# Morbialty and Mortality

Vol. 14, No. 29

WEEKLY REPORT

Week Ending July 24, 1965

# U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELEARE POBLIC HEALTH SERVICE

### WESTERN EQUINE ENCEPHALITIS - Colorado

The first confirmed case of Western equine encephalitis in 1965 in a human has been reported from Greeley, Colorado. The patient, a 14-year-old white boy, developed an encephalitic illness on July 12, 1965. Paired sera demonstrated a fourfold rise in hemagglutination inhibition titer to Western equine encephalitis. The patient has recovered.

During the past week reports of clinical horse encephalitis have been coming in from several midwestern and mountain States. Of the 36 cases in horses reported from Colorado, 8 have been serologically confirmed and 5 have resulted in death. The one case of clinical horse

1 M \ JUE 29 198965   M
Western Equine Encephantis Colorado
D
Encephalitis, Hale County, Texas Q Q 251
Salmonella typhi, Rhode Island A.T
International Notes - Quarantine Mediante 22 4 256

encephalitis in California has also been similarily confirmed.

Ten WEE-like agents have been isolated from pools of *Culex tarsalis* collected in the vicinity of Greeley, Colorado, during the week ended July 8, 1965. Nine of these isolates are now confirmed as WEE virus, thus giving *Culex tarsalis* infection rates much higher than those observed during a comparable period last year.

(Continued on page 246)

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

The state of the s	29th WEE	K ENDED		CUMULA	TIVE, FIRS	T 29 WEEKS
DISEASE	JULY 24, 1965	JULY 18, 1964	MEDIAN 1960 – 1964	1965	1964	MEDIAN 1960 – 1964
Aseptic meningitis Brucellosis Diphtheria Encephalitis, primary infectious Encephalitis, post-infectious	35 6 39 13	68 5 3 43 22	65 10 3 	824 133 88 864 453	901 219 154 1,046 591	901 232 229
Hepatitis, infectious including Serum hepatitis Measles Meningococcal infections Poliomyelitis, Total Paralytic Nonparalytic Unspecified	558 1,910 38 1 1	565 2,637 39 — — —	647 3,730 37 11 9	19,729 233,962 2,082 27 21 6	23,131 452,634 1,711 53 42 8	25,424 382,618 1,373 281 186
Streptococcal Sore Throat and Scarlet fever Tetanus Tularemia Typhoid fever Rables in Animals	4,144 8 5 12	3,763 5 14 12	3,354  16 71	257,390 132 138 209 2,694	263,425 135 184 209	216,572  289 2,266

### Table 2. NOTIFIABLE DISEASES OF LOW FREQUENCY

Anna	Cum.		Cum.
Anthrax: Botulism: Leptospirosis: La -1 Ark -1 Topp -1 P.R -1	6 11	Rabies in Man: Smallpox:	î
Malaria: Plague:	20	Trichinosis: Calif3 · · · · · · · · · · · · · · · · · · ·	69
" oliton " " " " " " " " " " " " " " " " " " "	0.000	Murine:	16
Cholera: D.C1	25	Rky. Mt. Spotted: 1112, Mich2, Md1, D.C1, N.C2	16 133
D.C1	2	Pa4, Va2, W. Va1, Ga1, Tenn3	

### WESTERN EQUINE ENCEPHALITIS - Colorado

(Continued from front page)

Mosquito population indices in this vicinity are two to four times what they were during the same period last year. The temperature during the spring of 1965 has been unusually cool in the area of Greeley; in past years, high WEE virus activity has occurred when the spring temperature generally has been lower than the seasonal mean. Reports of increased WEE virus activity may be anticipated within the next few weeks.

(Reported by Dr. C.S. Mollohan, Chief, Section of Epidemiology, Colorado State Department of Public Health and Disease Ecology Section, Technology Branch, CDC, Greeley, Colorado.)

### **ENCEPHALITIS - 1964**

Weekly encephalitis case reports are received at the Communicable Disease Center from State and local health departments through the National Morbidity Reporting System. In addition, the Encephalitis Surveillance Unit receives encephalitis surveillance forms which supply more detailed epidemiologic information about each case reported. Cases are reported in two categories: 1) Postinfectious encephalitis, defined as illnesses with encephalitic manifestations but with pre-existing diagnosed infections. Post-infectious encephalitis includes those cases associated with mumps, measles, rubella, vaccinia, etc. 2) Primary encephalitis, defined as acute febrile illnesses with encephalitic manifestations as an intrinsic part of the disease. This category includes "ARBO" infections, as well as acute encephalitis of unknown etiology.

During 1964, a total of 3,587 cases of encephalitis, including 337 deaths, was reported. This represents the highest total of cases reported to the Encephalitis Surveillance Unit in any one year since its establishment in 1955. It includes an increased number of both categories of encephalitis cases during 1964 as compared to 1963. Cases reported for 1964 are shown by etiology in Table 1. Mumps and measles accounted for over three-quarters of the 1,585 post-infectious encephalitis cases. There were 582 cases of arthropod-borne encephalitis and outbreaks due to St. Louis, Western equine, and California encephalitis viruses occurred. It was the first time in 3 years that human illness due to Eastern equine encephalitis virus was encountered.

The numbers of encephalitis cases reported for the years 1960-1964 are shown by month in Figure 1 and by etiologic group in Figure 2. The characteristic pattern of incidence, with an increase in April or May followed by a second peak in the late summer and fall, again occurred during 1964. The highest incidence of cases of post-infectious encephalitis occurred during the spring, whereas the cases due to arboviruses were more prevalent during August and September. A marked increase in cases

of encephalitis of unknown etiology also was noted during the latter period. At least some of the reported cases of encephalitis of undetermined etiology may have been unrecognized cases of arthropod-borne encephalitis.

The total of 582 cases of arthropod-borne encephalitis, which occurred during 1964 and which were designated confirmed or presumptive,\* is the highest since 1956. During the 10-year period of reporting to the Encephalitis Surveillance Unit, this total was exceeded only in 1956 when 625 cases of arthropod-borne encephalitis were recorded. A summary of the occurrence of arthropod-borne encephalitis by etiology over the past 10 years is shown in Table 2. Cases of St. Louis, Western equine and California encephalitis during 1964 are shown by State in Figure 3.

Table 1
Encephalitis in the United States, 1964
Cases Reported to the
Encephalitis Surveillance Unit, CDC

Etiology	Number of Cases	Percent of Cases
Post-infectious Encephalitis	1,585	44.2
Mumps	932	26.0
Measles	300	8.4
Varicella	106	3.0
Rubella	59	1.6
Influenza	14	0.4
Post Vaccinal	8	0.2
Other Primary Encephalitis	166 2,002	4.6 55.8
Arthropod-borne	582	16.2
Etiology Unknown	1,420	39.6
Total	3,587	100.0

Table 2
Human Cases of Arthropod-Borne Encephalitis
Reported to the CDC Encephalitis Surveillance Unit
1955-1964

		Etiology									
Tot	Calif.	SLE	EEE	WEE	Year WEE						
159	0	107	15	37	1955						
625	0	563	15	47	1956						
187	0	147	5	35	1957						
237	0	94	2	141	1958						
168 48	0	118	36	14	1959						
70	0	21	3	21	1960						
270	0	42	1	27	1961						
76	0	253	0	17	1962						
582	1	19	0	56	1963						
302	42	470	5	64	1964						

<sup>\*</sup>One case of encephalitis attributed to Tensaw virus (reported by Indiana) in included in the total.

<sup>\*</sup>For definition of confirmed and presumptive, please consult CDC Encephalitis Surveillance Report 1964, page 10.

Table 3
Confirmed and Presumptive Human Cases of
Arthropod-Borne Encephalitis by Age and Sex, 1964\*

		SLE			WE	E	C	alifo	rnia
Age Group	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	13	5	18	10	11	21	3	3	6
5-9	14	9	23	3	3	6	12	7	19
10-14	14	8	22	4	1	5	5	4	9
15-19	8	13	21	1	1	2	1	0	1
20-29	24	24	48	3	1	4	1	0	1
30-39	29	31	60	6	0	6	0	0	0
40-49	23	36	59	7	0	7	0	0	0
50-59	24	29	<b>5</b> 3	1	2	3	0	0	0
60-69	36	40	76	0	2	2	0	0	0
70 & over	38	48	86	2	2	4	0	0	0
Unknown	2	2	4	3	1	4	2	0	2
Total	225	245	470	40	24	64	24	14	42*

<sup>\*</sup>Includes 4 cases with unknown age and sex; 5 cases EEE and 1 case of Tensaw virus infection are not included.

The age and sex distribution of confirmed and presumptive cases of arthropod-borne encephalitis occurring in 1964 are shown in Table 3.

### Tensaw Virus

A case of clinical encephalitis associated with a fourfold rise in hemagglutination inhibition titer to Tensaw virus was reported from Indiana. The patient was a 13-year-old female from Kosciusko County who became ill on September 17, 1964. A rise of hemagglutination antibody titer from 40 to 160 was noted between the acute and convalescent serum specimens.

### Arbovirus Isolations

A summary of arbovirus isolations from arthropod vectors during 1964 is shown in Table 4.

A number of arboviruses, such as Venezuelan equine encephalitis virus (VEE), Hart Park, Tensaw, Bunyamwara, and Cache Valley viruses, were isolated from mosquito pools. The relationship of these viruses to human illness is presently undefined.

In Table 5 isolations of arboviruses from birds and mammals are summarized.

These two tables demonstrate that there was widespread enzootic arbovirus activity in the United States during 1964.

### St. Louis Encephalitis (SLE)

There were 470 laboratory-documented cases of St. Louis encephalitis reported from 14 States. Major epidemics were recorded in Harris County (Houston), Texas, and the Camden-Burlington County area of New Jersey. Epidemics with smaller numbers of cases occurred in Kentucky, Illinois, Indiana, and Tennessee. The only reported isolation of SLE virus from a human source was from a fatal case in Ohio.

### Western Equine Encephalitis (WEE)

The 64 reported cases of Western equine encephalitis were notified from 10 States. However 31 cases occurred in two areas, Hale county, Texas, and central Colorado, and mixed infections with WEE and SLE were also recorded. In these two areas both WEE and SLE have been isolated from pools of *Culex tarsalis* mosquitoes.

Table 4
Arbovirus Isolations from Mosquitoes, 1964
Reported to Encephalitis Surveillance Unit, CDC

	VIRUS ISOLATED											
Mosquito Species	WEE	нее	SLE	VEE	Calif.	Tensaw	Hart Park	Bunyamwara	Cache Valley			
C. nigripulpus				X			x					
C. pipiens			X				X					
C. quinquefasciatus			X		X		X					
C. tarsalis	X						X					
Cs. melanoconion		X		х.								
Cs. melanura	X	X					X					
A. infirmatus A. taeniorhynchus	X	X			X							
A. atlanticus					X	X						
A. crucians		X		x	X							
A. quadrimaculatus		^	v	X		X		v				
A. nigromaculis	v		X	ĺ		?		X	.?			
A. species	X				X							
M. perturbans		$ \mathbf{x} $			^							

Table 5 Arbovirus Isolations from Birds and Mammals, 1964 Reported to Encephalitis Surveillance Unit

Bird or Mammal	Vi	rus Isolated	
Species	EEE	SLE	WEE
Pheasant	X		
Exposure Chicks	X		X
House Sparrow		X	
Cathird		X	X
Chimney Swift		X	
Pigeon		X	
Redwing Blackbird			X
Blue Jay		X	
Swamp Sparrow	X		X
Mockingbird		X	
Robin			X
Domestic Goose		X	
Horse	X		X
Hamster			X
Cat		1	X
Mouse	X	İ	X
Dog	X		

### California Encephalitis (CE)

Forty-two cases of serologically confirmed or presumptive California encephalitis were reported, of which 25 cases were in Ohio and occurred primarily during August and September. There was no obvious geographic clustering, no county reporting more than two cases. The outbreak of California virus encephalitis which occurred in southern Indiana during August and September, 1964, was spread over five counties. There were 12 confirmed cases, the oldest patient being 16 years of age. This marked rise in reported California encephalitis in 1964 is in part due to increased efforts by various laboratories to test the sera of undiagnosed cases of encephalitis for California virus antibody.

### Eastern Equine Encephalitis (EEE)

Five cases of Eastern equine encephalitis were reported in 1964, the patients being 2, 5, 17, 38 and 51 years of age respectively. Four of the cases were reported from Florida and one from Georgia. There were three deaths, one female aged 5 and two males aged 17 and 51.

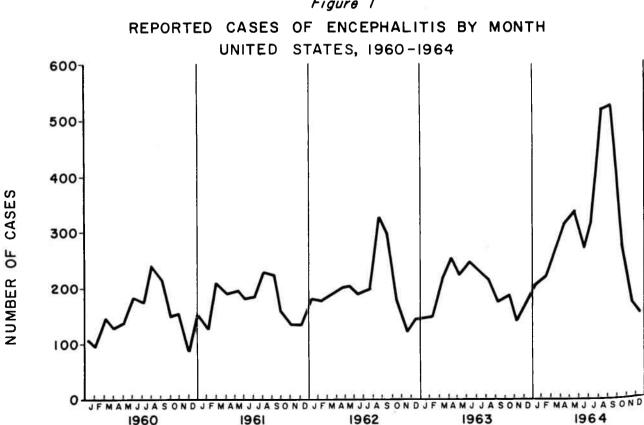


Figure 1

Figure 2

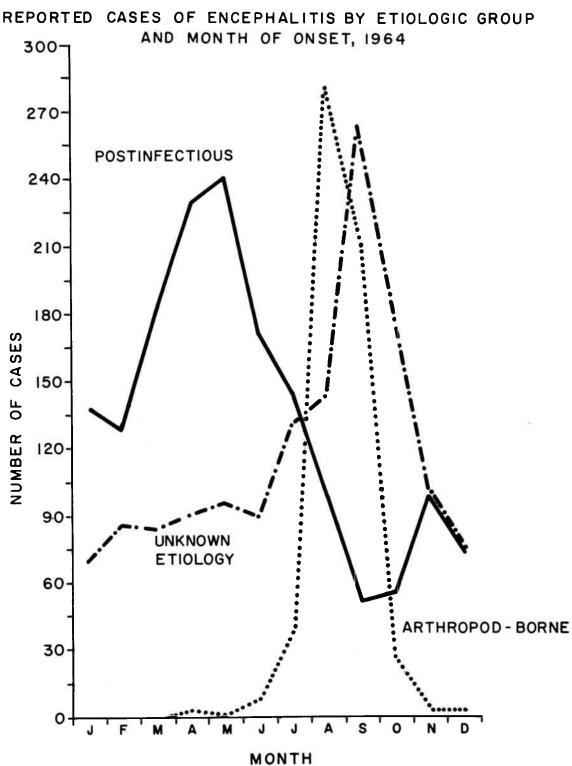
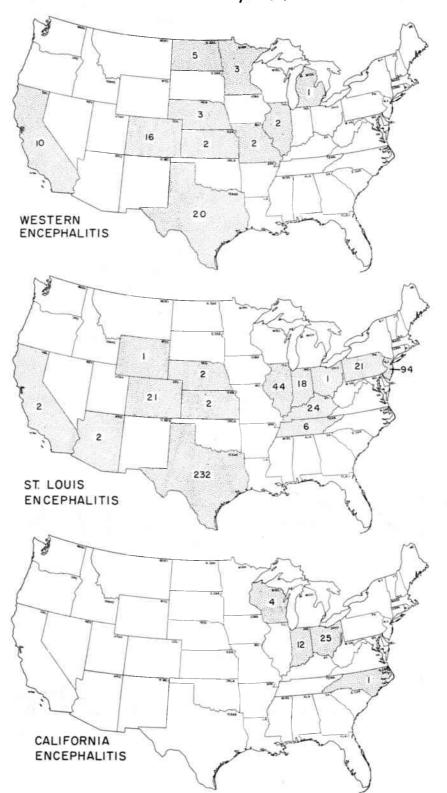


Figure 3
HUMAN CASES OF ARTHROPOD-BORNE ENCEPHALITIS
BY STATE, 1964



### ENCEPHALITIS - Hale County, Texas, 1964

During the months of July through September 1964, an outbreak of encephalitis occurred in Hale County, Texas. This county (population 36,798; 1960 census) is located in the high plains area of the Texas Panhandle, an area known to be endemic for Western equine encephalitis (WEE) and St. Louis encephalitis (SLE) for at least the past 10 years. During 1964, 70 suspect cases occurred within Hale County, and 7 more cases were reported from places closely adjacent to this county.

Etiological investigations of 67 of these reported cases demonstrated serological evidence of infection with WEE in 24 cases and SLE in 7. Thirteen cases were found to be enterovirus-related (8 coxsackievirus B2, 4 echovirus 11, 1 poliovirus type 3), and were noted to closely resemble the arbovirus-related cases, both in relation to the time of onset and clinical manifestations

(Table 1). Among the remainder of the reported cases, 2 demonstrated equivocal evidence of SLE infection, 21 had no laboratory evidence of WEE, SLE, or specific enterovirus infection, and specimens were judged inadequate or absent in 10 cases. Agglutination-lysis tests for leptospirosis were also performed on 23 of the sera, all with negative results.

The overall attack rate for WEE within the county was 51.6/100,000. The highest rates were among infants less than 12 months old (707/100,000), and children 1-4 years of age (107/100,000).

(Reported by Dr. Van C. Tupton, Director, Communicable Disease Division, Texas State Department of Health; and by the Greeley Field Station, and the Kansas City Field Station, CDC).

Table 1

Etiologic Confirmation of Suspected Cases of Central Nervous System Infections, Hale County, Texas - 1964

		Clinical diagnosis						
Etiologic category	Encephalitis	Aseptic meningitis	Undifferentiated febrile illness	Totals				
Enteroviruses	4	7	2	13				
WEE*	17	5	2	24				
SLE*	4	2	1	7				
Undiagnosed**	6	5	10	21				
Totals	31	19	15	65				

<sup>\*</sup>Confirmed or presumptive cases only. (Two equivocal cases of SLE not included)

### SALMONELLA TYPHI - Rhode Island

An infection with Salmonella typhi in Rhode Island has been traced by phage typing to a chronic typhoid carrier of at least 4 years known duration. The carrier, a woman of 84 years of age, was also known to be the source of two previous cases of typhoid fever in Rhode Island in 1961.

The present index case of typhoid was a 12-year-old Negro female from the city of Providence who was admitted to the hospital on June 8, 1965. There was a one-week history of dizziness, anorexia, headache and fever. On admission the patient had a temperature of  $104^{\circ}$  and signs and symptoms which suggested inclusion of such conditions as posterior brain tumor, brain abscess and encephalitis in the differential diagnosis. During the clinical investigations, febrile agglutinins done by a quantitative test tube method were:

Typhoid H 1:1280 Typhoid O 1:2560
Paratyphoid B 1:2560 Paratyphoid E 1:1280

Three specimens of blood cultured on the day of admission were positive for Salmonella typhi.

The patient responded quickly to therapy with ampicillin and made a good recovery apart from a parotitis which developed on the 11th hospital day. There had been an exposure to mumps one week before admission to the hospital. Stool and urine cultures made during her stay in the hospital and a stool culture 2 weeks after discharge were all negative for Salmonella typhi.

The patient is one of a family of seven children, none of whom has had a similar illness, and stool cultures on parents and siblings have been uniformly negative. However, a next-door neighbor who had been in close contact with the patient and her siblings was the 84-year-old woman who was known to be a typhoid carrier. Phage typing of the Salmonella typhi organisms from both the patient and the carrier demonstrated "degraded N types reacting with the D group of phage". This very unusual phage type gives a strong epidemiologic indication of the source of infection.

(Reported by Dr. Joseph E. Cannon, Director of Health, State of Rhode Island Department of Health, and an EIS Officer).

<sup>\*\*</sup>An additional 10 cases are excluded in this table, because of lack of specimens for laboratory study.

## Morbidity and Mortality Weekly Report

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDED

JULY 24, 1965 AND JULY 18, 1964 (29th WEEK)

	Acom	tio.	Encepl	nalitis		-	Poliom	elitis			Dipht	heria
	Asep Menin	gitis	Primary	Post-Inf.	Т	otal Case	s		Paralytic			
Area		<u> </u>	·			Cumu 1	ative		Cumu 1	ative		Cum.
	1965	1964	1965	1965	1965	1965	1964	1965	1965	1964	1965	1965
UNITED STATES	35	68	39	13	1	27	53	1	21	42		88
UNITED STATES	33	""			_			_				_
NEW ENGLAND	1	-	1	1 1	-	-	2	_	-	2 1	-	1
Maine	-	_	_	1	-	-	1	_	[	_		-
New Hampshire	-	_	_	_	_	-	_	-	-	-	_	-
Massachusetts	1	-	1		-	-		-	-	-	-	1
Rhode Island	-	-	-	· · · · ·	-	i -	<u>-</u>	-	-		-	10.65
Connecticut	-	-	-	- 1	-	-	1	-	-	1		
MIDDLE ATLANTIC	1	8	11	1	_	1	7	_	-	7	_	5
New York City	-	5	4	[ - ]	_	1	1	-	-	1	-	3
New York, Up-State.	1	-	-	-	-	-	4	-	1 - i	4	-	-
New Jersey	-	<u>-</u>	5	_	-		2	2020	-	2	-	2
Pennsylvania	-	3	2	1	-	-	-		•	-		2
EAST NORTH CENTRAL	4	9	8	1	_	1	7	_		6	-	3
Ohio	-		3	_	-	-	2	_	-	2	-	1
Indiana	-	1	_	-	_	-	-	-	-	-	-	2
Illinois	2	5	3	-	-	1	4	-	-	4	-	-
Michigan	2	3	1	1	-	-	1	-	-	-		-
Wisconsin	-	-	1	-	-	-	-	-	-	•.		~
WEST NORTH CENTRAL	3	2	4	4	_	5	3	_	5	2	-	18
Minnesota	3	2	1	4	_	i	1	-	1	1	-	7
Iowa	-	_	1	- 1	-	1	-	-	1	-	-	1
Missouri	-	-	-	-	-	-	2	-	- :	1	-	1
North Dakota	-	-	-	-	-	-	-	-		-		-
South Dakota	-	-	1	[ - ]	-	-	-	-	_ ]	-	-	7 1
Nebraska	-	_	1	-	-	3	-	_	3		5	1
Kansas	-	<u>-</u>	1 1	-	-	_	75	_	_	_		- 1
SOUTH ATLANTIC	4	5	2	- !	_	-	18	-	-	13		23
Delaware	1	1	-	- 1	-	-	-	-	- 1	-	-	-
Maryland	-	- 1	-	-	-	ļ -	1	-	-	1	-	-
Dist. of Columbia	-	-	-	-	-	! -	-	-	-	-	_	3
Virginia	-	1	1 -		-	1 -	1 -	_	<u> </u>	1		_
West Virginia North Carolina	- 1	1 -	1	<u>-</u>	_	-	8	_	-	4	_	2
South Carolina	_	_	1 -	_	_	-	-	_	_		-	1
Georgia	-	_	_	-	-	-	1	-	-	1	-	11
Florida	2	2	1	-	-	-	7	-	-	6	-	6
						ł	١,		_	,	_	14
EAST SOUTH CENTRAL	-	20	-	-	_	] -	4		]	3	_	-
Kentucky	-	19 1	] [	<u>-</u>	_	-	2	_	_	1	_	-
Alabama	_	1 -		- 1	_	-	2	_	-	2	-	13
Mississippi	-	_	-	-	_	-	-	-	- '	-	-	1
		_			_		l .	١.	١,,	١,		19
WEST SOUTH CENTRAL	12	8	4	-	1 -	12	4 -	1 -	10	4	<u> </u>	19
Arkansas	1	1	[ -	_	_	1	-	-	1	_	<u> </u>	2
Louisiana	-		3	-	_	-	1	_	] = 1	1	-	-
Texas	11	7	1	-	1	11	3	1	9	3	-	15
	1					_	1 .		_	_		_
MOUNTAIN	-	2	4	-	_	5 -	6	_	3	3	_	-
Montana	_	_	] [	_	-		[	· -		_	_ :	_
Idaho	-	_	-		_	] -	2	_	1 1 1	2	] -	-
Colorado	-	2	-		_	_	1	_	-	ī		-
New Mexico.	_	_		-	-	1	3	-	1	_	-"	-
Arizona	-	-	1	-	-	4	-	-	2	-	-	-
Utah	-	-	2	-	-	-	-	-		-	-	-
Nevada	-	-	-	-	-	-	-	-	- 1	-	-	
PACIFIC	10	14	5	6	_	3	2	-	3	2		5
Washington.	1	-	-	_	_	2	-	_	2	-	-	-
Oregon.	-	_	1	-	-	-	1	-	-	1	-	1
California	9	14	4	6	-	1	1	-	1	1	-	4
Alaska	-	-		-	-	-	-	-	-	-	-	
Hawaii						-		-		-		
								i	100000		1	6

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDED

JULY 24, 1965 AND JULY 18, 1964 (29th WEEK) - Continued

	Brucel- losis			tious Hepa ng Serum He				eningococca Infections	a1	Teta	nus
Area		Total incl.unk.	Under 20 years	20 years and over	Cumula Tota			Cumu l	ative		Cum.
<del></del>	1965	1965	1965	1965	1965	1964	1965	1965	1964	1965	1965
UNITED STATES	6	558	228	306	19,729	23,131	38	2,082	1,711	8	132
EW ENGLAND	1 -	30	14	15	1,191	2,282	3	106	47	170	5
Maine New Hampshire	_	6	2 2	4 2	223 111	748 166	2 -	14	5		- 1
Vermont	_	š	2	1 1	67	285	1	5 6	1 1		1
Massachusetts	-	10	6	4	463	471	-	34	19		3
Rhode Island Connecticut	1 -	1 5	-	1	147	125	-	14	7	-	-
connectitut	_	3	2	3	180	487	-	33	14	-	1
IDDLE ATLANTIC	-	97	33	64	3,483	5,247	7	278	205	72	8
New York City	-	34	5	29	665	772	3	49	28	-	-
New York, Up-State. New Jersey	-	27 18	11 7	16 11	1,390	2,365	3	75	58	-	3
Pennsylvania	_	18	10	8	641 787	945 1,165	1 -	74 80	71 48	-	5
AST NORTH CENTRAL	2	97	47	47	3 702		10	200	-		
Ohio		18	5	13	3,792 1,062	3,509 925	10 2	280 73	238 63	-	13 1
Indiana	-	14	8	6	330	309	1	38	36	-	
Illinois	2	20	11	8	705	615	2	73	60	-	Ž
Michigan	_	36	17 6	19 1	1,452	1,403	5	62	53	( <b>*</b>	
	_		6	1	243	257	-	34	26	-	2
EST NORTH CENTRAL	1	21	4	12	1,220	1,256	1	107	106	1	9
Minnesota	1	4	-	3	119	123	-	21	25	1	(
Iowa Missouri	- -	10 4	1 1	5 3	452 259	178	-	7	6		
North Dakota	_	-	-	-	17	321   49	1 -	49 7	52 11	-	]
South Dakota	-	_	-	- 1	16	106	_	2		-	
Nebraska	-	1	1	-	43	32	-	10	6		
Kansas	-	2	1	1	314	447	-	11	6	-	
OUTH ATLANTIC	1	51	20	27	2,022	2,185	5	407	357	2	37
Delaware	-	-	-	-	59	41	~	5	6		
Maryland Dist. of Columbia	<u>-</u>	6	3	3	375	420	-	38	25	-	:
Virginia	1	9	_	6	26 468	34 338	1	8 48	12 40	-	
West Virginia	-	8	6	2	302	347	1	24	26	-	
North Carolina	-	17	8	9	176	393	-	78	60	-	- 3
South Carolina	_	3 2	2	1 2	82	75	-	56	48	96	
Florida	_	6	1	4	76 458	52 485	2 1	53 97	46 94	2	10
AST SOUTH CENTRAL	_	40	19	18	1 610	1 605		161			
Kentucky	_	18	11	4	1,410 494	1,605 650	1 -	164 67	152 52	1	19
Tennessee	-	10	4	6	497	542	1	48	50	-	1
Alabama	-	5	1	4	240	271		30	32		
Mississippi	-	7	3	4	179	142	-	19	18	-	
EST SOUTH CENTRAL	1	69	34	33	1,716	1,716	4	292	209	4	2
Arkansas	-	6	1	5	229	176	-	14	19	2	
Oklahoma	_ 1	8	5 1	3	293 40	393 91	1 1	163 18	103	1	'
Texas	-	54	27	25	1,154	1,056	2	97	7 80	1	1
OUNTAIN		,,									
Montana.	_	23	9 2	8 -	1,155 86	1,410 127	1	62	62	( <b>a</b> )	1 8
Idaho	_	1	_		160	157		8	3	-	9
Wyoming	-	1	-	1	33	45	-	4	3	-	
Colorado New Mexico	-	12	6	6	239	388	-	13	11	84	
Arizona.	_	2 3	1	1 -	246 226	199 327	-	10 16	26	R <b>→</b> i	- 6
Utah	_	-		] [	158	125	1	7	5 6	-	0.000
Nevada	-	1	-	- '	7	42	*	2	8	-	
CIFIC.	_	130	48	82	3,740	3,921	6	204	225		
Washington	_	2	- 46	2	297	3,921 441	-	386 31	335 25	-	1:
Oregon	-	11	6	5	309	435		28	20	-	3
California	<u>-</u>	113	42	71	2,938	2,844	6	307	273	-	10
Alaska Hawaii	<u>-</u>	1 3	-	1 3	164 32	122 79	-	13 7	7 10	:=:	53
		<del> </del>					<del></del> _	<del> </del>	10	ļ <del>-</del>	<del> </del>
erto Rico	-	25	20	5	771	572	1	5	30	3	2.

# Morbidity and Mortality Weekly Report

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDED

JULY 24, 1965 AND JULY 18, 1964 (29th WEEK) - Continued

Area		Measles		Strept. Sore Th. & Scarlet Fev.	Tulai	remia	Typhoic	l Fever	Rabie Anim	
		Cumu 1	ative			Cum.		Cum.		Cum.
	1965	1965	1964	1965	1965	1965	1965	1965	1965	1965
UNITED STATES	1,910	233,962	452,634	4,144	5	138	12	209	67	2,694
NEW ENGLAND	73	36,546	16,025	395	-	-	-	3	3	30
Maine New Hampshire	11 3	2,764 381	2,787 237	92	-	_	_	-	-	3
Vermont	13	1,244	2,258	1	_	:	_	-	- -	1 24
Massachusetts	32	19,163	4,886	26	-	_ !	_	2	_	1
Rhode Island Connecticut	4 10	3,885 9,109	1,853 4,004	6 270	-	-	- -	1	-	- 1
MIDDLE ATLANTIC	224		_	1		!				
New York City	83	14,054 2,107	51,294 15,101	132	-	<u>-</u> '	2	35 17	3 -	109
New York, up-State.	49	3,963	12,282	78	_	] [	2	10	3	98
New Jersey	48	2,389	12,045	46	-	i -	_	2	_	
Pennsylvania	44	5,595	11,866	6	-	-	-	6	-	11
EAST NORTH CENTRAL	737	53,553	100,865	245	1	11	5	32	11	407
OhioIndiana	47	8,741	19,367	19	-	7	1	7	8	210
Illinois	14 67	1,715 2,472	22,455 16,099	87 34	1	5	- 1	9 7	2	39 72
Michigan	274	25,804	28,412	74	-	1	1	4	1	40
Wisconsin	335	14,821	14,532	31	-	i	2	5	-	46
WEST NORTH CENTRAL	38	16,260	29,938	144	1	15	1	6	18	550
Minnesota	2	619	327	2	-	1	-	-	3	111
Iowa Missouri	3 2	8,938	23,167	17	-	-	-	1	8	160
North Dakota	31	2,552 3,593	1,005 4,619	7 80	-	10	_	4	3 1	74 33
South Dakota	-	109	8	8	1	2	_	_	1	39
Nebraska	-	449	812	_	_	_	1	1	2	31
Kansas	NN	NN	NN	30	-	2	-	-	-	102
SOUTH ATLANTIC	188	24,028	37,597	542	-	27	3	44	13	368
Delaware	-	498	398	37	-	-	•	4	-	
Maryland Dist. of Columbia	27 2	1,094 71	3,382	120	-	-	2	14	4	9
Virginia	44	3,766	353 12,599	5 114	-	5	_	3	4	257
West Virginia	56	13,286	8,369	131	_		_	1	-	17
North Carolina	3	372	1,137	2	-	5	1	13	-	2
South Carolina	11	1,004	4,213	24	-	3	-	4	-	2
GeorgiaFlorida	8 37	612 3,325	159 6,987	109	-	14	-	2 3	2 3	36 45
EAST SOUTH CENTRAL	81	13,434	66,732	720	1	16	-	21	5	610
Kentucky	8	2,394	18,249	20	_	3		6	í	60
Tennessee	42	7,686	23,648	558	1	12	-	7	4	537
Alabama	23	2,275	18,174	30	-	1	-	4	-	10
Mississippi	8	1,079	6,661	112	-	-	-	4	-	3
WEST SOUTH CENTRAL	153	30,138 1,080	70,809 1,051	498	2 2	51 34	<u>-</u>	30	9	429
Louisiana	3	94	96		-	1	_	10 5	1 1	59 65
Oklahoma	ĩ	201	974	21	_	8	_	2	2	76
Texas	149	28,763	68,688	477	-	8	-	13	5	229
MOUNTAIN	197	19,204	17,642	830	-	13	1941	14	5	55
Montana	34	3,647	2,840	31	-	2	- 3	S=8	2	3
Idaho	54	2,690	1,818	84	-	-	-	1=1	-	-
Colorado	5 49	839 5,524	240 3,055	17 345	-	3	7,40	1	-	-
New Mexico	6	663	390	202	-		_	8	3	7 11
Arizona	31	1,199	6,422	46	-	-	_	5	2	33
Utah Nevada	18	4,440 202	1,898 979	105	-	8	-		=	1
PACIFIC	219					13974				
Washington	16	26,745 7,195	61,732 19,924	638	-	5	1	24	3	136
Oregon	20	3,133	8,316	13	-	2	-	2 3	1 -	6 3
California	75	12,613	31,991	482	_	3	1	18	2	125
Alaska Hawaii	108	142 3,662	1,073 428	8 69	-	_	•	10	-	2
Puerto Rico	40	2,180	5,296	7		<u>-</u>	-	3	-	11

Week No. Table 4. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED JULY 24, 1965

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

··				r	· · · · · · · · · · · · · · · · · · ·	γ · · · · · · · · · · · · · · · · · · ·		г	
	All Causes		Pneumonia	Under		All Causes		Pneumonia	Under
Area	A71	65	and	l year	Area	A11	ć E	and	1 year
Viea	All Ages	65 years and over	Inf luenza	A11	Area	All Ages	65 years	Inf luenza	
	Agea	and over	All Ages	Causes		Ages	and over	All Ages	Causes
NEW ENGLAND:	690	404	36	38	SOUTH ATLANTIC:	1,040	503	48	82
Boston, Mass	225	111	10	16	Atlanta, Ga	107	44	7	4
Bridgeport, Conn	36	17	3	4	Baltimore, Md	269	120	9	23
Cambridge, Mass	29	17	ā	2	Charlotte, N. C	27	14	2	1
Fall River, Mass	34	23	-	1 1	Jacksonville, Fla	55	28	1	3
Hartford, Conn	50	31	2	5	Miami, Fla	80	40	1	6
Lowell, Mass	23	16	-	1	Norfolk, Va	56	26	1	6
Lynn, Mass	24	15	2	2	Richmond, Va	75	38	-	7
New Bedford, Mass		21	1	12	Savannah, Ga	18	. 7	2	2
New Haven, Conn	42	27	1	1	St. Petersburg, Fla	62	45	9	1
Providence, R. I	63	39	5	3	Tampa, Fla	58	30	4	5
Somerville, Mass	14	8	4	(i+)	Washington, D. C	177	87	9	13
Springfield, Mass	48	30	6	1	Wilmington, Del	56	24	3	11
Waterbury, Conn	20	13	5	1	i I				
Worcester, Mass	54	36	2	1	EAST SOUTH CENTRAL:	567	283	25	42
	ı				Birmingham, Ala	77	35		9
MIDDLE ATLANTIC:	3,003	1,707	95	151	Chattanooga, Tenn	33	20	-	5
Albany, N. Y	37	22	2	3	Knoxville, Tenn	34	22	S(#)	:#S
Allentown, Pa	32	19	₩.	2	Louisville, Ky	128	60	12	7
Buffalo, N. Y	125	78	1	9	Memphis, Tenn	119	61	3	6
Camden, N. J	32	11	1	5	Mobile, Ala	41	14	2	6
Elizabeth, N. J	24	10	1	2	Montgomery, Ala	45	23	4	1
Erie, Pa	45	25	2	2	Nashville, Tenn	90	48	4	8
Jersey City, N. J	52	30	4	7	l !				1
Newark, N. J	75	40	3	6	WEST SOUTH CENTRAL:	1,055	526	36	101
New York City, N. Y	1,484	832	48	61	Austin, Tex	30	17	2	4
Paterson, N. J	32	18	3	1	Baton Rouge, La	31	10	-	1
Philadelphia, Pa	514	290	7	31	Corpus Christi, Tex	25	14	1	3
Pittsburgh, Pa	186	94	3	9	Dallas, Tex	146	73	1	17
Reading, Pa	42	29	7	2	El Paso, Tex	41	23	6	9
Rochester, N. Y	92	57	6	1	Fort Worth, Tex	69	33	4	4
Schenectady, N. Y	26	14	1	2	Houston, Tex	178	82	i	15
Scranton, Pa	48	40	-	1	Little Rock, Ark	51	22	-	3
Syracuse, N. Y	60	40	-	3	New Orleans, La	180	100	4	16
Trenton, N. J	45	27	1	1	Oklahoma City, Okla	82	39	i	1
Utica, N. Y.*	26	19	2	1	San Antonio, Tex	98	60	4	5
Yonkers, N. Y	26	12	3	2	Shreveport, La	54	22	5	12
	ı				Tulsa, Okla	70	31	1 7	11
EAST NORTH CENTRAL:	2,526	1,361	72	165				· ·	
Akron, Ohio	71	38	1	4	MOUNTAIN:	355	198	15	28
Canton, Ohio	42	24	2	3	Albuquerque, N. Mex	33	18	1	2
Chicago, Ill	708	356	32	63	Colorado Springs, Colo.	21	9	2	3
Cincinnati, Ohio	163	102	-	13	Denver, Colo	104	58	4	6
Cleveland, Ohio	229	125	1	7	Ogden, Utah	15	12	5	-
Columbus, Ohio	115	64	4	5	Phoenix, Ariz	70	37		8
Dayten, Ohio	80	39	2	6	Pueblo, Colo	14	8	-	2
Detroit, Mich	359	186	10	19	Salt Lake City, Utah	53	36	2	5
Evansville, Ind	40	29	2	1	Tucson, Ariz	45	20	1	2
Flint, Mich	57	26	2	4				0.77	i -
Fort Wayne, Ind	44	26	4	2	PACIFIC:	1,598	916	43	89
Gary, Ind	31	17	2	3	Berkeley, Calif	12	7	1	1
Grand Rapids, Mich	33	20	=	3	Fresno, Calif	36	13	-	4
Indianapolis, Ind	140	67	5	12	Glendale, Calif	52	38	3	i
Madison, Wis	33	15	-	5	Honolulu, Hawaii	51	26	1	5
Milwaukee, Wis									ĺí
	139	88	2	5	Long Beach, Calif	60	i 33		
Peoria, Ill	139 28	88 10	2	5	Long Beach, Calif Los Angeles, Calif	60 537	33 298		
Peoria, Ill Rockford, Ill			ł				298	19	35
	28	10	18	3	Los Angeles, Calif	537	298 62		
Rockford, Ill	28 32	10 18	- 5	3	Los Angeles, Calif Oakland, Calif	537 118	298 62 22	19 2 -	35 3
Rockford, Ill South Bend, Ind Toledo, Ohio	28 32 27 101	10 18 18 67	- 5	3 3	Los Angeles, Calif Oakland, Calif Pasadena, Calif	537 118 28 115	298 62 22 72	19 2 - 1	35 3 7
Rockford, Ill South Bend, Ind	28 32 27	10 18 18	5 2	3 3 - 2	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg	537 118 28 115 68	298 62 22 72 37	19 2 - 1	35 3 - 7 7
Rockford, Ill South Bend, Ind Toledo, Ohio	28 32 27 101	10 18 18 67 26	5 2 -	3 3 - 2 2	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif	537 118 28 115 68 99	298 62 22 72 37 55	19 2 - 1 - 5	35 3 7 7 4
Rockford, Ill South Bend, Ind Toledo, Ohio Youngstown, Ohio	28 32 27 101 54	10 18 18 67 26	5 2	3 3 - 2 2 2	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Francisco, Calif	537 118 28 115 68 99 188	298 62 22 72 37 55 111	19 2 - 1 - 5 4	35 3 7 7 4 13
Rockford, Ill South Bend, Ind Toledo, Ohio Youngstown, Ohio WEST NORTH CENTRAL: Des Moines, Iowa	28 32 27 101 54 804 61	10 18 18 67 26 472 34	5 2 -	3 3 - 2 2 2 56 6	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Francisco, Calif San Jose, Calif	537 118 28 115 68 99 188 33	298 62 22 72 37 55 111	19 2 - 1 - 5 4	35 3 7 7 4 13
Rockford, Ill South Bend, Ind Toledo, Ohio Youngstown, Ohio WEST NORTH CENTRAL: Des Moines, Iowa Duluth, Minn	28 32 27 101 54 804 61 33	10 18 18 67 26 472 34 28	- 5 2 - - - 16 -	3 3 - 2 2 2 56 6	Los Angeles, Calif Oakland, Calif Pasadena, Calif Sacramento, Calif San Diego, Calif San Jose, Calif San Jose, Calif Seattle, Wash	537 118 28 115 68 99 188 33	298 62 22 72 37 55 111 16 72	19 2 - 1 - 5 4 1 2	35 3 7 7 4 13 1 6
Rockford, Ill South Bend, Ind Toledo, Ohio Youngstown, Ohio WEST NORTH CENTRAL: Des Moines, Iowa Duluth, Minn Kansas City, Kans	28 32 27 101 54 804 61 33 47	10 18 18 67 26 472 34 28 25	16 -	3 3 - 2 2 2 56 6	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Jose, Calif Seattle, Wash Spokane, Wash	537 118 28 115 68 99 188 33 124	298 62 22 72 37 55 111 16 72 42	19 2 - 1 - 5 4 1 2	35 3 -7 7 4 13 1 6
Rockford, Ill South Bend, Ind Toledo, Ohio Youngstown, Ohio WEST NORTH CENTRAL: Des Moines, Iowa Duluth, Minn Kansas City, Kans Kansas City, Mo	28 32 27 101 54 804 61 33 47 124	10 18 18 67 26 472 34 28 25 75	16 	3 - 2 2 2 56 6 - 4	Los Angeles, Calif Oakland, Calif Pasadena, Calif Sacramento, Calif San Diego, Calif San Jose, Calif San Jose, Calif Seattle, Wash	537 118 28 115 68 99 188 33	298 62 22 72 37 55 111 16 72	19 2 - 1 - 5 4 1 2	35 3 7 7 4 13 1 6
Rockford, Ill	28 32 27 101 54 804 61 33 47 124	10 18 18 67 26 472 34 28 25 75 16	16 -	3 3 - 2 2 2 56 6 - 4 10	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Francisco, Calif San Jose, Calif Seattle, Wash Tacoma, Wash	537 118 28 115 68 99 188 33 124 57 20	298 62 22 72 37 55 111 16 72 42 12	19 2 - 1 5 4 1 2 1 3	35 3 7 7 4 13 1 6
Rockford, Ill	28 32 27 101 54 804 61 33 47 124 19	10 18 18 67 26 472 34 28 25 75 16	16 	3 3 - 2 2 56 6 - 4 10 - 7	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Jose, Calif Seattle, Wash Spokane, Wash	537 118 28 115 68 99 188 33 124	298 62 22 72 37 55 111 16 72 42	19 2 - 1 - 5 4 1 2	35 3 7 7 4 13 1 6
Rockford, Ill South Bend, Ind Toledo, Ohio Youngstown, Ohio WEST NORTH CENTRAL: Des Moines, Iowa Duluth, Minn Kansas City, Kans Kansas City, Mo Lincoln, Nebr Minneapolis, Minn Omaha, Nebr	28 32 27 101 54 804 61 33 47 124 19 111 62	10 18 18 67 26 472 34 28 25 75 16 65 25	16 	3 3 - 2 2 2 56 6 - 4 10 - 7 4	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Jose, Calif Seattle, Wash Spokane, Wash Tacoma, Wash	537 118 28 115 68 99 188 33 124 57 20	298 62 22 72 37 55 111 16 72 42 12	19 2 - 1 5 4 1 2 1 3	35 3 7 7 4 13 1 6
Rockford, Ill	28 32 27 101 54 804 61 33 47 124 19 111 62 236	10 18 18 67 26 472 34 28 25 75 16 65 25	16 	3 3 - 2 2 2 56 6 - 4 10 - 7 4	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Francisco, Calif San Jose, Calif Seattle, Wash Tacoma, Wash Total	537 118 28 115 68 99 188 33 124 57 20 11,638	298 62 22 72 37 55 111 16 72 42 12 6,370	19 2 - 1 - 5 4 1 2 1 3 3	35 3 - 7 7 4 13 1 6 1 -
Rockford, Ill	28 32 27 101 54 804 61 33 47 124 19 111 62 236 70	10 18 18 67 26 472 34 28 25 75 16 65 25 143	16 	3 3 - 2 2 2 56 6 - 4 10 - 7 4 13 6	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Jose, Calif Seattle, Wash Spokane, Wash Tacoma, Wash	537 118 28 115 68 99 188 33 124 57 20 11,638	298 62 22 72 37 55 111 16 72 42 12 6,370	19 2 - 1 - 5 4 1 2 1 3 3	35 3 - 7 7 4 13 1 6 1
Rockford, Ill	28 32 27 101 54 804 61 33 47 124 19 111 62 236	10 18 18 67 26 472 34 28 25 75 16 65 25	16 	3 3 - 2 2 2 56 6 - 4 10 - 7 4	Los Angeles, Calif Oakland, Calif Pasadena, Calif Sacramento, Calif San Diego, Calif San Francisco, Calif San Jose, Calif Seattle, Wash Tacoma, Wash Total  Cu including report	537 118 28 115 68 99 188 33 124 57 20 11,638	298 62 22 72 37 55 111 16 72 42 12 6,370	19 2 - 1 - 5 4 1 2 1 3 386	35 3 - 7 4 13 1 6 1 - 752
Rockford, Ill	28 32 27 101 54 804 61 33 47 124 19 111 62 236 70	10 18 18 67 26 472 34 28 25 75 16 65 25 143	16 	3 3 - 2 2 2 56 6 - 4 10 - 7 4 13 6	Los Angeles, Calif Oakland, Calif Pasadena, Calif Portland, Oreg Sacramento, Calif San Diego, Calif San Jose, Calif Seattle, Wash Tacoma, Wash Total  Cur including report	537 118 28 115 68 99 188 33 124 57 20 11,638	298 62 22 72 37 55 111 16 72 42 12 6,370	19 2 - 1 - 5 4 1 2 1 3 3 386 revious we 366,1:	35 3 - 7 4 13 1 6 1 - 752
Rockford, Ill	28 32 27 101 54 804 61 33 47 124 19 111 62 236 70	10 18 18 67 26 472 34 28 25 75 16 65 25 143	16 	3 3 - 2 2 2 56 6 - 4 10 - 7 4 13 6	Los Angeles, Calif Oakland, Calif Pasadena, Calif Sacramento, Calif San Diego, Calif San Francisco, Calif San Jose, Calif Seattle, Wash Tacoma, Wash Total  Cu including report	537 118 28 115 68 99 188 33 124 57 20 11,638 mulative To	298 62 22 72 37 55 111 16 72 42 12 6,370	19 2 - 1 1 - 5 4 1 2 1 3 386 revious we 366,1: 207,6:	35 3 -7 7 4 13 1 6 1 -752

### INTERNATIONAL NOTES - QUARANTINE MEASURES

Immunization Information for International Travel 1963-64 edition-Public Health Service Publication No. 384

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

Page 73

ADD

City: Lansing, Michigan

Center: Ingham County Health Department

> 119 W. Washtenaw Telephone - 487-6001

Clinic Hours: By Appointment

Fee: Yes

Page 78

DELETE

City: Houston, Texas

Center: The Methodist Hospital

Texas Medical Center

6516 Bertner

Clinic Hours: Monday-Friday, 8:00 a.m.-4:00 p.m.

By appointment

Fee:

Yes

ADD

City: Houston, Texas

Center: The Methodist Hospital

Texas Medical Center

6516 Bertner

Telephone JA 6-3311

Clinic Hours: By appointment

Fee: Yes THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULA-TION OF 13,800 IS PUBLISHED BY THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA 30333.

CHIEF, COMMUNICABLE DISEASE CENTER CHIEF, EPIDEMIOLOGY BRANCH CHIEF, STATISTICS SECTION ASST. CHIEF, STATISTICS SECTION CHIEF, SUPVEILLANCE SECTION

JAMES L. GODDARD, M.D. A. D. LANGMUIR, M.D. R. E. SERFLING, PH.D. IDA L. SHERMAN, M.S. D. A. HENDERSON, M.D.

D.J.M. MACKENZIE, M.B., F.R.C.P.E.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASES, SUCH ACCOUNTS SHOULD BE ADDRESSED TO:

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

NOTE: THESE PROVISIONAL DATA ARE BASED ON WEEKLY TELE-GRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPART-MENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

SYMBOLS: --- DATA NOT AVAILABLE - QUANTITY ZERO

THE CONSTRUCTION OF THE MORTALITY CURVES IS DESCRIBED IN VOL. 14, NO. 1.

HEALTH, EDUCATION, AND WELFARE Atlanta, Georgia 30333

U. S. DEPARTMENT OF H. E. OSTAGE AND FEES PAID \*