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For Week Ending December 12, 1970

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EPIDEMIOLOGIC NOTES AND REPORTS

DIPHTHERIA – Mobile County, Alabama, 1970

Since August 26, 1970, 17 laboratory-confirmed cases of diphtheria have been reported in Mobile County, Alabama (Figure 1). Sixteen cases were confirmed by throat culture and one by culture of a cutaneous lesion. Only two other cases have been reported this year for the rest of the State: one in Jefferson County and the other in Wilcox County. The latter case was the only fatality.

Of the 17 cases in Mobile County, 11 were in black children living in the central city area, and six were in white children living in rural areas (Figure 2). Most were under the age of 10 (Table 1) and were inadequately immunized. A review of immunization histories showed that no carriers and only two patients (12 percent) had been fully immunized (Table 2). Twelve different households were involved in the outbreak. Five of the six rural cases occurred in one household, while 11 urban cases were distributed in 10 different households. Eight individuals required hospitalization, and seven of these received diphtheria antitoxin.

Follow-up throat cultures from 104 household contacts resulted in 18 isolations of *Corynebacterium diphtheriae*. There were 33 isolates from both patients and contacts for which typing was available. Thirty-one of these were mitis type; the other two, from siblings, were gravis type. One

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	49th WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 49 WEEKS		
	December 12, 1970	December 6, 1969	1965 - 1969	1970	1969	MEDIAN 1965 - 1969
Aseptic meningitis	126	80	60	5,942	3,360	2,901
Brucellosis	1	5	5	198	220	235
Diphtheria	13	10	3	426	186	186
Encephalitis, primary:						
Arthropod-borne & unspecified	27	24	26	1,499	1,244	1,513
Encephalitis, post-infectious	2	6	8	357	286	625
Hepatitis, serum	157	116	984	6,927	5,023	38,725
Hepatitis, infectious	1,269	1,059		53,483	45,259	
Malaria	62	155	31	3,273	3,058	1,987
Measles (rubeola)	833	381	381	44,677	23,612	61,099
Meningococcal infections, total	56	39	45	2,327	2,761	2,761
Civilian	49	39	43	2,052	2,524	2,524
Military	7	—	1	275	237	202
Mumps	2,492	1,696	---	95,636	82,254	---
Poliomyelitis, total	2	1	1	29	18	57
Paralytic	1	1	1	28	17	44
Rubella (German measles)	487	547	---	54,172	53,561	---
Tetanus	7	7	7	132	156	187
Tularemia	4	—	2	148	136	166
Typhoid fever	8	9	9	343	318	382
Typhus, tick-borne (Rky. Mt. spotted fever)	—	2	1	336	449	277
Rabies in animals	51	61	65	2,844	3,142	3,803

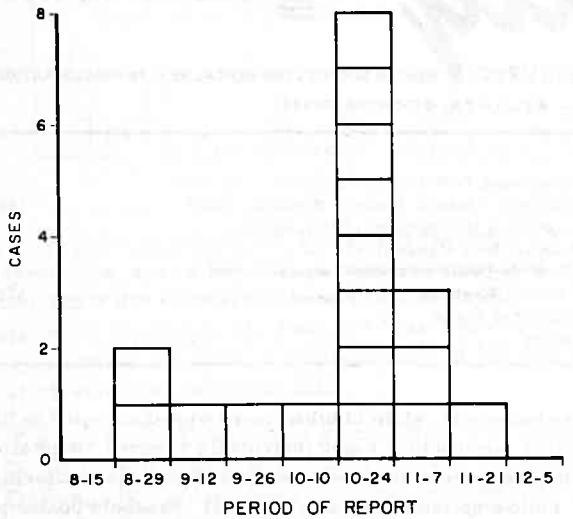
TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Psittacosis: N.Y.C.-1	36
Botulism:	12	Rabies in Man:	2
Leprosy: N.Y.C.-3	116	Rubella congenital syndrome: Calif.-2	65
Leptospirosis:	42	Trichinosis: Ida.-1	105
Plague:	12	Typhus, murine:	32

DIPHTHERIA – *(Continued from front page)*

of the mitis types was nontoxigenic, as were both gravis types. There were nontoxigenic *C. diphtheriae* isolated from two patients: one mitis and one gravis.

Figure 1
REPORTED CASES OF DIPHTHERIA, BY 2-WEEK PERIODS
MOBILE COUNTY, ALABAMA, 1970



Since the first reported diphtheria case in Mobile this year, immunization clinics have been held at the Mobile County Health Department, at various neighborhood locations, and at certain schools where patients have attended. The number of DTP, TD (pediatric), and Td (adult) vaccinations administered through mid-November totals approximately 23,000. Additional school-based clinics are planned, and further studies of cutaneous diphtheria have been initiated.

The outbreak appears to be multifocal in origin, since none of the patients had known contact with any patients outside their family, either in school, in common neighborhoods, or in travel to other areas of reported high incidence.

Table 1
Diphtheria Cases by Age and Sex
Mobile County, Alabama, 1970

Age Group	Male	Female	Total
0–4	3	0	3
5–9	4	2	6
10–14	1	2	3
15–19	2	1	3
20 +	0	2	2

Figure 2
DIPHTHERIA CASES BY RESIDENCE
MOBILE COUNTY, ALABAMA
AUG. 26-DEC. 5, 1970

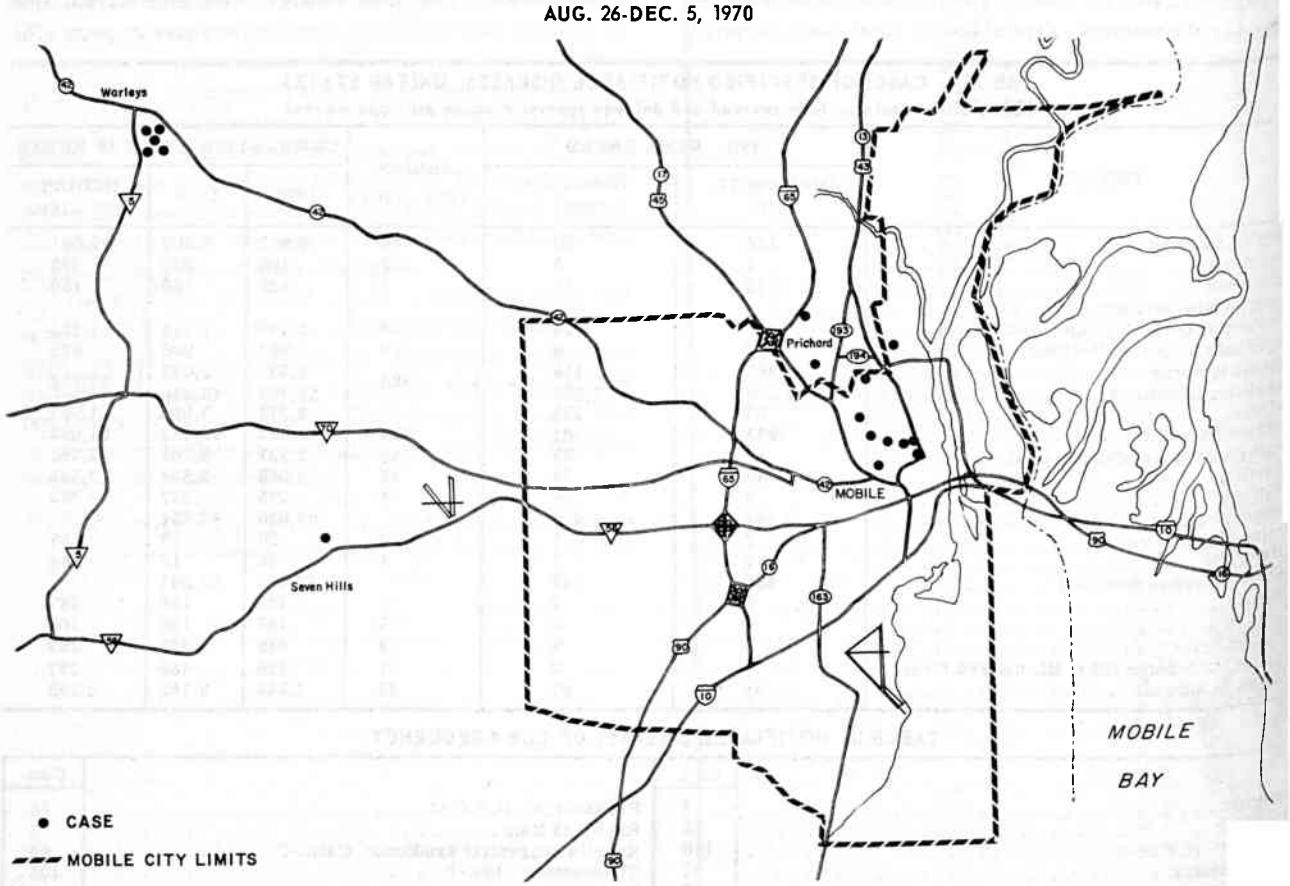


Table 2
Immunization Status of Diphtheria Cases and Positive Contacts
Mobile County, Alabama, 1970

Immunization Status	No. Cases	Percent of Cases	No. Positive Contacts	Percent of Positive Contacts
Full	2	12	0	0
Lapsed	5	29	0	0
Inadequate	0	0	13	72
None	10	59	5	28
Total	17	100	18	100

For the 10-year period 1960-1969, 73 cases of diphtheria were reported in Mobile County. This represents 34 percent of the total cases for the state, and a mean annual incidence of 2.3 cases per 100,000 population (Figure 3). For 1970, 90 percent of Alabama's cases have been located in Mobile County.

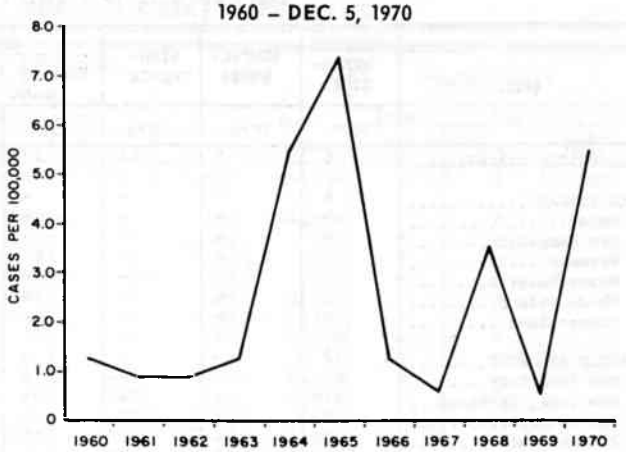
(Reported by George W. Newburn, Jr., M.D., Health Officer, M. C. Clark, D.V.M., Assistant Health Officer, Mobile County Health Department; Frederick S. Wolf, M.D., Director, Bureau of Preventable Diseases, Thomas S. Hosty, Ph.D., Director of Laboratories, Alabama Department of Public Health; and an EIS Officer.)

Editorial Note:

The annual number of reported cases of diphtheria in the United States has decreased from approximately 900 cases in 1960 to approximately 200 cases per year from 1965 to 1969. The 1970 total, which has already reached 426, is the highest since 1962.

For the past several years, diphtheria has been more of a problem in the southeastern and southwestern United States than in other areas of the country *(1)*. The percentage of non-immunized children is higher in the southern regions than in the northern regions *(2)*; analysis of surveillance data shows that incidence of diphtheria in children under 10 who have received no vaccinations is 70 times greater than in children receiving three or more injections. Cutaneous diphtheria has recently been reported in Alabama, and cutaneous infection has been postulated as a significant factor in maintaining the level of endemic diphtheria *(3)*.

Figure 3
ANNUAL INCIDENCE OF DIPHTHERIA
MOBILE COUNTY, ALABAMA
1960 – DEC. 5, 1970



References:
1. National Communicable Disease Center: Diphtheria Surveillance, Rep. No. 10, 31 Dec 1969
2. National Communicable Disease Center: United States Immunization Survey, 1969. Atlanta, NCDC, 1970
3. Belsey MA, Sinclair M, Roder MR, LeBlanc DR: *Corynebacterium diphtheriae* skin infections in Alabama and Louisiana. New Eng J Med 280:135-144, 1969

SEROGROUP A MENINGOCOCCAL MENINGITIS – Nashua, New Hampshire

On November 3, 1970, a 10-year-old male from Nashua, New Hampshire, became feverish and suffered abdominal and left flank pain after playing football. He was seen by his pediatrician shortly thereafter, and had a temperature of 104° F., vomiting, abdominal pain and rigidity. The boy was admitted to a hospital in Nashua with a clinical diagnosis of a possible ruptured spleen.

On admission, his white blood cell count was 10,000 and the hematocrit was normal. No meningeal signs were noted. Vomiting and fever continued, but abdominal pain and rigidity abated after 3-4 hours. The following morning, a generalized petechial rash was noted, and the child was started on intravenous penicillin. Lumbar puncture showed grossly purulent cerebrospinal fluid, which was negative for bacteria on gram stain and culture. The child improved with antibiotic therapy and made an uneventful recovery.

Nasal and blood samples obtained on the day of admission were cultured and yielded *Neisseria meningitidis*. The organism recovered from the nose was identified as serogroup A by the New Hampshire State Health Department Laboratory and the Laboratory Division, CDC.

(Reported by Herman Guiterman, M.D., James Sullivan, M.D., and Everett Tuttle, M.D., private pediatricians, Nashua, New Hampshire; Virginia Rosytinas, MT, A.S.C.P., Bacteriology Department, Hospital Laboratory, Memorial Hospital, Nashua, New Hampshire; George Coronis, M.S., Bacteriologist, Laboratory Services Section, and Vladas Kaupas, M.D., State Epidemiologist, Division of Public Health, State of New Hampshire, and Louis Greenberg, Ph.D., Chief, Biologics Control Laboratory, Canadian Communicable Disease Center, Ottawa, Canada.)

Editorial Note:

Though serogroup A *Neisseria meningitidis* is rare in the United States, it has been responsible for epidemic meningococcal meningitis. The only case reported in the United States during the preceding epidemic year (Sept. 1, 1969-Aug. 30, 1970) occurred in Olympia, Washington, in June 1970 (MMWR Vol. 19, No. 24), and CDC records only six isolates of serogroup A *N. meningitidis* since 1966. Despite the growing problem of sulfa-resistance with other

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED DECEMBER 12, 1970 AND DECEMBER 6, 1969 (49th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post Infectious	Serum	Infectious			
	1970	1970	1970	1970	1969	1970	1970	1970	1969	1970	Cum. 1970
UNITED STATES	126	1	13	27	24	2	157	1,269	1,059	62	3,273
NEW ENGLAND	4	–	–	–	1	–	4	116	145	1	87
Maine	–	–	–	–	–	–	–	17	17	–	11
New Hampshire	–	–	–	–	–	–	–	1	4	–	6
Vermont	–	–	–	–	–	–	1	6	6	–	5
Massachusetts	2	–	–	–	–	–	–	38	91	1	42
Rhode Island	2	–	–	–	–	–	–	22	13	–	9
Connecticut	–	–	–	–	1	–	3	32	14	–	14
MIDDLE ATLANTIC	33	–	–	5	4	–	72	227	182	11	316
New York City	15	–	–	2	2	–	38	52	42	2	42
New York, Up-State	11	–	–	1	1	–	10	57	23	1	91
New Jersey	4	–	–	–	1	–	23	74	49	6	81
Pennsylvania	3	–	–	2	–	–	1	44	68	2	102
EAST NORTH CENTRAL	13	–	–	10	6	–	22	227	169	5	200
Ohio	8	–	–	4	1	–	4	29	36	–	31
Indiana	–	–	–	1	3	–	–	12	34	–	24
Illinois	1	–	–	1	–	–	1	81	20	4	60
Michigan	4	–	–	4	2	–	17	91	74	1	85
Wisconsin	–	–	–	–	–	–	–	14	5	–	–
WEST NORTH CENTRAL	2	–	–	1	4	–	7	58	36	6	337
Minnesota	2	–	–	–	1	–	1	13	9	–	33
Iowa	–	–	–	–	1	–	1	10	6	–	27
Missouri	–	–	–	–	–	–	1	14	13	1	34
North Dakota	–	–	–	–	–	–	–	6	1	1	4
South Dakota	–	–	–	–	–	–	–	–	2	–	2
Nebraska	–	–	–	–	–	–	–	–	1	–	9
Kansas	–	–	–	1	2	–	4	15	4	4	228
SOUTH ATLANTIC	8	–	1	–	5	–	15	118	97	8	589
Delaware	–	–	–	–	–	–	–	1	5	–	2
Maryland	–	–	–	–	–	–	–	16	11	–	76
Dist. of Columbia	–	–	–	–	–	–	–	2	1	–	2
Virginia	3	–	–	–	2	–	8	38	9	–	79
West Virginia	1	–	–	–	–	–	–	10	5	1	12
North Carolina	2	–	–	–	1	–	6	19	21	3	220
South Carolina	–	–	–	–	–	–	–	4	2	–	52
Georgia	–	–	1	–	–	–	–	13	16	4	94
Florida	2	–	–	–	2	–	1	15	27	–	52
EAST SOUTH CENTRAL	35	–	1	5	1	–	2	38	75	–	193
Kentucky	1	–	–	3	–	–	1	15	41	–	157
Tennessee	2	–	–	–	1	–	1	15	26	–	–
Alabama	22	–	–	–	–	–	–	6	5	–	24
Mississippi	10	–	1	2	–	–	–	2	3	–	12
WEST SOUTH CENTRAL	5	1	9	1	1	1	2	96	84	12	596
Arkansas	1	–	–	–	–	–	–	25	1	–	15
Louisiana	–	–	1	–	1	–	1	5	6	1	47
Oklahoma	1	–	–	1	–	–	–	10	21	–	99
Texas	3	1	8	–	–	1	1	56	56	11	435
MOUNTAIN	–	–	2	1	–	–	2	101	56	9	348
Montana	–	–	–	–	–	–	–	11	2	–	10
Idaho	–	–	–	–	–	–	1	7	–	–	8
Wyoming	–	–	–	–	–	–	1	1	5	–	–
Colorado	–	–	–	–	–	–	–	39	11	9	306
New Mexico	–	–	–	1	–	–	–	14	5	–	10
Arizona	–	–	2	–	–	–	–	13	18	–	10
Utah	—	—	—	—	–	—	—	—	8	—	4
Nevada	–	–	–	–	–	–	–	16	7	–	–
PACIFIC	26	–	–	4	2	1	31	288	215	10	607
Washington	–	–	–	–	–	–	1	28	11	–	49
Oregon	1	–	–	–	–	–	1	32	19	–	25
California	17	–	–	4	2	1	29	225	179	10	390
Alaska	–	–	–	–	–	–	–	–	1	–	2
Hawaii	8	–	–	–	–	–	–	3	5	–	141
Puerto Rico†	–	–	–	–	–	–	2	9	15	–	27
Virgin Islands	–	–	–	–	–	–	–	–	–	–	–

*Delayed reports: Aseptic meningitis: Ariz. 1, Wash. 11
Brucellosis: Minn. 2
Encephalitis, primary: Wash. 1
Hepatitis, infectious: Okla. 9, Wash. delete 10, P.R. 8
Malaria: Iowa 2, Okla. 7

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 12, 1970 AND DECEMBER 6, 1969 (49th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		POLIOMYELITIS		
		Cumulative			Cumulative			Cum.	Total	Paralytic	
	1970	1970	1969	1970	1970	1969	1970	1970	1970	1970	Cum. 1970
UNITED STATES.....	833	44,677	23,612	56	2,327	2,761	2,492	95,636	2	1	28
NEW ENGLAND.....	21	1,158	1,179	2	100	107	283	10,984	-	-	-
Maine.....	9	391	9	-	5	8	54	829	-	-	-
New Hampshire.....	-	61	244	-	9	4	32	418	-	-	-
Vermont.....	-	8	3	-	8	-	1	705	-	-	-
Massachusetts.....	11	470	241	-	39	41	98	3,331	-	-	-
Rhode Island.....	-	120	27	-	6	14	43	2,165	-	-	-
Connecticut.....	1	108	655	2	33	40	55	3,536	-	-	-
MIDDLE ATLANTIC.....	65	5,201	7,905	12	432	455	170	8,902	-	-	-
New York City.....	37	1,063	5,011	3	90	87	32	3,025	-	-	-
New York, Up-State...	10	347	620	3	81	89	NN	NN	-	-	-
New Jersey.....	1	1,727	1,104	2	178	176	41	2,543	-	-	-
Pennsylvania.....	17	2,064	1,170	4	83	103	97	3,334	-	-	-
EAST NORTH CENTRAL.....	169	10,499	2,738	9	270	373	903	26,746	-	-	2
Ohio.....	19	3,899	511	4	97	136	149	4,616	-	-	-
Indiana.....	2	280	478	3	26	50	51	2,302	-	-	-
Illinois.....	53	3,224	730	-	67	52	49	2,061	-	-	-
Michigan.....	15	1,837	365	1	67	108	402	7,076	-	-	1
Wisconsin.....	80	1,259	654	1	13	27	252	10,691	-	-	1
WEST NORTH CENTRAL.....	6	3,930	1,390	3	121	137	166	5,211	-	-	1
Minnesota.....	-	40	10	2	21	29	33	564	-	-	-
Iowa.....	1	1,173	338	-	14	21	123	3,274	-	-	-
Missouri.....	2	1,279	31	-	63	56	1	405	-	-	1
North Dakota.....	-	321	51	-	5	2	5	365	-	-	-
South Dakota.....	-	104	51	-	1	1	3	48	-	-	-
Nebraska.....	2	943	900	-	8	11	1	400	-	-	-
Kansas.....	1	70	9	1	9	17	-	155	-	-	-
SOUTH ATLANTIC.....	77	7,525	2,892	8	455	477	141	10,169	-	-	-
Delaware.....	1	269	471	-	3	17	4	366	-	-	-
Maryland.....	-	1,387	93	2	47	41	15	1,081	-	-	-
Dist. of Columbia....	-	345	68	-	3	9	1	215	-	-	-
Virginia.....	44	2,113	950	1	47	57	31	2,199	-	-	-
West Virginia.....	2	333	224	-	13	24	20	2,513	-	-	-
North Carolina.....	18	935	346	1	97	89	NN	NN	-	-	-
South Carolina.....	12	626	134	1	47	62	21	967	-	-	-
Georgia.....	-	18	2	2	43	77	-	3	-	-	-
Florida.....	-	1,499	604	1	155	101	49	2,825	-	-	-
EAST SOUTH CENTRAL.....	234	1,927	126	4	165	201	180	5,737	-	-	-
Kentucky.....	113	1,031	70	1	60	81	87	2,110	-	-	-
Tennessee.....	21	465	21	3	69	74	73	3,189	-	-	-
Alabama.....	98	322	11	-	24	27	20	382	-	-	-
Mississippi.....	2	109	24	-	12	19	-	56	-	-	-
WEST SOUTH CENTRAL.....	191	9,059	5,058	6	287	362	181	8,707	-	-	22
Arkansas.....	-	30	16	2	25	33	22	160	-	-	-
Louisiana.....	19	215	125	1	71	98	3	47	-	-	-
Oklahoma*.....	71	873	142	1	23	36	2	2,700	-	-	-
Texas.....	101	7,941	4,775	2	168	195	154	5,800	-	-	22
MOUNTAIN.....	22	2,034	1,134	-	51	59	75	4,288	-	-	1
Montana.....	9	110	108	-	1	8	5	803	-	-	-
Idaho*.....	1	380	90	-	7	13	1	104	-	-	-
Wyoming.....	-	11	-	-	2	-	-	42	-	-	-
Colorado.....	-	192	141	-	17	13	16	1,504	-	-	1
New Mexico.....	8	286	284	-	2	8	6	779	-	-	-
Arizona*.....	4	998	499	-	16	10	47	924	-	-	-
Utah.....	---	36	11	---	5	5	---	132	---	---	-
Nevada.....	-	21	1	-	1	2	-	-	-	-	-
PACIFIC.....	48	3,344	1,190	12	446	590	393	14,892	2	1	2
Washington*.....	4	698	67	-	47	57	185	5,698	-	-	-
Oregon.....	11	421	200	1	31	21	42	1,290	1	-	-
California.....	32	1,894	863	10	363	491	148	5,972	1	1	2
Alaska.....	-	141	14	-	-	11	-	397	-	-	-
Hawaii.....	1	190	46	1	5	10	18	1,535	-	-	-
Puerto Rico.....	7	979	1,985	-	5	19	25	901	-	-	-
Virgin Islands.....	-	8	56	-	3	-	-	3	-	-	-

*Delayed reports: Measles: Okla. 29, Ida. 271, Wash. 20
Meningococcal infections: Okla. 1, Ariz. 1
Mumps: Okla. 1, Wash. 44

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 12, 1970 AND DECEMBER 6, 1969 (49th WEEK) - CONTINUED

AREA	RUBELLA		TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970
UNITED STATES.....	487	54,172	7	132	4	148	8	343	–	336	51	2,844
NEW ENGLAND.....	24	2,762	–	4	–	1	1	12	–	–	2	110
Maine.....	10	525	–	–	–	–	–	–	–	–	2	48
New Hampshire.....	–	154	–	–	–	–	–	–	–	–	–	1
Vermont.....	1	65	–	–	–	–	–	–	–	–	–	52
Massachusetts.....	5	1,275	–	2	–	1	–	9	–	–	–	4
Rhode Island.....	2	128	–	–	–	–	–	–	–	–	–	1
Connecticut.....	6	615	–	2	–	–	1	3	–	–	–	4
MIDDLE ATLANTIC.....	21	4,201	6	20	–	2	1	64	–	14	8	257
New York City.....	5	670	6	13	–	–	1	24	–	–	–	–
New York, Up-State..	6	471	–	3	–	1	–	20	–	6	8	241
New Jersey.....	3	889	–	3	–	–	–	10	–	4	–	–
Pennsylvania.....	7	2,171	–	1	–	1	–	10	–	4	–	16
EAST NORTH CENTRAL....	91	11,164	–	25	2	22	–	46	–	10	5	226
Ohio.....	5	2,132	–	2	2	4	–	17	–	9	3	58
Indiana*.....	15	2,041	–	8	–	13	–	4	–	–	–	25
Illinois.....	13	1,774	–	7	–	3	–	10	–	1	1	61
Michigan.....	42	2,945	–	8	–	–	–	13	–	–	–	26
Wisconsin.....	16	2,272	–	–	–	2	–	2	–	–	1	56
WEST NORTH CENTRAL....	12	3,435	–	5	–	31	–	11	–	4	13	607
Minnesota.....	3	127	–	1	–	1	–	1	–	–	6	123
Iowa.....	6	2,076	–	2	–	–	–	1	–	1	1	124
Missouri.....	1	443	–	1	–	27	–	3	–	3	2	113
North Dakota.....	1	156	–	–	–	1	–	2	–	–	2	51
South Dakota.....	–	1	–	1	–	1	–	–	–	–	–	85
Nebraska.....	–	580	–	–	–	–	–	2	–	–	–	7
Kansas.....	1	52	–	–	–	1	–	2	–	–	2	104
SOUTH ATLANTIC.....	33	6,813	1	31	–	16	2	48	–	224	4	563
Delaware.....	–	46	–	–	–	–	–	–	–	5	–	–
Maryland.....	3	333	–	1	–	–	1	14	–	24	–	3
Dist. of Columbia...	1	23	–	1	–	–	–	1	–	–	–	–
Virginia*.....	13	770	–	2	–	6	1	9	–	57	–	211
West Virginia.....	6	1,422	–	–	–	2	–	–	–	5	3	146
North Carolina.....	–	46	–	3	–	4	–	3	–	88	–	3
South Carolina.....	5	669	1	2	–	–	–	3	–	35	–	–
Georgia.....	–	–	–	6	–	3	–	8	–	9	1	111
Florida.....	5	3,504	–	16	–	1	–	10	–	1	–	89
EAST SOUTH CENTRAL....	16	2,969	–	16	1	14	1	41	–	38	10	226
Kentucky.....	2	969	–	2	–	2	1	11	–	3	7	125
Tennessee.....	8	1,513	–	6	1	11	–	20	–	22	3	61
Alabama.....	6	389	–	6	–	–	–	8	–	10	–	37
Mississippi.....	–	98	–	2	–	1	–	2	–	3	–	3
WEST SOUTH CENTRAL....	59	9,268	–	16	1	38	–	34	–	38	4	442
Arkansas.....	1	36	–	4	–	18	–	10	–	6	1	73
Louisiana.....	–	156	–	4	–	5	–	10	–	1	–	67
Oklahoma.....	1	824	–	–	–	6	–	1	–	24	1	91
Texas.....	57	8,252	–	8	1	9	–	13	–	7	2	211
MOUNTAIN.....	9	2,121	–	–	–	14	–	17	–	6	–	84
Montana.....	3	338	–	–	–	3	–	1	–	1	–	1
Idaho.....	–	201	–	–	–	–	–	–	–	2	–	–
Wyoming.....	–	135	–	–	–	–	–	2	–	1	–	3
Colorado.....	–	427	–	–	–	–	–	4	–	2	–	34
New Mexico.....	2	234	–	–	–	–	–	6	–	–	–	16
Arizona.....	4	614	–	–	–	–	–	2	–	–	–	14
Utah.....	—	172	—	–	—	11	—	2	—	–	—	2
Nevada.....	–	–	–	–	–	–	–	–	–	–	–	14
PACIFIC.....	222	11,439	–	15	–	10	3	70	–	2	5	329
Washington*.....	30	4,929	–	2	–	2	–	4	–	–	–	9
Oregon.....	19	978	–	3	–	2	–	1	–	–	–	4
California.....	166	5,195	–	10	–	6	3	61	–	2	5	305
Alaska.....	4	111	–	–	–	–	–	3	–	–	–	11
Hawaii.....	3	226	–	–	–	–	–	1	–	–	–	–
Puerto Rico*.....	–	27	–	16	–	–	–	5	–	–	–	48
Virgin Islands.....	–	1	–	–	–	–	–	1	–	–	–	–

*Delayed reports: Rubella: Wash. 4
Tetanus: P.R. 1
Tularemia: Ind. delete 1
RMSF: Va. delete 2

Week No. 49

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED DECEMBER 12, 1970

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

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
NEW ENGLAND:	775	474	46	33
Boston, Mass.	222	134	18	4
Bridgeport, Conn.	51	32	4	4
Cambridge, Mass.	20	15	3	1
Fall River, Mass.	33	22	2	–
Hartford, Conn.	58	33	2	3
Lowell, Mass.	30	15	3	1
Lynn, Mass.	27	19	–	1
New Bedford, Mass.	37	25	–	–
New Haven, Conn.	58	31	3	10
Providence, R. I.	83	46	5	5
Somerville, Mass.	12	6	1	1
Springfield, Mass.	52	32	2	2
Waterbury, Conn.	35	26	–	–
Worcester, Mass.	57	38	3	1
MIDDLE ATLANTIC:	3,614	2,160	130	135
Albany, N. Y.	52	31	1	2
Allentown, Pa.	56	37	5	3
Buffalo, N. Y.	168	99	3	8
Camden, N. J.	53	29	3	2
Elizabeth, N. J.	33	17	–	1
Erie, Pa.	35	19	3	–
Jersey City, N. J.	74	49	7	3
Newark, N. J.	75	30	1	2
New York City, N. Y. †	1,858	1,104	65	72
Paterson, N. J.	35	19	–	2
Philadelphia, Pa.	498	297	–	17
Pittsburgh, Pa.	203	119	15	9
Reading, Pa.	48	34	–	2
Rochester, N. Y.	112	80	9	4
Schenectady, N. Y.	40	21	5	2
Scranton, Pa.	42	26	1	–
Syracuse, N. Y.	124	74	3	5
Trenton, N. J.	47	28	6	–
Utica, N. Y.	25	20	1	–
Yonkers, N. Y.	36	27	2	1
EAST NORTH CENTRAL:	2,676	1,531	84	114
Akron, Ohio	59	38	–	1
Canton, Ohio	31	20	–	–
Chicago, Ill.	745	417	20	31
Cincinnati, Ohio	153	83	3	9
Cleveland, Ohio	202	107	6	6
Columbus, Ohio	137	77	1	9
Dayton, Ohio	77	44	6	6
Detroit, Mich.	373	210	8	11
Evansville, Ind.	51	33	4	2
Flint, Mich.	49	28	2	2
Fort Wayne, Ind.	51	29	4	3
Gary, Ind.	32	16	1	3
Grand Rapids, Mich.	64	44	7	2
Indianapolis, Ind.	187	99	3	10
Madison, Wis.	47	22	8	2
Milwaukee, Wis.	127	81	–	4
Peoria, Ill.	36	22	–	5
Rockford, Ill.	30	21	7	1
South Bend, Ind.	43	20	2	2
Toledo, Ohio	122	86	2	4
Youngstown, Ohio	60	34	–	1
WEST NORTH CENTRAL:	841	513	28	37
Des Moines, Iowa	59	34	1	4
Duluth, Minn.	28	18	3	–
Kansas City, Kans.	47	25	3	7
Kansas City, Mo.	122	75	3	3
Lincoln, Nebr.	31	20	–	1
Minneapolis, Minn.	110	69	1	4
Omaha, Nebr.	89	55	–	3
St. Louis, Mo.	229	138	9	12
St. Paul, Minn.	78	50	1	2
Wichita, Kans.	48	29	7	1
Las Vegas, Nev.*	22	7	3	2

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
SOUTH ATLANTIC:	1,359	719	61	82
Atlanta, Ga.	162	81	1	9
Baltimore, Md.	264	124	9	22
Charlotte, N. C.	68	34	–	6
Jacksonville, Fla.	81	44	2	2
Miami, Fla.	97	50	–	7
Norfolk, Va.	60	32	3	2
Richmond, Va.	111	58	11	6
Savannah, Ga.	30	13	4	1
St. Petersburg, Fla.	88	66	3	1
Tampa, Fla.	79	43	7	6
Washington, D. C.	246	131	15	15
Wilmington, Del.	73	43	6	5
EAST SOUTH CENTRAL:	752	398	29	38
Birmingham, Ala.	146	70	1	16
Chattanooga, Tenn.	78	32	7	4
Knoxville, Tenn.	53	30	9	–
Louisville, Ky.	139	78	8	5
Memphis, Tenn.	155	94	1	3
Mobile, Ala.	44	19	1	2
Montgomery, Ala.	42	26	–	3
Nashville, Tenn.	95	49	2	5
WEST SOUTH CENTRAL:	1,311	690	39	59
Austin, Tex.	46	27	4	1
Baton Rouge, La.	53	25	1	10
Corpus Christi, Tex.	36	16	–	–
Dallas, Tex.	182	100	2	6
El Paso, Tex.	42	26	1	3
Fort Worth, Tex.	84	45	10	8
Houston, Tex.	282	141	3	1
Little Rock, Ark.	46	28	1	2
New Orleans, La.	200	100	6	9
Oklahoma City, Okla.	86	45	–	3
San Antonio, Tex.	120	62	2	9
Shreveport, La.	70	33	3	3
Tulsa, Okla.	64	42	6	4
MOUNTAIN:	482	259	18	33
Albuquerque, N. Mex.	51	21	2	3
Colorado Springs, Colo.	35	20	6	3
Denver, Colo.	118	65	1	8
Ogden, Utah	21	16	2	1
Phoenix, Ariz.	111	65	–	5
Pueblo, Colo.	22	11	2	2
Salt Lake City, Utah	64	29	4	5
Tucson, Ariz.	60	32	1	6
PACIFIC:	1,837	1,128	43	70
Berkeley, Calif.	15	12	–	–
Fresno, Calif.	56	34	2	2
Glendale, Calif.	30	21	–	2
Honolulu, Hawaii	57	25	–	7
Long Beach, Calif.	112	70	–	2
Los Angeles, Calif.	599	356	14	19
Oakland, Calif.	85	59	2	2
Pasadena, Calif.	40	33	3	1
Portland, Oreg.	155	113	2	6
Sacramento, Calif.	51	28	3	–
San Diego, Calif.	133	83	4	6
San Francisco, Calif.	211	123	5	4
San Jose, Calif.	30	24	2	2
Seattle, Wash.	170	99	4	9
Spokane, Wash.	48	22	1	5
Tacoma, Wash.	45	26	1	3
Total	13,647	7,872	478	601
Expected Number	13,256	7,684	508	565
Cumulative Total (includes reported corrections for previous weeks)	628,686	358,864	24,226	29,910

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

† Delayed Report for week ended December 5, 1970

MENINGITIS – *(Continued from page 471)*

serogroups of meningococci, all United States serogroup A meningococcal isolates to date have been sulfa-sensitive.

The Canadian Communicable Disease Center reports a number of serogroup A isolates in 1969 and 1970 from several Canadian provinces, though there have been no large outbreaks. The single 1970 Canadian isolate tested at CDC was sulfa-sensitive.

No members of the family in Nashua, New Hampshire, had known contact with persons from Canada.

INTERNATIONAL NOTES
CHOLERA

Somalia has been added to the WHO list of cholera-infected nations *(1)*. In this region of West Africa, Affars and the Issas (formerly French Somaliland), Ethiopia, and Saudi Arabia have previously reported cholera cases in 1970 *(2)*.

(Reported by the Bacterial Diseases Branch, Epidemiology Program, and the Foreign Quarantine Program, CDC.)

References

1. Daily Radiotelegraphic, Epidemiological Bulletin, WHO, Dec. 10, 1970
2. Weekly Epidemiological Record, WHO, Vol. 45, Nos.1-49, 1970

EPIDEMIOLOGIC NOTES AND REPORTS
FOLLOW-UP DEATH FROM CHICKENPOX
Tacoma, Washington

Further study of the fatal case of chickenpox in Tacoma, Washington, (MMWR, Vol. 19, No. 47) has yielded the following: testing with oil red O fat stains revealed extensive fat accumulation in the liver, kidneys, and heart. These changes are nonspecific, and are sometimes seen in association with many bacterial and viral infections.

Recently, however, fatty infiltration of these organs has been seen in Reye's syndrome *(1)*. This usually fatal syndrome is occasionally associated with chickenpox and other febrile illnesses *(2)*.

It is now felt that the primary cause of the patient's death was related to this severe fatty infiltration of the liver, kidneys, and heart, associated with the severe cerebral edema with small perivascular hemorrhages.

(Reported by Jay Johnson, M.D., Pathology Resident, Charles Reberger, M.D., Pathologist, Tacoma General Hospital; and Byron J. Francis, M.D., Chief, Office of Epidemiology, Washington State Division of Health.)

References:

1. Reye RD, Morgan G, Baral J: Encephalopathy and fatty degeneration of the viscera, a disease entity in childhood. Lancet 2:749, 1963
2. Glick TH, Likosky WH, Levitt LP, Mellin H, Reynolds DW: Reye's syndrome: an epidemiologic approach. Pediatrics 46:371, 1970

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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 AT CLOSE OF BUSINESS ON FRIDAY; COMPILED DATA ON A NATIONAL BASIS ARE OFFICIALLY RELEASED TO THE PUBLIC ON THE SUCCEEDING FRIDAY.