

COMMUNICABLE DISEASE CENTER

*Marbidity and Mortality*

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WEEKLY REPORT

Week Ending August 20, 1966

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

EPIDEMIOLOGIC NOTES AND REPORTS  
ENCEPHALITIS - Texas

Corpus Christi, Nueces County

During the first 3 weeks of August a total of 47 cases of encephalitis and other illnesses clinically diagnosed as compatible with St. Louis encephalitis virus infection has been reported by the Corpus Christi-Nueces County Health Department. Initial sera from four patients with encephalitis had hemagglutination-inhibition titers ranging from 1:40 to 1:640 for St. Louis encephalitis virus. Clinical, epidemiologic and viral studies are in progress.

Mosquito control measures which were instituted in the beginning of the summer have been greatly intensified. (Reported by Dr. Van C. Tipton, State Epidemiologist, Texas State Department of Health; and Dr. William R. Metzger, Director of Public Health and Welfare, Corpus Christi-Nueces County Health Department.)

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Dallas

A total of 93 cases of clinical encephalitis have occurred in Dallas, Texas, from the middle of July through August 23, 1966. Six deaths have been associated with the outbreak. In addition there have been 52 cases of aseptic meningitis.

(Continued on page 282)

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

DISEASE	33rd. WEEK ENDED		MEDIAN 1961-1965	CUMULATIVE, FIRST 33 WEEKS		
	AUGUST 20, 1966	AUGUST 21, 1965		1966	1965	MEDIAN 1961-1965
Aseptic meningitis	142	54	88	1,323	1,073	1,114
Brucellosis	11	3	10	143	151	267
Diphtheria	4	6	5	112	95	165
Encephalitis, primary:						
Arthropod-borne & unspecified	110	45	---	972	1,027	---
Encephalitis, post-infectious	8	8	---	548	507	---
Hepatitis, serum	33	605	746	875	21,915	28,354
Hepatitis, infectious	610			20,688		
Measles (rubeola)	693	665	1,183	187,665	238,074	383,740
Poliomyelitis, Total (including unspecified)	2	1	23	59	36	182
Paralytic	2	1	22	54	31	155
Nonparalytic	---	---	---	---	5	---
Meningococcal infections, Total	33	25	26	2,602	2,217	1,665
Civilian	29	24	---	2,334	2,037	---
Military	4	1	---	268	180	---
Rubella (German measles)	228	---	---	40,912	---	---
Streptococcal sore throat & Scarlet fever	3,838	3,193	3,003	294,323	272,741	238,988
Tetanus	5	10	---	104	174	---
Tularemia	8	5	---	105	160	---
Typhoid fever	11	8	20	227	250	288
Typhus, tick-borne (Rky. Mt. Spotted fever)	5	13	---	165	189	---
Rabies in Animals	92	60	60	2,764	2,977	2,653

NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	4	Botulism	4
Leptospirosis: Hawaii-1, Tex-2	45	Trichinosis: Ore-1, Ohio-1	63
Malaria: NYC-1, Mich-3, Md-4, NC-1, NY UpS-1, La-1, Fla-1, Calif-3	213	Rabies in Man	1
Psittacosis: Minn-1, Tex-1	28	Rubella, Congenital Syndrome: Minn-2	20
Typhus, murine	14	Plague	4

## ENCEPHALITIS - Texas (Continued from front page)

Studies at the Texas State Department of Health laboratories revealed a fourfold increase in CF antibody titers for St. Louis encephalitis virus for 4 patients and initial titers of 1:10 or greater for 53 others. Presumptive virus isolates have been found in autopsy specimens from two patients and from pools of *Culex quinquefasciatus* mosquitoes.

Principle control measures have been directed toward eliminating the mosquito reservoirs in the area. Mobile equipment, including aircraft, have been used to spray the entire city with malathion.

(Reported by Dr. Van C. Tipton, State Epidemiologist, Texas State Department of Health; and Dr. Hal J. Dewlett, Director, Dallas City Health Department.)

## SALMONELLOSIS - Massachusetts

An outbreak of *Salmonella cubana* in a Massachusetts hospital has been found associated with a carmine dye used for the investigation of gastrointestinal disease in several patients.

Investigation of the outbreak was initiated by the hospital when it was noted that *S. cubana* accounted for a disproportionate number of salmonella isolations from clinical specimens in the hospital bacteriology laboratory. In 1965, this serotype represented 10.3 percent of salmonella isolations at the hospital as compared to 0.7 percent of the national total (Table 1). From January through July 1966, *S. cubana* accounted for 48.5 percent of the hospital isolates of salmonellae. Several of the patients with *S. cubana* infection developed symptoms of salmonellosis after admission to the hospital. Many of this group had been admitted because of chronic gastrointestinal disease or feeding problems and had been given carmine powder for timing collection of fecal specimens, measurement of bowel transit time and demonstration of fistulae.

Carmine powder from capsules prepared for ingestion and from opened and unopened pharmacy stocks was cultured and found to be heavily contaminated with *Salmonella cubana*. A preliminary quantitative culture revealed  $10^5$  salmonellae per gram. Samples of carmine powder from four other hospitals have been collected and examined by the Massachusetts Department of Public Health; samples from two of these hospitals have been found positive for *S. cubana*. The powder in each instance was prepared from dried female insects of the species *coccus cacti*. Further investigation of the sources and use of this type of powder is underway.

## SALMONELLOSIS - Spokane, Washington

During the last 2 weeks of July, 1966, an outbreak of salmonellosis associated with the consumption of barbecued chicken involved 24 different family groups in Spokane, Washington. Reports indicated that a total of 65 individuals became ill, 24 of whom were hospitalized; two deaths were associated with the outbreak.

While all family groups purchased the barbecued chickens from supermarkets, 21 of 24 groups bought chickens from a single stand in a modern Spokane supermarket. The dates of purchase ranged from July 11 to July 27; 22 of the groups bought their chickens between July 19 and July 24.

Investigation of the food handling operations and practices at the involved store revealed a number of

deficiencies. The barbecuing oven was found to give internal (body cavity) bird temperatures of 150°; the temperature of the meat itself was substantially less. The duration of barbecuing was variable, and some individuals complained that the meat was inadequately cooked. The holding oven (warmer) for cooked birds gave internal (body cavity) bird temperatures of 100-110°, thus allowing bacterial growth to occur in the cooler meat after barbecuing. In addition, the barbecued birds were placed on the same surfaces as uncooked birds, and unpurchased birds were refrigerated and warmed again for sale the next day.

*Salmonella typhi-murium* has been isolated from over 30 individuals associated with this outbreak, from three packaged, barbecued birds from the incriminated store,

Table 1  
Incidence of *Salmonella cubana*  
among *Salmonella* serotypes

Year	National*			Hospital		
	Total Serotypes	<i>S. cubana</i>	Per-cent	Total Serotypes	<i>S. cubana</i>	Per-cent
1963	18,649	40	0.2	75	0	0
1964	21,113	63	0.3	64	1	1.6
1965	20,865	145	0.7	68	7	10.3
1966**	10,507	95	0.9	33	16	48.5

\*Data taken from Salmonella Surveillance, Annual Summaries, 1964, 1965.

\*\*January through July, 1966.

## Discussion:

From the facts accumulated thus far, it would seem that carmine dye, particularly that prepared from the insect *coccus cacti*, should be carefully checked bacteriologically to insure the absence of pathogenic microorganisms before being administered to patients. This applies particularly to materials given to patients with impaired intestinal physiology who may be at greater risk of enteric infection. It should be pointed out that *S. cubana* has Group G salmonella antigens and may not be recognized as a salmonella in laboratories using only diagnostic antisera A through E.

(Reported by David J. Lang, M.D., and Lawrence J. Kunz, Ph.D., Boston, Massachusetts; by A. Daniel Rubenstein, M.D., Director, Division of Hospital Facilities, Massachusetts Department of Public Health.)

and from left-over barbecued chicken and wrappings. An investigation of the poultry plant in western Washington which processes the chickens used in the barbecuing operation revealed a modern, efficient plant. Of 27 environmental swabs, including from the water overflow from the final chilling unit, 6 were positive for various types of salmonellae.

As a result of the investigation, the barbecuing operations at supermarkets throughout Spokane have been temporarily suspended by the Spokane City Health Department. Meetings are being scheduled with the manufac-

turers and distributors of the barbecuing machines and an educational program will be drawn up for those using these machines.

Approximately 25 cases of gastroenteritis have been identified in northern Idaho, all in persons who ingested barbecued chicken obtained from the same supermarket in Spokane, Washington. These cases are still under investigation.

(Reported by Dr. Ernest A. Ager, Chief, Division of Epidemiology, Washington State Department of Health; and an EIS Officer.)

## CURRENT TRENDS

REPORTED CASES OF POST-INFECTIOUS AND POST-IMMUNIZATION ENCEPHALITIS  
SECOND QUARTER ENDING JULY 1, 1966 (WEEKS 14-26)

State	Mumps	Measles	Chickenpox	Other Specified
Alaska	1	...	...	
Arkansas	3	3	...	
California	31	29	11	Influenza-1
Connecticut	1	...	1	
Florida	17	2	4	
Illinois	7	3	1	Rubella-1
Louisiana	...	1	1	
Maryland	1	...	...	
Massachusetts	7	...	...	
Michigan	13	5	4	
Minnesota	5	3	1	Influenza-1, Herpes Simplex-2
New Hampshire	...	...	...	Influenza-1
New York, Upstate	11	3	4	
Pennsylvania	13	9	3	Rubella-1
Tennessee	5	4	...	Influenza-2, Herpes Simplex-1
Texas	8	3	2	
Utah	...	...	1	Herpes-1
Virginia	4	1	...	
Washington	8	...	...	
Second Quarter Total				
1966	135	66	33	
1965	150	39	25	
Cumulative Total (weeks 1-26)				
1966	241	128	61	
1965	264	70	58	

... = Data not available. (States not reporting a case not listed)

## MALARIA - 1966

Through July 1966, a total of 151 case reports of malaria with onset in the first 6 months of 1966 were received by the Malaria Surveillance Unit in the Parasitic Diseases Section of CDC. Imported malaria was responsible for 149 of the cases, 100 of which were in military personnel and 49 in civilians. Eight of the civilians were foreign visitors to the United States. South Vietnam was the country of origin of 91 of the military cases; for civilians, 29 cases originated in Africa and 11 in Asia. The remaining two malaria cases of the total 151 reported were

probably introduced. The cases were in two children of one family in Kentucky with onsets on the same day; investigations to clarify the mode of transmission are continuing.

The parasite species is known in 132 of the 151 cases. The distribution by species is shown in Table 2. *Plasmodium vivax* accounted for 57.6 percent of all cases, and *P. falciparum* for 33.3 percent. Of the military cases 38 percent were attributable to *P. falciparum* as compared to 24 percent of the civilian cases.

(Continued on page 288)

## Morbidity and Mortality Weekly Report

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
AUGUST 20, 1966 AND AUGUST 21, 1965 (33rd WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	ENCEPHALITIS			DIPHTHERIA		HEPATITIS		
	1966	1965		Primary including unsp. cases		Post-Infectious	1966	1965	Serum	Infectious	Both Types
				1966	1965						
UNITED STATES...	142	54	11	110	45	8	4	6	33	610	605
NEW ENGLAND.....	9	3	-	3	3	-	-	-	-	22	29
Maine.....	-	-	-	-	-	-	-	-	-	3	5
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	2
Vermont.....	-	-	-	-	-	-	-	-	-	-	2
Massachusetts.....	8	3	-	2	2	-	-	-	-	2	13
Rhode Island.....	-	-	-	1	-	-	-	-	-	3	1
Connecticut.....	1	-	-	-	1	-	-	-	-	14	6
MIDDLE ATLANTIC.....	6	6	-	9	15	1	-	-	16	66	122
New York City.....	4	3	-	2	8	-	-	-	13	16	33
New York, Up-State.....	-	1	-	1	4	-	-	-	-	18	34
New Jersey.....	-	1	-	5	2	-	-	-	2	9	32
Pennsylvania.....	2	1	-	1	1	1	-	-	1	23	23
EAST NORTH CENTRAL...	8	10	-	15	10	2	-	-	3	152	100
Ohio.....	1	3	-	10	8	-	-	-	1	27	30
Indiana.....	1	-	-	-	-	-	-	-	-	7	5
Illinois.....	5	4	-	1	1	1	-	-	1	50	16
Michigan.....	1	3	-	3	1	1	-	-	1	66	42
Wisconsin.....	-	-	-	1	-	-	-	-	-	2	7
WEST NORTH CENTRAL...	1	5	5	2	4	2	-	-	-	28	18
Minnesota.....	1	3	-	-	-	-	-	-	-	5	5
Iowa.....	-	2	4	-	-	2	-	-	-	11	6
Missouri.....	-	-	-	-	-	-	-	-	-	11	2
North Dakota.....	-	-	-	2	2	-	-	-	-	-	-
South Dakota.....	-	-	-	-	-	-	-	-	-	1	-
Nebraska.....	-	-	1	-	-	-	-	-	-	-	1
Kansas.....	-	-	-	-	2	-	-	-	-	-	4
SOUTH ATLANTIC.....	24	4	4	6	1	1	2	6	2	54	58
Delaware.....	-	-	-	-	-	-	-	-	-	1	-
Maryland.....	-	-	-	-	-	-	-	-	1	14	7
Dist. of Columbia..	1	-	-	-	-	-	-	-	-	-	2
Virginia.....	2	2	2	3	1	-	-	-	-	7	14
West Virginia.....	15	-	-	-	-	-	-	-	-	5	9
North Carolina.....	-	1	-	-	-	-	-	-	-	8	5
South Carolina.....	-	1	-	-	-	-	2	-	1	1	4
Georgia.....	-	-	1	-	-	-	-	3	-	7	-
Florida.....	6	-	1	3	-	1	-	3	-	11	17
EAST SOUTH CENTRAL...	12	10	2	4	3	1	-	-	-	38	59
Kentucky.....	1	6	-	-	-	-	-	-	-	9	18
Tennessee.....	2	1	1	1	3	1	-	-	-	17	19
Alabama.....	5	3	-	-	-	-	-	-	-	5	7
Mississippi.....	4	-	1	3	-	-	-	-	-	7	15
WEST SOUTH CENTRAL...	39	4	-	62	-	-	2	-	2	61	53
Arkansas.....	-	-	-	-	-	-	-	-	-	4	10
Louisiana.....	4	-	-	3	-	-	2	-	-	18	8
Oklahoma.....	-	-	-	-	-	-	-	-	-	1	2
Texas.....	35	4	-	59	-	-	-	-	2	38	33
MOUNTAIN.....	-	1	-	4	5	-	-	-	-	25	29
Montana.....	-	-	-	-	-	-	-	-	-	2	1
Idaho.....	-	-	-	3	-	-	-	-	-	1	5
Wyoming.....	-	-	-	-	-	-	-	-	-	1	-
Colorado.....	-	-	-	1	4	-	-	-	-	2	14
New Mexico.....	-	1	-	-	-	-	-	-	-	8	2
Arizona.....	-	-	-	-	-	-	-	-	-	8	4
Utah.....	-	-	-	-	1	-	-	-	-	3	3
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	43	11	-	5	4	1	-	-	10	164	137
Washington.....	1	1	-	-	1	-	-	-	-	17	6
Oregon.....	-	-	-	2	-	-	-	-	-	24	7
California.....	42	9	-	3	3	1	-	-	10	119	123
Alaska.....	-	-	-	-	-	-	-	-	-	3	-
Hawaii.....	-	1	-	-	-	-	-	-	-	1	1
Puerto Rico.....	-	-	-	-	2	-	-	-	-	21	25

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
AUGUST 20, 1966 AND AUGUST 21, 1965 (33rd 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...	693	187,665	238,074	33	2,602	2,217	2	1	2	54	228
NEW ENGLAND.....	10	2,230	36,722	-	113	112	-	-	-	-	23
Maine.....	-	194	2,786	-	9	16	-	-	-	-	5
New Hampshire.....	1	79	381	-	9	7	-	-	-	-	-
Vermont.....	-	225	1,246	-	4	6	-	-	-	-	-
Massachusetts.....	8	773	19,269	-	44	36	-	-	-	-	-
Rhode Island.....	-	72	3,897	-	12	14	-	-	-	-	3
Connecticut.....	1	887	9,143	-	35	33	-	-	-	-	15
MIDDLE ATLANTIC.....	18	17,925	14,532	4	307	293	-	-	-	-	16
New York City.....	11	8,247	2,282	1	43	51	-	-	-	-	7
New York, Up-State.....	6	2,508	4,084	-	87	81	-	-	-	-	8
New Jersey.....	-	1,844	2,512	3	91	77	-	-	-	-	-
Pennsylvania.....	1	5,326	5,654	-	86	84	-	-	-	-	1
EAST NORTH CENTRAL...	196	68,161	55,046	3	401	305	-	-	-	-	91
Ohio.....	2	6,326	8,843	1	108	81	-	-	-	-	4
Indiana.....	25	5,646	1,801	2	71	39	-	-	-	-	6
Illinois.....	60	11,317	2,602	-	76	83	-	-	-	-	5
Michigan.....	66	14,183	26,240	-	105	66	-	-	-	-	13
Wisconsin.....	43	30,689	15,560	-	41	36	-	-	-	-	63
WEST NORTH CENTRAL...	4	8,661	16,391	-	140	111	-	1	-	1	2
Minnesota.....	-	1,639	625	-	33	22	-	-	-	1	-
Iowa.....	1	5,303	8,971	-	22	7	-	-	-	-	2
Missouri.....	-	529	2,580	-	54	51	-	-	-	-	-
North Dakota.....	3	1,075	3,654	-	9	8	-	-	-	-	-
South Dakota.....	-	40	112	-	4	2	-	-	-	-	-
Nebraska.....	-	75	449	-	8	10	-	-	-	-	-
Kansas.....	NN	NN	NN	-	10	11	-	1	-	-	-
SOUTH ATLANTIC.....	63	15,001	24,602	10	443	426	-	-	-	1	26
Delaware.....	-	256	502	-	4	6	-	-	-	-	-
Maryland.....	-	2,095	1,146	1	46	42	-	-	-	-	2
Dist. of Columbia..	1	381	73	-	11	8	-	-	-	-	-
Virginia.....	10	2,100	4,028	1	49	49	-	-	-	-	2
West Virginia.....	25	5,158	13,511	-	24	24	-	-	-	-	18
North Carolina.....	9	462	378	4	110	82	-	-	-	-	-
South Carolina.....	1	654	1,009	1	47	57	-	-	-	-	-
Georgia.....	-	233	613	-	63	53	-	-	-	1	-
Florida.....	17	3,662	3,342	3	89	105	-	-	-	-	4
EAST SOUTH CENTRAL...	41	19,558	13,597	1	224	175	-	-	-	3	14
Kentucky.....	-	4,693	2,410	-	82	69	-	-	-	-	4
Tennessee.....	29	12,194	7,785	-	73	54	-	-	-	-	10
Alabama.....	9	1,672	2,294	-	49	32	-	-	-	1	-
Mississippi.....	3	999	1,108	1	20	20	-	-	-	2	-
WEST SOUTH CENTRAL...	141	24,084	30,529	2	365	301	2	-	2	47	-
Arkansas.....	-	966	1,081	-	33	14	-	-	-	-	-
Louisiana.....	-	98	104	1	137	168	-	-	-	1	-
Oklahoma.....	-	474	202	-	18	18	-	-	-	1	-
Texas.....	141	22,546	29,142	1	177	101	2	-	2	45	-
MOUNTAIN.....	51	11,810	19,548	1	81	68	-	-	-	-	19
Montana.....	1	1,802	3,696	-	4	2	-	-	-	-	-
Idaho.....	11	1,542	2,761	-	5	8	-	-	-	-	1
Wyoming.....	-	145	841	-	6	5	-	-	-	-	1
Colorado.....	7	1,276	5,600	1	42	13	-	-	-	-	8
New Mexico.....	3	1,118	674	-	10	10	-	-	-	-	-
Arizona.....	10	5,264	1,277	-	10	16	-	-	-	-	9
Utah.....	19	620	4,496	-	-	12	-	-	-	-	-
Nevada.....	-	43	203	-	4	2	-	-	-	-	-
PACIFIC.....	169	20,235	27,107	12	528	426	-	-	-	2	37
Washington.....	16	3,478	7,213	-	37	33	-	-	-	2	24
Oregon.....	19	1,701	3,176	-	33	30	-	-	-	-	8
California.....	53	14,459	12,820	12	439	340	-	-	-	-	4
Alaska.....	76	467	170	-	15	16	-	-	-	-	-
Hawaii.....	5	130	3,728	-	4	7	-	-	-	-	1
Puerto Rico.....	42	2,599	2,298	-	10	5	-	-	-	1	2

## Morbidity and Mortality Weekly Report

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

AUGUST 20, 1966 AND AUGUST 21, 1965 (33rd 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...	3,838	5	104	8	105	11	227	5	165	92	2,764
NEW ENGLAND.....	430	-	2	-	1	-	4	-	2	3	65
Maine.....	35	-	-	-	-	-	-	-	-	1	23
New Hampshire.....	3	-	-	-	-	-	-	-	-	1	22
Vermont.....	-	-	-	-	-	-	-	-	-	1	18
Massachusetts.....	52	-	2	-	1	-	1	-	1	-	2
Rhode Island.....	46	-	-	-	-	-	-	-	-	-	-
Connecticut.....	294	-	-	-	-	-	3	-	1	-	-
MIDDLE ATLANTIC.....	97	-	11	-	-	2	40	-	35	-	175
New York City.....	2	-	4	-	-	-	16	-	-	-	-
New York, Up-State.	91	-	2	-	-	2	10	-	12	-	164
New Jersey.....	NN	-	1	-	-	-	7	-	10	-	-
Pennsylvania.....	4	-	4	-	-	-	7	-	13	-	11
EAST NORTH CENTRAL...	355	-	8	-	12	1	30	1	15	6	371
Ohio.....	8	-	3	-	3	1	15	-	8	-	180
Indiana.....	65	-	1	-	3	-	2	-	-	-	80
Illinois.....	135	-	2	-	5	-	3	1	7	6	44
Michigan.....	86	-	2	-	-	-	4	-	-	-	30
Wisconsin.....	61	-	-	-	1	-	6	-	-	-	37
WEST NORTH CENTRAL...	144	-	6	-	10	4	20	-	2	24	628
Minnesota.....	-	-	1	-	-	-	-	-	-	6	145
Iowa.....	19	-	1	-	-	1	5	-	-	5	130
Missouri.....	1	-	4	-	5	-	8	-	1	4	192
North Dakota.....	86	-	-	-	-	-	1	-	-	3	26
South Dakota.....	7	-	-	-	2	-	-	-	-	4	67
Nebraska.....	4	-	-	-	1	-	1	-	-	1	18
Kansas.....	27	-	-	-	2	3	5	-	1	1	50
SOUTH ATLANTIC.....	397	2	27	-	9	-	40	2	74	7	355
Delaware.....	1	-	-	-	-	-	1	-	1	-	-
Maryland.....	53	-	2	-	1	-	7	1	23	1	2
Dist. of Columbia..	4	-	-	-	-	-	2	-	-	-	-
Virginia.....	66	-	4	-	2	-	8	-	21	-	195
West Virginia.....	124	-	-	-	1	-	1	-	-	1	43
North Carolina.....	6	1	4	-	2	-	3	1	17	-	3
South Carolina.....	41	-	1	-	1	-	7	-	5	-	-
Georgia.....	3	-	6	-	2	-	2	-	7	4	70
Florida.....	99	1	10	-	-	-	9	-	-	1	42
EAST SOUTH CENTRAL...	851	1	12	2	20	-	25	2	27	15	359
Kentucky.....	9	-	1	1	3	-	3	1	6	5	72
Tennessee.....	741	1	2	-	10	-	11	1	16	7	264
Alabama.....	69	-	6	-	4	-	6	-	5	-	12
Mississippi.....	32	-	3	1	3	-	5	-	-	3	11
WEST SOUTH CENTRAL...	481	1	22	5	44	-	24	-	6	22	567
Arkansas.....	-	-	2	4	35	-	1	-	2	2	59
Louisiana.....	-	-	5	-	3	-	7	-	-	3	30
Oklahoma.....	16	-	1	-	4	-	8	-	4	5	145
Texas.....	465	1	14	1	2	-	8	-	-	12	333
MOUNTAIN.....	580	1	2	1	6	-	12	-	3	7	62
Montana.....	33	-	-	-	2	-	-	-	-	-	7
Idaho.....	51	-	-	-	-	-	-	-	-	-	-
Wyoming.....	15	-	-	-	-	-	-	-	-	-	-
Colorado.....	184	1	2	-	-	-	3	-	2	-	8
New Mexico.....	130	-	-	-	1	-	2	-	1	-	11
Arizona.....	51	-	-	-	1	-	3	-	-	5	31
Utah.....	116	-	-	1	2	-	3	-	-	1	1
Nevada.....	-	-	-	-	-	-	1	-	-	1	4
PACIFIC.....	503	-	14	-	3	4	32	-	1	8	182
Washington.....	5	-	-	-	-	-	11	-	-	-	8
Oregon.....	13	-	1	-	-	-	1	-	-	-	2
California.....	405	-	13	-	3	4	18	-	1	8	172
Alaska.....	58	-	-	-	-	-	-	-	-	-	-
Hawaii.....	22	-	-	-	-	-	2	-	-	-	-
Puerto Rico.....	4	-	31	-	-	-	6	-	-	-	10

# Morbidity and Mortality Weekly Report

287

Week No.

## DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED AUGUST 20, 1966

33

(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		
<b>NEW ENGLAND:</b>	678	396	29	35	<b>SOUTH ATLANTIC:</b>	1,113	559	39	73
Boston, Mass.-----	256	147	12	14	Atlanta, Ga.-----	134	53	9	8
Bridgeport, Conn.-----	39	19	2	-	Baltimore, Md.-----	229	117	2	17
Cambridge, Mass.-----	22	16	-	1	Charlotte, N. C.-----	38	19	-	3
Fall River, Mass.-----	22	14	-	2	Jacksonville, Fla.-----	59	24	1	2
Hartford, Conn.-----	54	28	1	4	Miami, Fla.-----	85	47	-	4
Lowell, Mass.-----	18	10	-	-	Norfolk, Va.-----	46	23	1	4
Lynn, Mass.-----	20	15	1	2	Richmond, Va.-----	86	39	3	4
New Bedford, Mass.*-----	26	17	1	1	Savannah, Ga.-----	34	16	2	1
New Haven, Conn.-----	43	22	2	2	St. Petersburg, Fla.-----	72	59	6	1
Providence, R. I.-----	60	31	2	4	Tampa, Fla.-----	88	42	7	14
Somerville, Mass.-----	8	4	1	-	Washington, D. C.-----	187	93	8	9
Springfield, Mass.-----	42	31	4	1	Wilmington, Del.-----	55	27	-	6
Waterbury, Conn.-----	24	14	-	2					
Worcester, Mass.-----	44	28	3	2	<b>EAST SOUTH CENTRAL:</b>	552	255	32	31
<b>MIDDLE ATLANTIC:</b>	2,972	1,685	101	140	Birmingham, Ala.-----	79	39	-	5
Albany, N. Y.-----	46	26	1	3	Chattanooga, Tenn.-----	44	23	5	5
Allentown, Pa.-----	43	27	-	1	Knoxville, Tenn.-----	34	20	1	-
Buffalo, N. Y.-----	140	69	3	5	Louisville, Ky.-----	80	18	11	3
Camden, N. J.-----	40	21	1	3	Memphis, Tenn.-----	123	67	2	5
Elizabeth, N. J.-----	28	20	-	-	Mobile, Ala.-----	47	18	1	4
Erie, Pa.-----	37	23	4	1	Montgomery, Ala.-----	39	21	4	2
Jersey City, N. J.-----	42	22	1	-	Nashville, Tenn.-----	106	49	8	7
Newark, N. J.-----	93	45	5	3					
New York City, N. Y.-----	1,458	817	49	74	<b>WEST SOUTH CENTRAL:</b>	1,084	553	44	91
Paterson, N. J.-----	34	24	3	4	Austin, Tex.-----	31	17	4	-
Philadelphia, Pa.-----	412	234	9	16	Baton Rouge, La.-----	30	15	1	4
Pittsburgh, Pa.-----	212	111	3	11	Corpus Christi, Tex.-----	23	13	-	3
Reading, Pa.-----	54	38	2	-1	Dallas, Tex.-----	169	81	5	16
Rochester, N. Y.-----	102	63	2	2	El Paso, Tex.-----	40	19	3	6
Schenectady, N. Y.-----	18	13	1	1	Fort Worth, Tex.-----	82	31	1	13
Scranton, Pa.-----	42	24	5	2	Houston, Tex.-----	172	84	4	10
Syracuse, N. Y.-----	60	37	3	7	Little Rock, Ark.-----	52	28	4	5
Trenton, N. J.-----	46	26	2	4	New Orleans, La.-----	179	82	6	22
Utica, N. Y.-----	26	19	3	-	Oklahoma City, Okla.-----	58	30	-	2
Yonkers, N. Y.-----	39	26	4	2	San Antonio, Tex.-----	119	79	8	5
					Shreveport, La.-----	70	37	5	2
					Tulsa, Okla.-----	59	37	3	3
<b>EAST NORTH CENTRAL:</b>	2,388	1,303	74	137	<b>MOUNTAIN:</b>	406	227	10	29
Akron, Ohio-----	61	35	1	4	Albuquerque, N. Mex.-----	47	24	1	5
Canton, Ohio-----	40	20	3	2	Colorado Springs, Colo.-----	24	13	3	3
Chicago, Ill.-----	650	345	24	42	Denver, Colo.-----	115	60	4	11
Cincinnati, Ohio-----	201	116	5	8	Ogden, Utah-----	18	8	-	-
Cleveland, Ohio-----	189	99	1	6	Phoenix, Ariz.-----	87	56	1	3
Columbus, Ohio-----	126	73	2	4	Pueblo, Colo.-----	22	11	-	-
Dayton, Ohio-----	71	38	2	1	Salt Lake City, Utah-----	49	31	-	2
Detroit, Mich.-----	307	150	13	24	Tucson, Ariz.-----	44	24	1	5
Evansville, Ind.-----	46	28	2	4					
Flint, Mich.-----	43	23	1	3	<b>PACIFIC:</b>	1,470	853	20	77
Fort Wayne, Ind.-----	36	23	5	-	Berkeley, Calif.-----	16	10	-	1
Gary, Ind.-----	42	23	2	3	Fresno, Calif.-----	41	23	1	3
Grand Rapids, Mich.-----	41	22	1	2	Glendale, Calif.-----	34	20	-	2
Indianapolis, Ind.-----	141	79	3	8	Honolulu, Hawaii-----	53	23	-	10
Madison, Wis.-----	32	14	-	2	Long Beach, Calif.-----	87	46	-	5
Milwaukee, Wis.-----	122	72	6	10	Los Angeles, Calif.-----	434	252	6	21
Peoria, Ill.-----	33	22	-	2	Oakland, Calif.-----	90	51	-	7
Rockford, Ill.-----	21	11	1	2	Pasadena, Calif.-----	33	24	-	-
South Bend, Ind.-----	47	27	1	1	Portland, Ore.-----	108	63	3	3
Toledo, Ohio-----	92	56	-	6	Sacramento, Calif.-----	57	37	1	1
Youngstown, Ohio-----	47	27	1	3	San Diego, Calif.-----	81	44	1	5
					San Francisco, Calif.-----	217	120	2	9
<b>WEST NORTH CENTRAL:</b>	780	473	14	64	San Jose, Calif.-----	27	15	4	-
Des Moines, Iowa-----	41	27	2	1	Seattle, Wash.-----	113	67	2	7
Duluth, Minn.-----	20	13	-	1	Spokane, Wash.-----	41	31	-	1
Kansas City, Kans.-----	38	16	2	2	Tacoma, Wash.-----	38	27	-	2
Kansas City, Mo.-----	147	87	5	9					
Lincoln, Nebr.-----	27	21	-	-	<b>Total</b>	<b>11,443</b>	<b>6,304</b>	<b>363</b>	<b>677</b>
Minneapolis, Minn.-----	98	63	1	9	<b>Cumulative Totals</b>				
Omaha, Nebr.-----	75	43	2	4	including reported corrections for previous weeks				
St. Louis, Mo.-----	224	130	-	28	All Causes, All Ages -----				
St. Paul, Minn.-----	72	53	1	3	All Causes, Age 65 and over-----				
Wichita, Kans.-----	38	20	1	7	Pneumonia and Influenza, All Ages-----				
					All Causes, Under 1 Year of Age-----				

\*Estimate - based on average percent of divisional total.

All Causes, All Ages -----	421,655
All Causes, Age 65 and over-----	242,765
Pneumonia and Influenza, All Ages-----	18,378
All Causes, Under 1 Year of Age-----	22,127

## MALARIA - 1966 (Continued from page 283)

Table 2  
Cases of Malaria by Parasite Species  
United States - January-June, 1966\*

Species	Total	Percent
<i>P. vivax</i> .....	76	57.6
<i>P. falciparum</i> .....	44	33.3
<i>P. malariae</i> .....	1	0.8
<i>P. ovale</i> .....	4	3.0
Mixed infections .....	7	5.3
	132	100.0

\*Preliminary data

During the past decade the incidence of imported malaria has increased considerably. For example in the full year 1959 there were 60 cases, and in 1964 and 1965, 168 and 154 cases, respectively. Already in the first 6 months of 1966 there have been 149 imported cases.

No concomitant rise, however, has been seen in the number of cases acquired in the United States. At most, four such cases occurred in any one year since 1959 and all but two of these could be defined as sporadic. The number of induced cases\* likewise has shown no increase in recent years, not more than one or two cases having been reported in any one year between 1959 and 1964, and no cases since 1964.

\*Malaria infection acquired through artificial means, i.e., blood transfusions, common syringes, etc.

#### INTERNATIONAL NOTES QUARANTINE MEASURES

##### Cholera - Iraq

An outbreak of cholera has been reported by Iraq. A valid certificate of vaccination against cholera is required for entrance into the country. The certificate will be required also by countries visited or transited within 5 days of departure from Iraq. This includes the United States.

##### ERRATUM, Vol. 15, No. 31, p. 262:

In the article entitled "Current Trends - Plague," the second sentence in the third paragraph should read: "The family did raise domestic rabbits, some of which died shortly after the patient became ill."

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      DAVID J. SENCER, M.D.  
CHIEF, EPIDEMIOLOGY BRANCH              A. D. LANGMUIR, M.D.  
ACTING CHIEF, STATISTICS SECTION        IDA L. SHERMAN, M.S.

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

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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