	897	1	—	728	1
North Dakota	2	1,048	28	—	—	3	8	454	—	—	65	—
South Dakota	—	356	27	—	1	3	1	6	—	—	18	—
Nebraska	1	395	2	—	2	3	—	34	—	—	19	—
Kansas	—	2,145	150	—	8	9	—	803	—	—	559	—
SOUTH ATLANTIC	5	314	476	6	205	182	31	2,946	9	3	1,507	11
Delaware	—	35	7	—	6	3	1	8	—	—	19	—
Maryland	—	48	22	3	24	18	8	205	—	—	37	—
District of Columbia	—	1	3	—	5	1	1	112	—	—	—	—
Virginia	2	37	21	—	17	29	1	699	—	1	310	—
West Virginia *	2	136	154	—	8	7	7	1,010	4	1	184	—
North Carolina	—	2	5	—	36	39	6	96	5	1	42	6
South Carolina	—	—	48	—	32	16	—	47	—	—	739	1
Georgia	1	30	4	—	10	8	—	13	—	—	—	—
Florida	—	25	212	3	67	61	7	756	—	—	176	4
EAST SOUTH CENTRAL	1	270	202	2	148	96	86	4,287	9	3	929	3
Kentucky *	—	83	138	1	61	38	31	1,643	8	1	228	1
Tennessee	1	176	34	—	47	43	49	1,991	1	2	673	—
Alabama	—	3	17	1	28	9	4	365	—	—	21	1
Mississippi	—	8	13	—	12	6	2	288	—	—	7	1
WEST SOUTH CENTRAL	4	284	176	4	166	151	22	4,143	16	2	696	10
Arkansas	—	—	6	—	8	11	—	168	—	—	19	—
Louisiana	—	—	13	1	27	31	—	327	6	—	280	3
Oklahoma	—	125	24	—	9	16	5	180	1	—	83	—
Texas *	4	159	133	3	122	93	17	3,468	9	2	314	7
MOUNTAIN	8	1,384	724	—	34	28	10	852	2	—	500	—
Montana	1	42	372	—	7	1	2	23	2	—	252	—
Idaho	—	7	50	—	5	2	—	12	—	—	74	—
Wyoming	—	1	1	—	—	3	—	2	—	—	—	—
Colorado	5	1,158	30	—	9	7	6	587	—	—	124	—
New Mexico	—	13	54	—	4	2	—	19	—	—	15	—
Arizona	1	70	15	—	1	4	—	—	—	—	2	—
Utah	—	66	3	—	7	6	—	123	—	—	26	—
Nevada	1	27	199	—	1	3	2	86	—	—	7	—
PACIFIC	37	5,448	851	2	94	96	52	7,182	5	20	1,733	11
Washington	—	284	62	—	16	10	2	3,677	—	—	267	—
Oregon	—	196	—	—	4	11	20	603	2	5	160	—
California	37	4,905	729	2	73	69	28	2,829	3	15	1,290	10
Alaska	—	—	—	—	—	3	—	40	—	—	—	—
Hawaii	—	63	60	—	1	3	2	33	—	—	16	1
Guam	—	22	14	—	2	1	—	22	—	—	7	—
Puerto Rico	—	493	560	—	1	5	—	594	—	—	17	10
Virgin Islands	—	8	24	—	—	—	—	220	—	—	3	2

*Delayed reports: Measles: Me. 1, Tex. delete 1
Meningococcal infections: Pa. delete 1, W. Va. delete 3
Mumps: Me. 1
Pertussis: Ky. 6, Tex. delete 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING AUGUST 9, 1975 AND AUGUST 10, 1974 (32nd WEEK) - Continued

AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES (Civilian Cases Only)						RABIES IN ANIMALS
	1975	Cum. 1975	Cum. 1975	1975	Cum. 1975	1975	Cum. 1975	1975	GONORRHEA		1975	SYPHILIS (Pri. & Sec.)		Cum. 1975
									1975	1974		1975	1974	
UNITED STATES . . .	716	20,602	75	6	186	41	557	21,839	591,144	534,970	447	15,555	15,430	1,545
NEW ENGLAND	9	827	-	-	9	1	6	547	16,164	14,030	14	532	549	44
Maine *	1	56	-	-	-	-	-	-	1,116	1,125	-	12	23	27
New Hampshire *	-	24	-	-	-	-	-	18	458	434	-	11	8	1
Vermont	-	14	-	-	-	-	-	16	390	386	-	5	1	-
Massachusetts	6	488	-	-	5	-	2	317	7,583	6,539	10	342	392	9
Rhode Island	-	80	-	-	-	-	3	53	1,314	1,176	2	11	10	1
Connecticut	2	165	-	-	4	1	1	143	5,303	4,370	2	151	115	6
MIDDLE ATLANTIC	216	3,779	3	2	35	-	56	1,682	66,170	65,871	36	2,703	3,373	70
Upstate New York	1	551	2	1	5	-	23	524	12,350	12,256	-	268	333	56
New York City *	68	1,490	-	1	15	-	-	-	26,659	28,496	-	1,474	1,944	-
New Jersey *	17	743	1	-	6	-	6	610	9,608	9,465	17	448	545	-
Pennsylvania	130	995	-	-	9	-	27	548	17,553	15,654	19	513	551	14
EAST NORTH CENTRAL	64	2,823	4	1	22	3	15	3,983	97,229	84,807	41	1,293	1,298	65
Ohio *	12	836	-	-	7	3	14	1,182	26,973	22,171	13	302	180	5
Indiana	11	360	-	-	-	-	-	302	8,433	8,119	3	93	117	5
Illinois	16	729	-	1	11	-	1	1,456	33,618	27,646	17	626	672	16
Michigan *	22	813	1	-	4	-	-	698	18,819	19,254	5	212	265	5
Wisconsin	3	85	3	-	-	-	-	345	9,386	7,617	3	60	64	34
WEST NORTH CENTRAL	17	754	14	1	7	1	22	1,010	29,353	27,749	13	390	391	353
Minnesota	-	87	-	-	2	-	-	214	6,118	5,844	2	72	51	85
Iowa	1	79	1	1	1	-	-	124	4,100	3,736	-	22	25	71
Missouri	10	379	10	-	4	1	11	391	10,558	9,295	7	189	261	35
North Dakota	-	8	-	-	-	-	-	25	452	429	-	5	4	72
South Dakota	1	53	-	-	-	-	-	65	1,148	1,266	1	5	2	47
Nebraska *	1	26	1	-	-	-	1	49	2,577	2,322	-	11	8	4
Kansas *	4	122	2	-	-	-	10	142	4,400	4,857	3	86	40	39
SOUTH ATLANTIC	167	4,587	14	1	28	27	286	5,779	147,785	137,408	164	4,938	4,832	214
Delaware	2	93	-	-	-	-	3	86	2,116	1,885	-	62	50	-
Maryland	22	751	1	-	4	2	22	723	17,248	13,764	9	362	479	5
District of Columbia	8	240	-	-	-	-	-	273	8,746	12,204	16	427	395	-
Virginia	21	541	6	-	5	7	72	691	14,605	12,443	14	371	490	82
West Virginia	6	170	-	-	4	-	3	71	1,818	1,581	-	36	10	3
North Carolina *	27	730	-	-	2	11	90	869	20,802	18,520	23	616	573	5
South Carolina	8	279	2	-	3	2	62	470	13,976	13,463	12	332	432	8
Georgia	34	663	4	1	1	5	29	1,021	27,532	26,524	24	644	726	96
Florida	39	1,120	1	-	9	-	5	1,575	40,942	37,024	66	2,088	1,677	15
EAST SOUTH CENTRAL	56	1,765	9	-	18	9	71	1,725	50,285	45,843	24	692	769	115
Kentucky *	21	319	1	-	6	-	3	219	6,545	5,674	3	108	178	80
Tennessee	20	679	8	-	8	5	53	684	19,934	18,027	7	259	295	16
Alabama	10	515	-	-	2	1	6	480	13,794	12,704	9	159	148	19
Mississippi	5	252	-	-	2	3	9	342	10,012	9,438	5	166	148	-
WEST SOUTH CENTRAL	73	2,335	28	-	10	-	97	2,835	73,119	69,926	33	1,342	1,377	336
Arkansas	9	314	10	-	-	-	11	168	7,582	7,283	-	38	69	55
Louisiana *	7	293	1	-	4	-	-	656	13,762	14,764	11	319	392	4
Oklahoma *	5	210	9	-	-	-	72	278	7,015	5,900	1	49	81	74
Texas *	52	1,518	8	-	6	-	14	1,733	44,760	41,979	21	936	835	203
MOUNTAIN	22	627	1	1	6	-	3	896	23,008	20,390	9	369	347	181
Montana	1	35	-	-	-	-	1	32	1,241	1,128	-	4	2	139
Idaho	2	16	-	-	-	-	1	92	1,154	1,091	-	9	7	-
Wyoming	-	18	1	-	1	-	-	-	505	454	-	9	2	5
Colorado	-	129	-	1	1	-	1	207	5,708	5,643	1	66	83	-
New Mexico	6	86	-	-	2	-	-	129	4,170	2,857	-	102	51	28
Arizona	10	274	-	-	2	-	-	268	6,354	5,918	6	133	153	9
Utah	-	30	-	-	-	-	-	56	1,480	1,124	-	11	7	-
Nevada	3	39	-	-	-	-	-	112	2,396	2,175	2	35	42	-
PACIFIC	92	3,105	2	-	51	-	1	3,382	88,031	68,946	113	3,296	2,494	167
Washington	10	218	1	-	4	-	1	319	8,047	7,188	24	118	76	-
Oregon	2	116	-	-	-	-	-	270	6,591	6,587	6	81	57	6
California	66	2,367	1	-	46	-	-	2,749	69,689	52,167	82	3,061	2,338	158
Alaska *	-	38	-	-	-	-	-	21	2,137	1,607	1	4	2	3
Hawaii	14	366	-	-	1	-	-	23	1,567	1,397	-	32	21	-
Guam *	-	33	-	-	-	-	-	-	244	-	-	4	-	-
Puerto Rico	-	274	-	-	1	-	-	-	1,441	2,032	-	361	548	32
Virgin Islands	-	3	-	-	2	-	-	9	107	477	-	20	41	-

*Delayed reports: Tuberculosis: N.C. delete 8, Kans. delete 1
Alaska delete 5, Guam 4, Ky. delete 1
Ohio delete 5, Mich. delete 5

RMSF: N.J. 1
Gonorrhea: Neb. delete 1 mil., Me. delete 1
Guam 10; N.H. 6 mil., NYC 917
Syphilis: La. delete 1, Okla. delete 1, Tex. 2 mil.,
NYC 73

Morbidity and Mortality Weekly Report

Week No. 32

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING AUGUST 9, 1975

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

Area	All Causes					Pneumonia and Influenza All Ages	Area	All Causes					Pneumonia and Influenza All Ages
	All Ages	65 years and over	45-64 years	25-44 years	Under 1 year			All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
NEW ENGLAND	869	567	213	42	19	64	SOUTH ATLANTIC	1,094	591	330	80	47	21
Boston, Mass.	296	182	75	23	6	19	Atlanta, Ga.	121	66	37	13	1	3
Bridgeport, Conn.	56	36	14	—	2	5	Baltimore, Md.	142	80	44	9	5	2
Cambridge, Mass.	38	23	13	1	—	7	Charlotte, N. C.	35	17	12	4	—	—
Fall River, Mass.	37	29	7	1	—	2	Jacksonville, Fla.	86	45	26	7	4	1
Hartford, Conn.	59	34	15	6	1	2	Miami, Fla.	89	39	38	5	5	—
Lowell, Mass.	27	18	7	1	—	1	Norfolk, Va.	51	29	15	1	4	3
Lynn, Mass.	26	21	4	—	—	2	Richmond, Va.	89	41	30	6	5	3
New Bedford, Mass.	36	22	10	2	1	1	Savannah, Ga.	39	24	11	2	1	4
New Haven, Conn.	60	41	12	3	1	—	St. Petersburg, Fla.	69	58	7	—	3	2
Providence, R. I.	67	38	22	1	3	7	Tampa, Fla.	71	47	15	3	2	3
Somerville, Mass.	16	15	1	—	—	1	Washington, D. C.	264	123	89	27	12	—
Springfield, Mass.	46	32	10	2	2	4	Wilmington, Del.	38	22	6	3	5	—
Waterbury, Conn.	36	22	10	1	2	6							
Worcester, Mass.	69	54	13	1	1	7	EAST SOUTH CENTRAL	685	367	179	61	25	23
MIDDLE ATLANTIC	2,874	1,813	687	188	90	118	Birmingham, Ala.	112	63	37	4	2	2
Albany, N. Y.	40	23	11	2	—	1	Chattanooga, Tenn.	73	29	20	13	2	1
Allentown, Pa.	16	9	5	2	—	2	Knoxville, Tenn.	32	17	8	3	4	1
Buffalo, N. Y.	119	71	32	7	5	9	Louisville, Ky.	111	55	30	10	5	5
Camden, N. J.	29	19	4	3	1	2	Memphis, Tenn.	166	96	43	10	4	5
Elizabeth, N. J.	33	19	14	—	—	3	Mobile, Ala.	56	32	8	7	1	—
Erie, Pa.	36	21	11	3	—	3	Montgomery, Ala.	38	26	7	—	5	3
Jersey City, N. J.	109	74	21	10	—	4	Nashville, Tenn.	97	49	26	14	2	6
Newark, N. J.	108	61	34	6	3	6	WEST SOUTH CENTRAL	1,126	594	329	80	51	21
New York City, N. Y. †	1,370	859	319	106	41	45	Austin, Tex.	40	27	8	2	—	1
Paterson, N. J.	39	24	7	6	2	6	Baton Rouge, La.	62	33	19	5	2	1
Philadelphia, Pa.	387	226	104	23	17	5	Corpus Christi, Tex.	36	18	10	4	2	—
Pittsburgh, Pa.	178	103	49	10	9	11	Dallas, Tex.	167	86	50	9	6	3
Reading, Pa.	29	22	7	—	—	—	El Paso, Tex.	29	16	9	3	1	2
Rochester, N. Y.	109	75	23	3	3	6	Fort Worth, Tex.	77	47	21	4	2	1
Schenectady, N. Y.	29	24	2	2	—	1	Houston, Tex.	240	114	77	22	12	2
Scranton, Pa.	51	37	10	1	2	3	Little Rock, Ark.	58	24	25	3	3	1
Syracuse, N. Y.	94	68	19	—	4	1	New Orleans, La.	148	83	38	5	15	—
Trenton, N. J.	35	25	7	3	—	1	San Antonio, Tex.	140	77	38	10	5	5
Utica, N. Y.	28	26	2	—	—	2	Shreveport, La.	62	32	17	5	3	—
Yonkers, N. Y.	35	27	6	1	1	7	Tulsa, Okla.	67	37	17	8	—	5
EAST NORTH CENTRAL	2,369	1,374	595	177	106	56	MOUNTAIN	485	249	130	44	31	14
Akron, Ohio	64	32	22	3	4	1	Albuquerque, N. Mex.	44	22	12	5	1	2
Canton, Ohio	37	22	8	1	1	—	Colorado Springs, Colo.	31	20	7	3	—	1
Chicago, Ill.	584	323	163	50	21	7	Denver, Colo.	128	65	30	11	13	4
Cincinnati, Ohio	149	101	19	8	9	5	Las Vegas, Nev.	23	9	8	6	—	2
Cleveland, Ohio	198	103	54	17	15	3	Ogden, Utah	20	10	8	1	—	2
Columbus, Ohio	135	78	36	10	5	2	Phoenix, Ariz.	104	48	31	12	5	1
Dayton, Ohio	95	51	28	7	6	3	Pueblo, Colo.	22	15	6	—	—	—
Detroit, Mich.	340	190	76	37	18	9	Salt Lake City, Utah	56	30	8	4	9	2
Evansville, Ind.	44	28	12	3	—	3	Tucson, Ariz.	57	30	20	2	3	—
Fort Wayne, Ind.	55	35	13	5	1	1	PACIFIC	1,555	876	426	114	73	34
Gary, Ind.	18	8	4	3	2	1	Berkeley, Calif.	22	15	5	1	—	—
Grand Rapids, Mich.	56	31	11	9	2	3	Fresno, Calif.	52	28	13	2	3	2
Indianapolis, Ind.	146	80	43	7	7	3	Glendale, Calif.	19	12	6	—	—	—
Madison, Wis.	43	27	8	4	2	8	Honolulu, Hawaii	65	36	17	1	10	5
Milwaukee, Wis.	141	92	34	4	4	—	Long Beach, Calif.	93	53	26	4	6	—
Peoria, Ill.	36	21	8	1	5	1	Los Angeles, Calif.	526	288	149	52	17	8
Rockford, Ill.	30	19	4	2	3	5	Oakland, Calif.	70	38	24	3	2	3
South Bend, Ind.	34	25	7	1	—	—	Pasadena, Calif.	27	18	6	3	—	—
Toledo, Ohio	101	65	26	5	1	—	Portland, Oreg.	95	54	32	1	6	3
Youngstown, Ohio	63	43	19	—	—	1	Sacramento, Calif.	49	26	15	6	1	1
WEST NORTH CENTRAL	779	481	181	33	42	27	San Diego, Calif.	104	47	30	7	9	2
Des Moines, Iowa	62	36	13	4	3	1	San Francisco, Calif.	149	92	42	7	5	3
Duluth, Minn.	29	19	5	1	1	4	San Jose, Calif.	49	35	4	7	—	1
Kansas City, Kans.	26	11	8	2	4	1	Seattle, Wash.	157	88	36	14	12	5
Kansas City, Mo.	128	83	34	1	6	3	Spokane, Wash.	42	26	9	2	2	1
Lincoln, Nebr.	22	14	4	2	—	3	Tacoma, Wash.	36	20	12	4	—	—
Minneapolis, Minn.	106	64	23	4	8	3							
Omaha, Nebr.	69	40	20	2	2	—							
St. Louis, Mo.	172	108	40	12	9	4							
St. Paul, Minn.	79	56	14	—	4	1							
Wichita, Kans.	86	50	20	5	5	7							
Total	11,836	6,912	3,070	819	484	378							
Expected Number	11,878	7,005	3,148	820	376	367							

†Delayed report for week ending August 2, 1975

TYPHOID FEVER — Continued

rector, Kingston, Frontenac, Lennox, Addington Health Unit; C McKenna, MD, Area Medical Officer, S Johnson, MD, Senior Medical Consultant, Ontario Ministry of Health; RD Tennant, Director, Public Health Laboratory, Kingston; P Chadwick, MD, Director of Laboratories, Kingston General Hospital; R Mathias, MD, Field Epidemiologist, F White, MD,

Chief of Communicable Disease Section, Bureau of Epidemiology Laboratory, Centre for Disease Control, Health and Welfare, Canada; Rick Coscia, MS, Microbiologist, McClaren Hospital, Flint, Michigan; Bernard Berman, MD, Director, Genessee County Health Department; Norman S Hayner, MD, State Epidemiologist, Michigan Department of Public Health, and an EIS Officer.)

DEATH FROM COMPLICATIONS OF DIPHTHERIA — Arizona

In mid-December 1974, a 49-year-old white man from Phoenix, Arizona, was identified as a casual contact of 2 persons living in his apartment building who had culture-proven diphtheria due to *Corynebacterium diphtheriae*, biotype intermedius. He reported receiving multiple immunizations while in the Army in World War II and none since. On December 19 he was given 0.5 cc Td subcutaneously. No throat culture was recorded.

On January 9, 1975, he was admitted to a Phoenix hospital with a 1-month history of intermittent sore throat and recent exposure to diphtheria. He had left-sided exudative tonsillitis and cervical adenopathy. Methylene-blue stain of the exudate was negative for diphtheroids. Although the patient was placed in isolation because of the possibility of diphtheria, the working diagnosis was streptococcal pharyngitis; and therapy was initiated with oral penicillin. No diphtheria antitoxin was given. Routine pretreatment throat culture was negative at 48 hours for *C. diphtheriae* and beta hemolytic streptococci, but by January 17 the Arizona State Laboratory had isolated toxigenic *C. diphtheriae*, biotype intermedius. Because the patient was asymptomatic and late in the course of his illness, no antitoxin was administered. Repeat throat culture was negative for *C. diphtheriae*.

The patient was discharged on January 21 but readmitted on February 6 because of exertional dyspnea and weakness. Examination revealed atrial flutter that was converted to sinus rhythm by direct current countershock. The patient then had onset of facial paresthesias, weakness of the hypopharyngeal muscles, weakness of the proximal muscles of his limbs, absence of deep tendon reflexes, and diminished perception of pinprick in a "stocking" distribution. The clinical diagnosis was diphtheritic myocarditis and polyneuritis. Progressive muscular weakness necessitated tracheostomy and mechanical ventilation. Complications included gram-negative bacillary pneumonia, upper-gastrointestinal hemorrhage, and recurrent supraventricular tachycardia. The patient died on

March 21. Pertinent autopsy findings were cardiomegaly and patchy myocardial fibrosis without hyaline degeneration of the myocardium.

(Reported by Peter C Kelly, MD, Chief, Infectious Diseases, William Ragle, MD, Resident in Medicine, and Judith Wofsy, MD, Intern in Medicine, Maricopa County General Hospital; and Philip M Hotchkiss, DVM, Manager, Preventive Program Section, Jon Counts, DPH, Director, State Laboratories, Arizona Department of Health Services; and an EIS Officer.)

Editorial Note

This report emphasizes the need to accurately assess the immunization status of diphtheria case contacts. Diphtheria immunization was not widely practiced by the Armed Forces until 1946; therefore, patients whose only immunizations were given during military service in World War II should not necessarily be considered adequately immunized against diphtheria. For fully or partially immunized persons a booster dose of diphtheria toxoid is appropriate, but for intimate contacts who have not been immunized or whose status is unknown, passive protection with diphtheria antitoxin should be given and arrangements made for completion of active immunization. Surveillance and a high degree of suspicion for diphtheria are indicated for all case contacts. In addition, contacts should be cultured and positives treated with penicillin or erythromycin.

When diphtheria is strongly suspected on clinical and/or epidemiologic grounds, antitoxin should be administered before the results of cultures are available and regardless of immunization history. Only limited data are available to assess the antitoxin's efficacy when it is given late in the course of diphtheria, but it has been associated with a decrease in the prevalence of cardiac and neurologic sequelae in patients treated as late as 6 to 7 days after onset of symptoms (1).

Reference

1. Naiditch MJ, Bower AG: Diphtheria. *Amer J Med* 17:229-245, 1954

INTERNATIONAL NOTES**CHOLERA — Portugal**

Portuguese authorities reported 145 cases of cholera to the World Health Organization for the period July 20 to August 6; 144 cases were in Porto District and 1 was in Lisbon City.

(Reported by the World Health Organization, Geneva, Switzerland.)

Editorial Note

In 1974 Portugal reported a total of 2,467 cases of cholera to the World Health Organization (1); since November 1974, however, the country had been reported free of cholera (2).

Travelers to Portugal and to other cholera-infected areas should avoid eating uncooked vegetables, unpeeled fruits, and raw seafood, all of which are considered to be potential vehicles in the spread of cholera. Similarly, travelers should con-

sume only bottled carbonated beverages and boiled or chemically disinfected water.

Cholera vaccination is not required for entry into the United States or other countries complying with the International Health Regulations (MMWR, Vol. 23, No. 2). However, persons going to Portugal and then to other countries are advised to have a validated International Certificate of Cholera Vaccination, because some countries may still require cholera vaccine before entry.

References

1. World Health Organization: *Weekly Epidemiologic Record* 50(29): 261-262, 18 July 1975
2. World Health Organization: *Weekly Epidemiologic Record* 49(49): 408, 6 Dec 1974

INTERNATIONAL NOTES QUARANTINE MEASURES

The following changes should be made in the "Supplement - Health Information for International Travel," Morbidity and Mortality Weekly Report, Vol. 23, September 1974:

SAUDI ARABIA - Delete all information concerning cholera and yellow fever and insert:

Cholera - During the period from 12 January 1975 until amended: Code II - A Certificate is required from travelers arriving from countries any part of which is infected.

During the period from 6 October 1975 to 1 January 1976 (season of periodic mass congregations): Code I.

A Certificate showing a single dose of vaccine administered not less than 1 week and not more than 6 months before arriving in Saudi Arabia is required of ALL travelers.

In addition, all travelers arriving from countries any part of which is infected are required to possess (i) a Certificate showing that before arriving in Saudi Arabia they have spent 5 days in a cholera-free area of their countries which should be designated by health authorities and notified in advance to Saudi Arabia Health Authorities (time spent on board a safe vessel is considered as a period spent in a cholera-free area provided no cases appear on board); (ii) a Certificate from local health authorities showing that travelers have taken adequate doses of tetracycline or any substitute antibiotic for 4 subsequent days immediately before leaving the local infected area or during their stay in the cholera-free area.

Yellow fever - Code II - A Certificate is ALSO required from travelers arriving from countries any part of which is infected.

Addendum - Vol. 24, No. 22, p. 190

In "Bubonic Plague - Arizona" the following person was inadvertently omitted from the credits: Jon Counts, DPH, Director, State Laboratories, Arizona Department of Health Services.

Erratum - Vol. 24, No. 28, p. 237

In the article "Outbreak of Gastrointestinal Illness at Crater Lake National Park - Oregon," line 12 should have read "...900 persons who were lodge guests on or before July 11..."

The Morbidity and Mortality Weekly Report, circulation 45,000, is published by the Center for Disease Control, Atlanta, Ga.

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Director, Bureau of Epidemiology, CDC
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The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials.

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DHEW Publication No. (CDC) 76-8017

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