



# Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION  
 DATE OF RELEASE: NOVEMBER 27, 1970 - ATLANTA, GEORGIA 30333

**EPIDEMIOLOGIC NOTES AND REPORTS**  
**GASTROENTERITIS - South Carolina**

**CONTENTS**

Epidemiologic Notes and Reports  
 Gastroenteritis - South Carolina . . . . . 445  
 Surveillance Summary  
 Encephalitis - United States, 1969 . . . . . 446  
 International Notes  
 Quarantine Measures . . . . . 452

In the 4-day period beginning Sunday, September 27, approximately 240 of 720 students attending a women's college in South Carolina developed symptoms of acute gastroenteritis. Onset in over 75 percent of the cases occurred between 5:00 P.M. Monday and 5:00 P.M. Tuesday. The illness usually lasted 12 to 36 hours, and symptoms included nausea (88 percent), diarrhea (63 percent), vomiting (58 percent), abdominal cramps (50 percent), and fever (46 percent). Fever, when documented, was usually low, with temperatures ranging from 99° to 101°F. No one required hospitalization.

Cultures of food and water obtained on Monday, September 28, failed to show any of the usual foodborne pathogens. Similarly, rectal cultures from kitchen help involved in food

preparation and from 15 ill students were all negative for salmonella, clostridium, and staphylococcus.

Epidemiologic data were obtained through questionnaires distributed to the resident students and by telephone interviews of 51 of the 80 day students. The attack rate for resident students who remained on campus over the weekend and ate at least one meal was 47 percent. For resident

*(Continued on page 446)*

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

DISEASE	46th WEEK ENDED		MEDIAN 1965 - 1969	CUMULATIVE, FIRST 46 WEEKS		
	November 21, 1970	November 15, 1969		1970	1969	MEDIAN 1965 - 1969
Aseptic meningitis . . . . .	131	79	67	5,547	3,168	2,740
Brucellosis . . . . .	3	3	3	190	208	219
Diphtheria . . . . .	7	11	4	395	165	165
Encephalitis, primary:						
Arthropod-borne & unspecified . . . . .	27	42	39	1,419	1,162	1,451
Encephalitis, post-infectious . . . . .	5	3	7	351	274	600
Hepatitis, serum	172	110	945	6,500	4,703	36,116
Hepatitis, infectious . . . . .	1,247	1,080		50,090	42,209	
Malaria . . . . .	112	65	60	3,065	2,766	1,860
Measles (rubeola) . . . . .	385	303	310	42,428	22,250	60,202
Meningococcal infections, total . . . . .	52	28	38	2,179	2,625	2,625
Civilian . . . . .	37	26	37	1,949	2,414	2,414
Military . . . . .	15	2	2	230	211	193
Mumps . . . . .	2,164	1,697	---	88,340	76,984	---
Poliomyelitis, total . . . . .	—	—	2	26	17	54
paralytic . . . . .	—	—	—	26	16	42
Rubella (German measles) . . . . .	473	389	---	52,693	52,148	---
Tetanus . . . . .	4	5	4	119	147	171
Tularemia . . . . .	5	1	4	139	129	160
Typhoid fever . . . . .	7	2	7	311	291	354
Typhus, tick-borne (Rky. Mt. spotted fever) . . . . .	2	—	1	332	437	270
Rabies in animals . . . . .	45	53	70	2,682	2,976	3,612

**TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY**

	Cum.		Cum.
Anthrax: . . . . .	2	Psittacosis: Ark.-1, N.Y.C.-3, Tex.-1 . . . . .	33
Botulism: . . . . .	12	Rabies in Man: . . . . .	2
Leptospirosis: Calif.-1, Tex.-1 . . . . .	106	Rubella congenital syndrome: Calif.-1 . . . . .	57
Leptospirosis: . . . . .	41	Trichinosis: N.Y.C.-1 . . . . .	89
Plague: . . . . .	12	Typhus, murine: . . . . .	32

## GASTROENTERITIS - (Continued from front page)

students who did not eat any meals in the campus dining hall or who were away, the attack rate was 22 percent, and the attack rate for day students who do not live or eat on the campus was only 2 percent. The data did not incriminate any specific food or meal as the source of infection in the resident students.

Since no bacterial pathogens could be isolated and no specific food, meal, or event could be implicated, it is felt that this epidemic of acute gastroenteritis is consistent with the syndrome of winter vomiting disease.

(Reported by William H. McClure, Supervisor of the District III (Spartanburg, Cherokee, and Union) Food Protection Program, Spartanburg County Health Department; and Willard Horton, Program Manager, Food Protection Program, South Carolina State Board of Health; and an EIS Officer.)

## Editorial Note:

In 1929, Zahorsky (1) first used the term winter vomiting disease to describe an epidemic gastrointestinal illness usually occurring in the winter and characterized by a short afebrile course, persistent vomiting, and the absence of an upper respiratory infection. This diagnosis is now mainly applied to outbreaks of acute gastroenteritis occurring in institutional settings between September and March, for which no etiologic agent can be found. Although study volunteers have acquired the illness by ingesting fecal filtrates or inhaling fecal aerosols, attempts to isolate a virus have been unsuccessful (2).

## References

1. Zahorsky J: Hyperemesis hiemis or the winter vomiting disease. Arch Pediat 46:391-395, 1929
2. Gordon I, Ingraham HS, Kornis RF: Transmission of epidemic gastroenteritis to human volunteers by oral administration of fecal filtrates. J Exp Med 86:409-422, 1947

SURVEILLANCE SUMMARY  
ENCEPHALITIS - United States, 1969

There were 1,917 cases of encephalitis, with 307 deaths, reported to the CDC for the United States for 1969 (Table 1). This case total was less than that reported for 1968 (2,283, with 260 deaths) and is the lowest in the 10-year period 1960-1969. Reported cases of arboviral encephalitis totaled 108, compared with 130 cases reported in 1968. California encephalitis (CE) virus accounted for 67 of the 108 arboviral cases. Three cases of Eastern Equine Encephalomyelitis (EEE), 21 of Western Equine Encephalomyelitis (WEE), and 16 of St. Louis Encephalitis (SLE) were also noted. One case of Venezuelan Equine Encephalomyelitis (VEE) was reported from Florida, where the first reported case of VEE in the United States occurred in 1968.

Encephalitis associated with confirmed enteroviral infection accounted for 31 of the reported cases; echovirus type 9 was identified in 10 of these.

The number of reported cases of encephalitis associated with measles reached 35, with five deaths. By comparison, there were 19 measles-associated encephalitis cases, with one death, in 1968. All 35 cases in 1969 occurred in persons under 20 years of age, and females predominated by 2:1. The case fatality ratio was 14.3 percent, as compared to 5.3 percent in 1968. The rate of associated encephalitis cases per 100,000 cases of measles was 134.5, in contrast to 84.0 in 1968.

There were 218 reported cases of encephalitis associated with mumps infection, with five deaths. The case fatality ratio (2.3 percent) was the highest in the 7-year period 1963-1969. The number of cases of encephalitis associated with mumps in 1969 is half what it was in 1968,

though, for both years, the rate of associated encephalitis cases per 100,000 was about the same (242.9 per 100,000 cases in 1969 and 268.0 in 1968). Over 75 percent of mumps-

Figure 1  
REPORTED CASES OF ENCEPHALITIS,  
BY MONTH OF ONSET AND ETIOLOGIC GROUP  
UNITED STATES - 1969

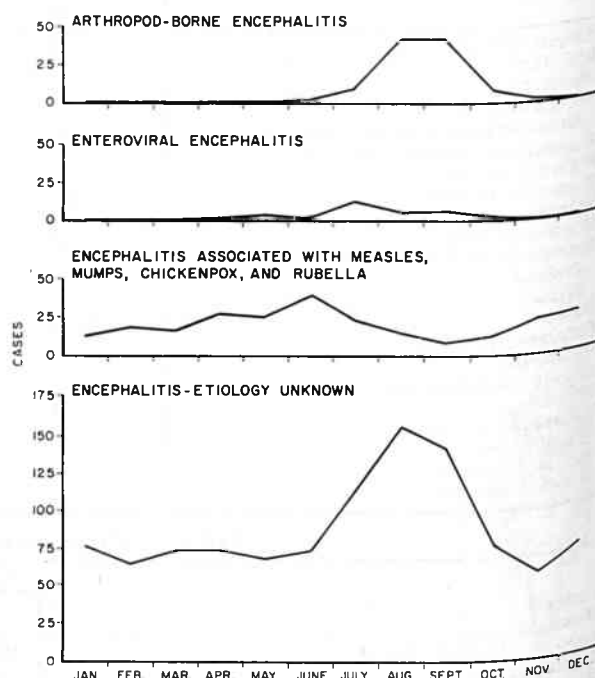


Table 1  
 Etiology of 1,917 Cases of Encephalitis and 307 Deaths  
 Reported to the Neurotropic Viral Diseases Unit, CDC, for 1969

Category and Etiology	Cases		Deaths		Death/Case Ratio (Percent)
	Number	Percent of Total	Number	Percent of Total	
Arboviral	108	5.6	3	1.1	2.8
WEE	21		1		
EEE	3		2		
SLE	16		0		
CE	67		0		
VEE	1		0		
Enteroviral (Confirmed)	31	1.6	1	0.3	3.2
Associated with Childhood Infections	304	15.9	22	7.3	7.2
Measles	35		5		
Mumps	218		5		
Chickenpox	48		12		
Rubella	3		0		
Associated with Respiratory Illnesses	7	0.4	1	0.3	14.3
Influenza	5		1		
<i>M. pneumoniae</i>	2		0		
Associated with Immunization	5	0.3	0	0.0	
Post-vaccinial	4		0		
Post-influenza vaccine	1		0		
Associated with Other Infectious Agents	35	1.8	12	4.0	34.3
LCM	2		0		
Herpes simplex	29		11		
Herpes zoster	0		0		
Infectious mononucleosis	3		0		
Mucormycosis	1		1		
Other Diagnosis	9	0.5	8	2.6	88.9
"Toxic"	2		1		
Reye's syndrome	7		7		
Unknown and Complex Etiology	1,418	73.9	259	84.4	19.0
Complex Etiology	1		0		
Unknown	1,417		259		
Total	1,917	100	306	100	16.0

associated encephalitis cases occurred in males, and over 85 percent occurred in persons under 20.

Forty-eight cases of encephalitis associated with chickenpox, with 12 deaths, were reported. Cases occurred only in children under 15, and the male to female ratio was 1:1. Though there were 21 fewer cases reported than in 1968, the case fatality ratio for both years was almost the same: 25.0 percent in 1969 and 24.6 percent in 1968.

Three cases of rubella-associated encephalitis were reported, with no deaths. The rate of rubella-associated encephalitis cases per 100,000 cases of rubella decreased from 12.8 in 1968 to 5.4 in 1969.

There were 56 cases, with 20 fatalities, of encephalitis associated with a known etiology other than measles, mumps, rubella, and chickenpox. Of seven cases associated with respiratory illnesses, five cases (one death) were associated with influenza, and two with *Mycoplasma pneumoniae* infection; all seven occurred in males. Four cases of encephalitis occurred after smallpox vaccination, and

one after influenza vaccination; all occurred in males. Twenty-nine cases of encephalitis associated with confirmed Herpes simplex infections, with 11 deaths, were reported. Cases of Herpes-associated encephalitis occurred in all age groups, with a male to female ratio of approximately 1:1.

A total of 1,418 cases with unknown etiology were also reported. Approximately 57 percent occurred in males and 53 percent in children less than 15 years of age. The death-to-case ratio (25.5 percent) was similar to the average death-to-case ratio (23.3 percent) for the previous 3 years.

The seasonal distribution of reported cases of encephalitis by etiologic groups shows a consistent pattern, with the most cases occurring during the summer months (Figure 1).

(Reported by Neurotropic Viral Diseases Unit, Viral Diseases Branch, and the Statistical Services Activity, Epidemiology Program, CDC.)

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

NOVEMBER 21, 1970 AND NOVEMBER 15, 1969 (46th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPH- THERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post In- fectious	Serum	Infectious		1970	Cum. 1970
				1970	1969	1970	1970	1970	1969		
UNITED STATES.....	131	3	7	27	42	5	172	1,247	1,080	112	3,065
NEW ENGLAND.....	7	-	-	-	1	-	11	95	134	1	81
Maine.....	1	-	-	-	-	-	-	12	20	-	10
New Hampshire.....	-	-	-	-	-	-	-	2	8	-	6
Vermont.....	-	-	-	-	-	-	-	6	9	-	5
Massachusetts.....	2	-	-	-	-	-	9	46	53	1	39
Rhode Island.....	3	-	-	-	-	-	-	9	26	-	9
Connecticut.....	1	-	-	-	1	-	2	20	18	-	12
MIDDLE ATLANTIC.....	40	-	-	5	4	1	63	266	212	5	301
New York City.....	16	-	-	2	2	-	24	72	79	-	40
New York, Up-State...	1	-	-	2	-	-	9	66	40	1	87
New Jersey, A.....	21	-	-	-	2	-	16	61	40	-	75
Pennsylvania.....	2	-	-	1	-	1	14	67	53	4	99
EAST NORTH CENTRAL.....	22	-	-	12	8	-	13	197	164	4	185
Ohio.....	8	-	-	5	4	-	5	56	41	1	31
Indiana, *.....	4	-	-	1	-	-	2	18	18	3	24
Illinois.....	2	-	-	3	2	-	-	26	25	-	50
Michigan.....	5	-	-	2	2	-	6	85	71	-	80
Wisconsin.....	3	-	-	1	-	-	-	12	9	-	-
WEST NORTH CENTRAL.....	-	1	-	2	13	1	5	71	37	7	299
Minnesota.....	-	-	-	-	7	1	3	6	12	-	22
Iowa, *.....	-	1	-	1	4	-	1	7	4	-	25
Missouri.....	-	-	-	-	2	-	1	43	8	3	31
North Dakota, *.....	-	-	-	-	-	-	-	3	1	-	3
South Dakota.....	-	-	-	-	-	-	-	-	-	-	2
Nebraska.....	-	-	-	-	-	-	-	2	5	-	6
Kansas.....	-	-	-	1	-	-	-	10	7	4	210
SOUTH ATLANTIC.....	10	-	-	2	3	-	32	112	117	11	565
Delaware.....	-	-	-	-	-	-	-	3	2	-	2
Maryland.....	1	-	-	1	1	-	5	14	13	3	73
Dist. of Columbia....	-	-	-	-	-	-	1	1	-	-	2
Virginia.....	4	-	-	1	1	-	15	30	11	4	79
West Virginia.....	-	-	-	-	-	-	-	13	13	-	11
North Carolina.....	2	-	-	-	1	-	6	19	28	3	210
South Carolina.....	-	-	-	-	-	-	1	3	7	-	49
Georgia.....	1	-	-	-	-	-	-	6	5	-	88
Florida.....	2	-	-	-	-	-	4	23	38	1	51
EAST SOUTH CENTRAL.....	5	-	-	1	3	-	5	42	60	-	178
Kentucky.....	3	-	-	-	-	-	1	16	18	-	143
Tennessee.....	1	-	-	-	3	-	3	18	21	-	-
Alabama.....	1	-	-	-	-	-	-	4	7	-	24
Mississippi.....	-	-	-	1	-	-	1	4	14	-	11
WEST SOUTH CENTRAL.....	4	2	7	1	1	-	4	78	84	32	569
Arkansas.....	-	-	-	-	-	-	-	3	1	1	15
Louisiana, *.....	-	-	-	-	1	-	-	13	16	4	41
Oklahoma, *.....	3	-	-	1	-	-	-	5	14	1	91
Texas.....	1	2	7	-	-	-	4	57	53	26	422
MOUNTAIN.....	1	-	-	-	2	-	5	82	42	43	320
Montana.....	-	-	-	-	1	-	-	8	1	-	10
Idaho.....	-	-	-	-	-	-	-	11	-	-	7
Wyoming.....	-	-	-	-	-	-	-	-	1	-	-
Colorado.....	-	-	-	-	1	-	5	33	17	43	279
New Mexico.....	1	-	-	-	-	-	-	5	4	-	10
Arizona.....	-	-	-	-	-	-	-	13	16	-	10
Utah.....	-	-	-	-	-	-	-	10	1	-	4
Nevada.....	-	-	-	-	-	-	-	2	2	-	-
PACIFIC.....	42	-	-	4	7	3	34	304	230	9	567
Washington.....	-	-	-	-	-	-	-	100	43	1	46
Oregon.....	-	-	-	-	1	-	2	15	20	2	21
California.....	41	-	-	4	6	3	32	187	163	6	363
Alaska.....	1	-	-	-	-	-	-	2	3	-	1
Hawaii.....	-	-	-	-	-	-	-	-	1	-	136
Puerto Rico.....	-	-	-	-	-	-	-	-	18	-	10
Virgin Islands.....	-	-	-	-	-	-	-	-	-	-	-

\* Delayed reports: Brucellosis: Iowa 5

Diphtheria: La. delete 1

Hepatitis, infectious: N.J. delete 3, Ind. delete 1, N. Dak. 10

Malaria: Okla. 2

# Morbidity and Mortality Weekly Report

449

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

NOVEMBER 21, 1970 AND NOVEMBER 15, 1969 (46th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		POLIOMYELITIS		
	1970	Cumulative		1970	Cumulative		1970	Cum. 1970	Total 1970	Paralytic	
		1970	1969		1970	1969				1970	Cum. 1970
UNITED STATES.....	385	42,428	22,250	52	2,179	2,625	2,164	88,340	-	-	26
NEW ENGLAND.....	28	979	1,147	1	96	105	204	10,094	-	-	-
Maine.....	20	261	9	-	5	7	20	753	-	-	-
New Hampshire.....	1	61	243	-	9	4	19	382	-	-	-
Vermont.....	-	8	3	-	8	-	15	669	-	-	-
Massachusetts.....	6	428	230	-	39	41	57	3,080	-	-	-
Rhode Island.....	-	120	27	-	6	14	54	1,913	-	-	-
Connecticut.....	1	101	635	1	29	39	39	3,297	-	-	-
MIDDLE ATLANTIC.....	40	5,067	7,685	18	403	437	111	8,348	-	-	-
New York City.....	25	991	4,980	-	87	85	32	2,958	-	-	-
New York, Up-State...	8	332	610	2	77	83	NN	NN	-	-	-
New Jersey.....	5	1,720	979	12	164	169	64	2,337	-	-	-
Pennsylvania.....	2	2,024	1,116	4	75	100	15	3,053	-	-	-
EAST NORTH CENTRAL.....	50	10,149	2,574	5	254	358	816	24,294	-	-	2
Ohio.....	7	3,871	462	2	93	133	116	4,215	-	-	-
Indiana.....	-	274	476	-	22	46	87	2,162	-	-	-
Illinois.....	11	3,136	661	1	65	51	39	1,918	-	-	-
Michigan.....	10	1,810	343	1	62	101	268	6,079	-	-	1
Wisconsin.....	22	1,058	632	1	12	27	306	9,920	-	-	1
WEST NORTH CENTRAL.....	3	3,907	972	-	111	130	197	4,820	-	-	1
Minnesota.....	-	40	9	-	18	29	34	496	-	-	-
Iowa.....	2	1,169	336	-	13	19	144	2,995	-	-	-
Missouri.....	-	1,276	31	-	59	53	4	398	-	-	1
North Dakota.....	-	320	43	-	5	2	5	341	-	-	-
South Dakota.....	-	96	3	-	1	1	-	42	-	-	-
Nebraska.....	-	937	543	-	8	10	-	394	-	-	-
Kansas.....	1	69	7	-	7	16	10	154	-	-	-
SOUTH ATLANTIC.....	29	7,381	2,654	14	428	466	144	9,651	-	-	-
Delaware.....	-	267	401	-	3	13	4	347	-	-	-
Maryland.....	2	1,381	80	-	43	41	17	1,026	-	-	-
Dist. of Columbia....	1	345	31	-	3	9	7	207	-	-	-
Virginia.....	9	2,044	907	2	46	57	35	2,141	-	-	-
West Virginia.....	-	325	220	-	12	24	51	2,429	-	-	-
North Carolina.....	11	900	326	5	93	88	NN	NN	-	-	-
South Carolina.....	2	608	131	-	46	58	8	927	-	-	-
Georgia.....	-	17	2	1	37	77	-	3	-	-	-
Florida.....	4	1,494	556	5	145	99	22	2,571	-	-	-
EAST SOUTH CENTRAL.....	57	1,592	116	1	159	168	114	5,223	-	-	-
Kentucky.....	13	898	66	-	58	55	26	1,888	-	-	-
Tennessee.....	14	422	20	1	66	69	73	2,961	-	-	-
Alabama.....	23	171	6	-	24	25	14	325	-	-	-
Mississippi.....	7	101	24	-	11	19	1	49	-	-	-
WEST SOUTH CENTRAL.....	69	8,500	4,882	2	274	345	107	8,254	-	-	21
Arkansas.....	-	30	16	-	23	32	3	136	-	-	-
Louisiana.....	12	174	125	2	67	93	-	40	-	-	-
Oklahoma.....	-	731	142	-	21	34	4	2,646	-	-	-
Texas.....	57	7,565	4,599	-	163	186	100	5,432	-	-	21
MOUNTAIN.....	22	1,707	1,074	-	50	52	83	4,059	-	-	1
Montana.....	-	101	92	-	1	8	18	791	-	-	-
Idaho.....	10	105	90	-	7	11	2	98	-	-	-
Wyoming.....	-	11	-	-	2	-	-	37	-	-	-
Colorado.....	2	189	141	-	17	9	33	1,420	-	-	1
New Mexico.....	7	257	275	-	2	7	2	758	-	-	-
Arizona.....	3	987	464	-	15	10	27	827	-	-	-
Utah.....	-	36	11	-	5	5	1	128	-	-	-
Nevada.....	-	21	1	-	1	2	-	-	-	-	-
PACIFIC.....	87	3,146	1,146	11	404	564	388	13,597	-	-	1
Washington.....	22	631	67	2	46	57	177	5,067	-	-	-
Oregon.....	1	389	200	1	30	20	32	1,178	-	-	-
California.....	64	1,796	821	8	325	466	178	5,591	-	-	1
Alaska.....	-	141	13	-	-	11	1	395	-	-	-
Hawaii.....	---	189	45	---	3	10	---	1,366	---	---	-
Puerto Rico.....	---	967	1,784	---	5	19	---	827	---	---	-
Virgin Islands.....	---	8	46	---	3	-	---	3	---	---	-

\*Delayed reports: Mumps: Hawaii 36

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
NOVEMBER 21, 1970 AND NOVEMBER 15, 1969 (46th 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.....	473	52,693	4	119	5	139	7	311	2	332	45	2,682
NEW ENGLAND.....	17	2,651	-	4	-	1	-	10	-	-	1	104
Maine.....	4	464	-	-	-	-	-	-	-	-	1	44
New Hampshire.....	-	153	-	-	-	-	-	-	-	-	-	1
Vermont.....	-	60	-	-	-	-	-	-	-	-	-	50
Massachusetts.....	8	1,252	-	2	-	1	-	8	-	-	-	4
Rhode Island.....	1	121	-	-	-	-	-	-	-	-	-	1
Connecticut.....	4	601	-	2	-	-	-	2	-	-	-	4
MIDDLE ATLANTIC.....	22	4,147	1	14	-	2	-	59	-	14	6	238
New York City.....	7	653	1	7	-	-	-	20	-	-	-	-
New York, Up-State..	4	461	-	3	-	1	-	19	-	6	6	222
New Jersey.....	4	883	-	3	-	-	-	10	-	4	-	-
Pennsylvania.....	7	2,150	-	1	-	1	-	10	-	4	-	16
EAST NORTH CENTRAL....	117	10,940	1	22	-	20	1	41	-	10	2	212
Ohio.....	13	2,106	-	2	-	2	1	15	-	9	-	51
Indiana.....	50	2,013	-	8	-	14	-	3	-	-	-	23
Illinois.....	4	1,749	-	4	-	2	-	9	-	1	1	60
Michigan.....	36	2,866	1	8	-	-	-	12	-	-	1	26
Wisconsin.....	14	2,206	-	-	-	2	-	2	-	-	-	52
WEST NORTH CENTRAL....	17	3,411	1	5	1	31	-	9	-	4	11	560
Minnesota.....	1	124	-	1	-	1	-	1	-	-	3	109
Iowa.....	10	2,061	1	2	-	-	-	1	-	1	4	114
Missouri.....	-	442	-	1	1	27	-	3	-	3	2	102
North Dakota.....	-	154	-	-	-	1	-	2	-	-	2	43
South Dakota.....	-	1	-	1	-	1	-	-	-	-	-	85
Nebraska.....	5	578	-	-	-	-	-	2	-	-	-	6
Kansas.....	1	51	-	-	-	1	-	-	-	-	-	101
SOUTH ATLANTIC.....	21	6,555	1	29	2	16	-	42	2	223	9	534
Delaware.....	-	46	-	-	-	-	-	-	-	5	-	3
Maryland.....	1	327	1	1	-	-	-	11	1	23	-	-
Dist. of Columbia..	-	22	-	1	-	-	-	1	-	-	-	-
Virginia.....	4	737	-	2	-	6	-	8	-	59	3	208
West Virginia.....	8	1,392	-	-	2	2	-	-	-	5	2	135
North Carolina.....	-	45	-	3	-	4	-	3	1	88	-	3
South Carolina.....	1	656	-	1	-	-	-	1	-	35	-	-
Georgia.....	-	-	-	6	-	3	-	8	-	8	1	102
Florida.....	7	3,330	-	15	-	1	-	10	-	-	3	83
EAST SOUTH CENTRAL....	26	2,891	-	14	1	11	-	38	-	38	4	209
Kentucky.....	2	961	-	1	-	2	-	10	-	3	3	114
Tennessee.....	15	1,472	-	5	1	9	-	18	-	22	1	57
Alabama.....	9	362	-	6	-	-	-	8	-	10	-	35
Mississippi.....	-	96	-	2	-	-	-	2	-	3	-	3
WEST SOUTH CENTRAL....	52	9,083	-	16	1	36	1	34	-	36	4	425
Arkansas.....	-	35	-	4	-	18	1	10	-	6	1	71
Louisiana.....	1	155	-	4	-	5	-	10	-	1	-	65
Oklahoma.....	-	821	-	-	-	6	-	1	-	23	2	87
Texas.....	51	8,072	-	8	1	7	-	13	-	6	1	202
MOUNTAIN.....	12	2,079	-	-	-	14	1	17	-	6	1	84
Montana.....	5	330	-	-	-	3	-	1	-	1	-	1
Idaho.....	-	199	-	-	-	-	-	-	-	2	-	-
Wyoming.....	-	134	-	-	-	-	-	2	-	1	-	3
Colorado.....	3	417	-	-	-	-	-	4	-	2	-	34
New Mexico.....	2	229	-	-	-	-	-	6	-	-	-	16
Arizona.....	2	604	-	-	-	-	-	2	-	-	-	14
Utah.....	-	166	-	-	-	11	1	2	-	-	-	2
Nevada.....	-	-	-	-	-	-	-	-	-	-	1	14
PACIFIC.....	189	10,936	-	15	-	8	4	61	-	1	7	316
Washington.....	31	4,839	-	2	-	2	-	4	-	-	-	9
Oregon.....	9	940	-	3	-	2	-	1	-	-	-	4
California.....	148	4,833	-	10	-	4	4	53	-	1	7	292
Alaska.....	1	107	-	-	-	-	-	2	-	-	-	11
Hawaii.....	-	217	-	-	-	-	-	1	-	-	-	42
Puerto Rico.....	-	27	-	13	-	-	-	5	-	-	-	-
Virgin Islands.....	-	1	-	-	-	-	-	1	-	-	-	-

\* Delayed reports: Rubella: Hawaii 2  
Rabies in animals: Neb. 10

# Morbidity and Mortality Weekly Report

451

Week No. 46  
**TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED NOVEMBER 21, 1970**

(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>	743	448	55	33	<b>SOUTH ATLANTIC:</b>	1,406	722	52	102
Boston, Mass.-----	227	124	20	15	Atlanta, Ga.-----	159	77	4	7
Bridgeport, Conn.-----	42	26	3	—	Baltimore, Md.-----	270	143	5	10
Cambridge, Mass.-----	18	9	1	—	Charlotte, N. C.-----	49	30	—	3
Fall River, Mass.-----	33	19	3	1	Jacksonville, Fla.-----	85	48	2	9
Hartford, Conn.-----	68	37	2	4	Miami, Fla.-----	104	59	3	4
Lowell, Mass.-----	31	18	3	2	Norfolk, Va.-----	54	31	4	1
Lynn, Mass.-----	14	10	2	1	Richmond, Va.-----	93	43	6	4
New Bedford, Mass.-----	35	27	2	1	Savannah, Ga.-----	38	15	7	1
New Haven, Conn.-----	40	28	2	3	St. Petersburg, Fla.-----	114	91	1	1
Providence, R. I.-----	72	46	4	3	Tampa, Fla.-----	65	41	4	3
Somerville, Mass.-----	13	9	2	—	Washington, D. C.-----	332	120	14	57
Springfield, Mass.-----	55	31	3	—	Wilmington, Del.-----	43	24	2	2
Waterbury, Conn.-----	24	13	—	1	<b>EAST SOUTH CENTRAL:</b>	704	390	29	37
Worcester, Mass.-----	71	51	8	2	Birmingham, Ala.-----	103	61	2	2
<b>MIDDLE ATLANTIC:</b>	3,302	1,934	119	135	Chattanooga, Tenn.-----	57	32	7	2
Albany, N. Y.-----	53	28	—	3	Knoxville, Tenn.-----	46	29	2	—
Allentown, Pa.-----	37	19	5	4	Louisville, Ky.-----	98	60	8	6
Buffalo, N. Y.-----	146	88	6	7	Memphis, Tenn.-----	171	92	1	8
Camden, N. J.-----	52	27	2	4	Mobile, Ala.-----	69	37	3	4
Elizabeth, N. J.-----	31	19	2	1	Montgomery, Ala.-----	39	24	1	—
Erie, Pa.-----	48	25	2	3	Nashville, Tenn.-----	121	55	5	15
Jersey City, N. J.-----	75	40	3	—	<b>WEST SOUTH CENTRAL:</b>	1,301	641	43	65
Newark, N. J.-----	86	49	2	2	Austin, Tex.-----	45	25	5	1
New York City, N. Y.-----	1,628	965	50	55	Baton Rouge, La.-----	67	35	2	3
Paterson, N. J.-----	34	24	3	—	Corpus Christi, Tex.-----	41	15	2	6
Philadelphia, Pa.-----	405	207	4	21	Dallas, Tex.-----	179	89	2	10
Pittsburgh, Pa.-----	229	122	10	14	El Paso, Tex.-----	40	20	2	1
Reading, Pa.-----	48	35	1	3	Fort Worth, Tex.-----	93	54	4	5
Rochester, N. Y.-----	150	103	9	4	Houston, Tex.-----	264	116	4	1
Schenectady, N. Y.-----	29	23	2	1	Little Rock, Ark.-----	59	32	6	6
Scranton, Pa.-----	42	33	3	—	New Orleans, La.-----	178	88	4	10
Syracuse, N. Y.-----	81	48	4	6	Oklahoma City, Okla.-----	49	23	—	2
Trenton, N. J.-----	57	31	3	3	San Antonio, Tex.-----	112	56	1	11
Utica, N. Y.-----	36	23	6	3	Shreveport, La.-----	65	31	5	5
Yonkers, N. Y.-----	35	25	2	1	Tulsa, Okla.-----	109	57	6	4
<b>EAST NORTH CENTRAL:</b>	2,636	1,491	91	120	<b>MOUNTAIN:</b>	497	293	20	26
Akron, Ohio-----	64	38	—	2	Albuquerque, N. Mex.-----	42	23	5	—
Canton, Ohio-----	30	20	—	1	Colorado Springs, Colo.-----	20	13	1	—
Chicago, Ill.-----	679	353	15	38	Denver, Colo.-----	136	74	4	11
Cincinnati, Ohio-----	167	103	6	6	Ogden, Utah-----	22	9	3	1
Cleveland, Ohio-----	193	91	3	12	Phoenix, Ariz.-----	121	73	1	12
Columbus, Ohio-----	184	113	15	5	Pueblo, Colo.-----	19	12	1	—
Dayton, Ohio-----	75	41	3	6	Salt Lake City, Utah-----	57	38	1	1
Detroit, Mich.-----	307	157	11	8	Tucson, Ariz.-----	80	51	4	1
Evansville, Ind.-----	49	28	3	2	<b>PACIFIC:</b>	1,762	1,069	37	63
Flint, Mich.-----	52	23	3	7	Berkeley, Calif.-----	14	10	—	—
Fort Wayne, Ind.-----	62	41	6	4	Fresno, Calif.-----	42	22	1	4
Gary, Ind.-----	42	19	2	3	Glendale, Calif.-----	26	19	—	—
Grand Rapids, Mich.-----	54	38	5	2	Honolulu, Hawaii-----	56	25	1	4
Indianapolis, Ind.-----	184	106	3	10	Long Beach, Calif.-----	126	84	1	2
Madison, Wis.-----	39	25	3	1	Los Angeles, Calif.-----	464	306	10	10
Milwaukee, Wis.-----	174	110	2	3	Oakland, Calif.-----	110	61	3	7
Peoria, Ill.-----	29	18	2	—	Pasadena, Calif.-----	36	22	1	—
Rockford, Ill.-----	37	25	3	1	Portland, Ore.-----	171	107	3	8
South Bend, Ind.-----	53	37	3	2	Sacramento, Calif.-----	65	37	3	4
Toledo, Ohio-----	102	64	3	6	San Diego, Calif.-----	145	94	—	5
Youngstown, Ohio-----	60	41	—	1	San Francisco, Calif.-----	208	107	9	6
<b>WEST NORTH CENTRAL:</b>	883	558	30	49	San Jose, Calif.-----	48	33	—	2
Des Moines, Iowa-----	56	39	1	2	Seattle, Wash.-----	152	85	3	5
Duluth, Minn.-----	38	27	3	1	Spokane, Wash.-----	63	35	1	4
Kansas City, Kans.-----	44	23	5	2	Tacoma, Wash.-----	36	22	1	2
Kansas City, Mo.-----	130	88	2	5	<b>Total</b>	<b>13,234</b>	<b>7,546</b>	<b>476</b>	<b>630</b>
Lincoln, Nebr.-----	42	22	1	3	<b>Expected Number</b>	<b>12,880</b>	<b>7,421</b>	<b>464</b>	<b>553</b>
Minneapolis, Minn.-----	132	81	2	9	<b>Cumulative Total</b> (includes reported corrections for previous weeks)	<b>589,573</b>	<b>336,115</b>	<b>22,789</b>	<b>28,143</b>
Omaha, Nebr.-----	100	58	4	4					
St. Louis, Mo.-----	209	129	6	17					
St. Paul, Minn.-----	91	62	3	5					
Wichita, Kans.-----	41	29	3	1					
Las Vegas, Nev.*	35	19	3	1					

\*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 November 14, 1970

INTERNATIONAL NOTES  
QUARANTINE MEASURES

*Changes in the "Supplement - United States Designated Yellow Fever Vaccination Centers," MMWR, Vol. 18, No. 53*

The following additions should be made in the list of United States Designated Yellow Fever Vaccination Centers:

NEW YORK

New York City U.S. Public Health Service  
Outpatient Clinic  
Change clinic hours to 1:30-2:30

Purchase Pepsi Cola Company  
Change address to  
Anderson Hill Rd., 10577

PUERTO RICO

San Juan U.S. Public Health Service  
Outpatient Clinic  
Change clinic hours to Mon.  
and Wed., 3 P.M.

TEXAS

Austin Austin-Travis County Health Dept.  
Change clinic hours to Wed.,  
3 P.M. and by appointment

VIRGINIA

Hampton This center has been closed.

*Changes in the "Supplement - Vaccination Certificate Requirements for International Travel," MMWR, Vol. 19, No. 21*

The following changes should be made in the Vaccination Certificate Requirements for International Travel:

Albania

Delete all information concerning cholera and insert: I.

Algeria

1. Delete the note concerning cholera and insert: Cholera - And from Afghanistan, Burma, Guinea, India, Indonesia, Jordan, Kuwait, Liberia, Libya, Malaysia, Nepal, Pakistan, Philippines, Republic of Korea, Saudi Arabia, Sierra Leone, Syria, Sudan, Trucial Oman, Tunisia, Turkey, United Arab Republic, Vietnam (Rep.).

2. Delete all information concerning smallpox and insert: I. Except European countries, Canada, United States of America, Morocco, Tunisia, provided travelers have been resident in these countries for 14 days immediately before arrival in Algeria. The certificate is, however, required from arrivals from all countries, any parts of which are infected.

Australia

In the note concerning cholera, delete: USSR, and insert: Turkey.

Bulgaria

In the note concerning cholera, insert: Turkey.

Czechoslovakia

In the note concerning cholera, delete: Israel, Jordan, Lebanon.

El Salvador

Insert: Cholera - II.

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 21,000 IS PUBLISHED AT THE CENTER FOR DISEASE CONTROL, ATLANTA, GEORGIA.

DIRECTOR, CENTER FOR DISEASE CONTROL DAVID J. SENCER, M.D.  
DIRECTOR, EPIDEMIOLOGY PROGRAM PHILIP S. BRACHMAN, M.D.

EDITOR MICHAEL B. GREGG, M.D.

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

CENTER FOR DISEASE CONTROL  
ATTN: THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT  
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 AT CLOSE OF BUSINESS ON FRIDAY; COMPILED DATA ON A NATIONAL BASIS ARE OFFICIALLY RELEASED TO THE PUBLIC ON THE SUCCEEDING FRIDAY.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION  
CENTER FOR DISEASE CONTROL  
ATLANTA, GEORGIA 30333  
OFFICIAL BUSINESS

2/69 46-1-10, 18, 19, 22  
LIBRARY  
COMMUNICABLE DISEASE CENTER

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF H.E.W.

