



# Morbidity and Mortality

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

**EPIDEMIOLOGIC NOTES AND REPORTS  
GASTROENTERITIS AND VIRAL HEPATITIS  
ASSOCIATED WITH RAW CLAMS - New Jersey**

An outbreak of 33 cases of a gastroenteric illness and 4 cases of viral hepatitis occurred among 128 persons who had attended a picnic in East Brunswick Township, New Jersey, on August 21, 1966. Following the investigation of the four cases of viral hepatitis during October 1966, the common picnic experience was detected. Subsequent investigation of the persons who had attended that picnic revealed the occurrence of the gastroenteric illnesses.

The gastroenteric illnesses, which developed 12 to 60 hours following the afternoon of the picnic, lasted

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for one to 3 days and were characterized by nausea, vomiting, abdominal cramps, and diarrhea. Only 5 of the 33 persons experienced fever. None of the ill persons were hospitalized.

Of the 128 persons who attended the picnic, 122 persons were questioned regarding possible illnesses and foods eaten. Twenty-two food items, including raw and  
*(Continued on page 394)*

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

DISEASE	46th WEEK ENDED		MEDIAN 1961 - 1965	CUMULATIVE, FIRST 46 WEEKS		
	NOVEMBER 19, 1966	NOVEMBER 20, 1965		1966	1965	MEDIAN 1961 - 1965
Aseptic meningitis . . . . .	55	44	45	2,675	1,904	1,914
Brucellosis . . . . .	3	4	6	211	217	353
Diphtheria . . . . .	1	4	8	170	144	244
Encephalitis, primary:						
Arthropod-borne & unspecified . . . . .	44	39	---	1,937	1,728	---
Encephalitis, post-infectious . . . . .	5	7	---	655	600	---
Hepatitis, serum . . . . .	40			1,279		
Hepatitis, infectious . . . . .	717	665	793	28,376	29,849	38,292
Measles (rubeola) . . . . .	1,159	1,702	1,885	195,405	249,331	399,815
Poliomyelitis, Total (including unspecified)	3	—	11	91	54	389
Paralytic . . . . .	3	—	10	83	42	332
Nonparalytic . . . . .	—	—	---	1	9	---
Meningococcal infections, Total . . . . .	50	60	44	3,071	2,692	2,097
Civilian . . . . .	45	57	---	2,779	2,499	---
Military . . . . .	5	3	---	292	193	---
Rubella (German measles) . . . . .	263	---	---	43,827	---	---
Streptococcal sore throat & Scarlet fever . . . . .	8,248	7,374	6,356	368,315	343,589	297,496
Tetanus . . . . .	3	11	---	171	245	---
Tularemia . . . . .	6	4	---	159	228	---
Typhoid fever . . . . .	7	11	11	347	394	483
Typhus, tick-borne (Rky. Mt. Spotted fever) . . . . .	4	4	---	239	256	---
Rabies in Animals . . . . .	85	79	72	3,606	3,851	3,372

**NOTIFIABLE DISEASES OF LOW FREQUENCY**

	Cum.		Cum.
Anthrax . . . . .	6	Botulism . . . . .	8
Leptospirosis . . . . .	60	Trichinosis: NJ-1, NYC-2 . . . . .	90
Malaria: Ala-1, Calif-2, La-5, Mass-1, NYUpS-1, Ore-1, P.R.-1 . . . . .	421	Rabies in Man . . . . .	1
Psittacosis: Minn-1 . . . . .	41	Rubella, Congenital Syndrome . . . . .	21
Typhus, murine: Ala-1 . . . . .	26	Plague . . . . .	5

## GASTROENTERITIS AND VIRAL HEPATITIS ASSOCIATED WITH RAW CLAMS - New Jersey

Table 1  
Attack Rates of Gastroenteric Illnesses Among Persons Who Ate or Did Not Eat Picnic Foods

	Eaters				Non-Eaters			
	Ill	Not Ill	Total	Attack Rate	Ill	Not Ill	Total	Attack Rate
Beer	16	28	44	36	17	61	78	22
Birch beer	20	62	82	24	13	27	40	33
Chicken	25	54	79	32	8	35	43	19
Clams	31	30	61	51	2	59	61	3
Corn on cob	23	68	91	25	10	21	31	32
Hamburgers	25	74	99	25	8	15	23	35
Hot dogs—grilled	18	44	62	29	15	45	60	25
Ice cream	16	45	61	26	17	44	61	28
Potato salad	16	31	47	34	17	58	75	23
Raw onions	12	32	44	27	21	57	78	27
Sausage with sauce	19	50	69	28	14	39	53	26

steamed clams, were served. Those food items eaten by more than half of the ill persons are listed in Table 1, with the attack rates shown among persons who ate and did not eat each food. With the exception of clams, there are no differences in attack rates among eaters and non-eaters for each food item. Among 61 persons who had eaten clams, 31 (51 percent) became ill, whereas only 2 (3 percent) of the 61 persons who did not eat clams became ill. These data suggested clams as the responsible food item.

Table 2 shows the attack rates among persons who ate clams in different forms. Among persons who ate only raw clams or both raw and steamed clams, the attack rates were 52 and 53 percent, respectively. Although the attack rate among persons who ate steamed clams alone was 33 percent, there were only six persons in that category, an insufficient number to conclude that steamed clams were involved. Thus, the illnesses seem to have been related to ingestion of the raw clams.

Table 2  
Attack Rates Among Persons Who Ate or Who Did Not Eat Clams

	Eaters		
	Ill	Total	Attack Rate
Raw plus steamed clams	16	30	53
Raw only	13	25	52
Steamed only	2	6	33
None	2	61	3
Total	33	122	27

Four persons who attended the picnic developed viral hepatitis. Each had eaten both raw and steamed clams, and three of them also experienced an acute gastroenteric illness. The intervals between the time of the picnic and onsets of hepatitis in the four patients were 22, 26, 37, and 40 days, respectively. None of these four had a history of personal contact with a jaundiced person during the 2 months prior to onset, and none had received parental inoculations or blood transfusions within the 6 months preceding their illnesses.

An attempt was made to uncover other patients with hepatitis who had eaten clams obtained from the same sources as the "picnic" clams. A telephone survey among 95 physicians in the county where the clam retailer is located revealed four unreported hepatitis cases. None of these four had eaten raw or steamed clams. In addition, from the entire state there were eight other persons with hepatitis and history of clam ingestion reported to the New Jersey State Health Department during August, September, and October, but none of these could be linked with the sources of the "picnic" clams.

One bushel of raw clams (*Mercenaria mercenaria*) and one bushel of steamer clams (*Mya arenaria*) which were served at the picnic were obtained from different sources. Investigation of the source of the raw clams is currently underway.

(Reported by Dr. William J. Dougherty, Director, Preventable Disease Control, New Jersey State Department of Health; Dr. Sidney Katz, Director, Health and Welfare, East Township; and a team of EIS Officers.)

### CURRENT TRENDS MEASLES - 1966

For the 46th week (ending November 19, 1966), 1,159 measles cases were reported from 40 states. This represents an increase of 443 cases over the preceding week

and a decrease of 543 cases from the total of 1,702 cases for the 46th week in 1965. The states recording the highest numbers of measles cases for the 46th week are

Texas, with 199 cases, and Washington, with 190.

The 14 counties reporting 10 or more cases for the 45th week are listed in Table 3; the geographic distribution of counties and health districts reporting measles for that week is shown in Figure 1.

(Reported by the Childhood Viral Diseases Unit, Epidemiology Branch, CDC.)

**Table 3**  
**Counties Reporting Highest Number of Measles Cases**  
**Week Ending November 12, 1966**

County	State	Number of Cases
Wayne	Michigan	71
Washington	Oregon	69
Richardson	Nebraska	41
Sioux	N. Dakota	28
Maury	Tennessee	25
Waushara	Wisconsin	22
Jefferson	Texas	16
Los Angeles	California	14
Milwaukee	Wisconsin	14
Red River	Texas	14
Glacier	Montana	11
McHenry	N. Dakota	10
Penobscot	Maine	10
Tulsa	Oklahoma	10

**Park County, Wyoming**

Investigation of the recent outbreak of measles in Park County, Wyoming (MMWR, Vol. 15, No. 45) has revealed the localization of 99 known cases among school children in the city of Cody (population 4,838). The

distribution of cases to date in the Cody schools is as follows: Eastside School—58 cases; Sunset School—38 cases; Westside School—2 cases; Junior High School—1 case. A telephone survey of families of known school cases has uncovered more than 20 cases among preschool siblings of school-age cases.

The index case entered the Eastside School during the first week of September; a playmate of the index case had had measles during the late summer. Peak numbers of cases occurred during the first week in October and again in the first and second weeks in November. Complications requiring hospitalization occurred in an 18-month-old male with a febrile convulsion and in an 8-year-old male with post-infectious encephalitis.

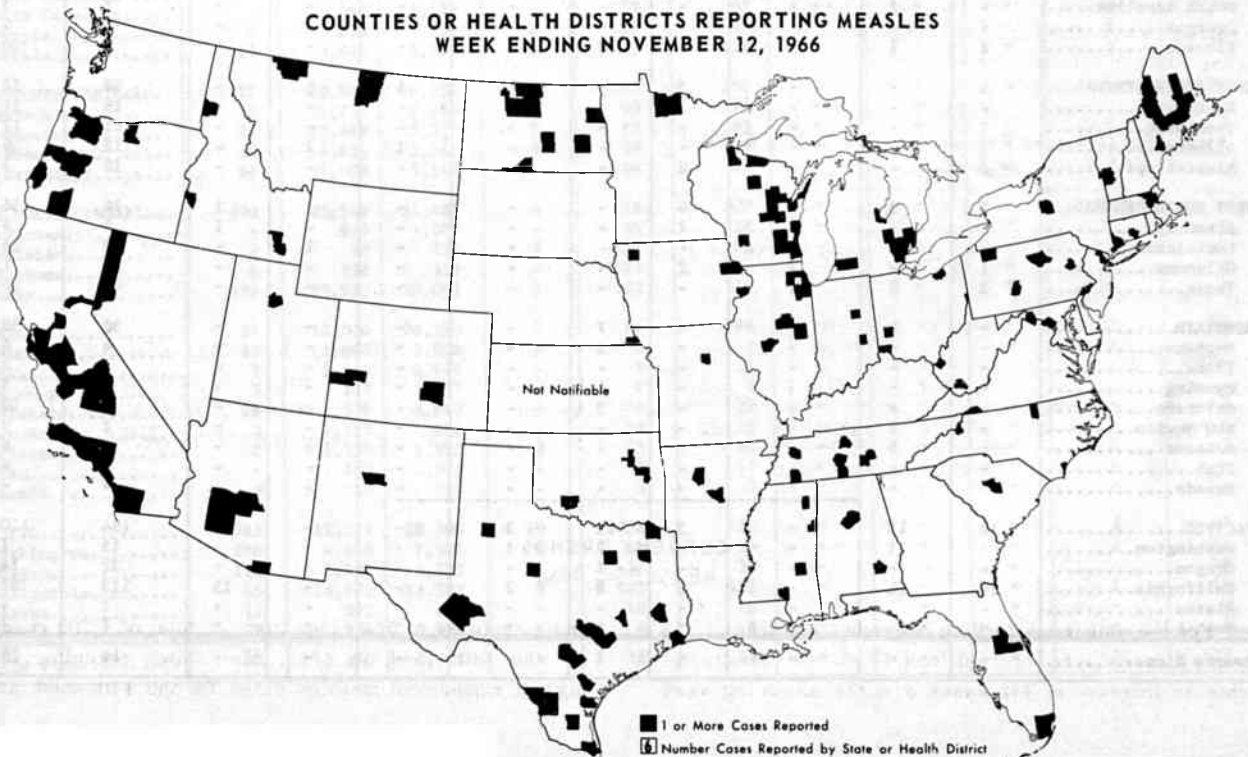
A survey was conducted in the three elementary schools with 97 percent return of the questionnaire forms. In the first three grades of the schools, 37.5 percent of the children at Westside were noted to be susceptible, compared to 22.9 and 17.3 percent, respectively, of the students at Eastside and Sunset Schools where almost all of the measles cases occurred.

Local newspaper articles and radio programs have emphasized the importance of measles immunization. A letter from the superintendent of the school system was sent to the parents of susceptible children in the elementary grades urging measles immunization.

In the nearby community of Powell, Wyoming (population 4,740), seven cases of measles have been reported since October 16, 1966, five of which occurred in one

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**Figure 1**  
**COUNTIES OR HEALTH DISTRICTS REPORTING MEASLES**  
**WEEK ENDING NOVEMBER 12, 1966**



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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
NOVEMBER 19, 1966 AND NOVEMBER 20, 1965 (46th WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	ENCEPHALITIS			DIPHTHERIA		HEPATITIS		
	1966	1965		Primary including unsp. cases		Post-Infectious			Serum	Infectious	Both Types
				1966	1965						
UNITED STATES...	55	44	3	44	39	5	1	4	40	717	665
NEW ENGLAND.....	3	1	-	1	-	-	-	-	4	44	40
Maine.....	-	-	-	-	-	-	-	-	-	9	6
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	3
Vermont.....	-	-	-	-	-	-	-	-	-	2	1
Massachusetts.....	1	-	-	-	-	-	-	-	-	11	24
Rhode Island.....	1	1	-	-	-	-	-	-	2	2	2
Connecticut.....	1	-	-	1	-	-	-	-	2	20	4
MIDDLE ATLANTIC.....	6	6	-	6	11	1	-	-	16	135	125
New York City.....	-	1	-	2	4	-	-	-	12	32	33
New York, Up-State.....	1	2	-	-	-	-	-	-	1	41	38
New Jersey.....	4	3	-	3	4	-	-	-	1	24	25
Pennsylvania.....	1	-	-	1	3	1	-	-	2	38	29
EAST NORTH CENTRAL...	7	11	-	16	5	1	-	-	1	121	150
Ohio.....	1	1	-	8	3	-	-	-	-	25	30
Indiana.....	1	-	-	2	-	-	-	-	-	16	15
Illinois.....	3	3	-	2	1	1	-	-	-	32	30
Michigan.....	2	7	-	1	1	-	-	-	1	39	68
Wisconsin.....	-	-	-	3	-	-	-	-	-	9	7
WEST NORTH CENTRAL...	2	1	-	9	2	-	-	-	1	29	38
Minnesota.....	-	1	-	6	-	-	-	-	1	7	4
Iowa.....	2	-	-	2	-	-	-	-	-	14	14
Missouri.....	-	-	-	-	-	-	-	-	-	6	9
North Dakota.....	-	-	-	-	-	-	-	-	-	-	-
South Dakota.....	-	-	-	-	1	-	-	-	-	-	-
Nebraska.....	-	-	-	1	1	-	-	-	-	-	1
Kansas.....	-	-	-	-	-	-	-	-	-	2	10
SOUTH ATLANTIC.....	11	5	-	2	3	-	-	2	2	71	76
Delaware.....	-	2	-	-	-	-	-	-	-	1	-
Maryland.....	1	-	-	-	-	-	-	-	-	17	16
Dist. of Columbia..	-	-	-	-	-	-	-	-	1	3	2
Virginia.....	1	-	-	-	1	-	-	-	1	20	15
West Virginia.....	-	-	-	-	-	-	-	-	-	13	6
North Carolina.....	7	-	-	2	-	-	-	-	-	6	10
South Carolina.....	-	2	-	-	-	-	-	-	-	1	3
Georgia.....	-	-	-	-	-	-	-	2	-	4	4
Florida.....	2	1	-	-	2	-	-	-	-	6	20
EAST SOUTH CENTRAL...	4	-	-	3	-	-	1	1	-	59	32
Kentucky.....	-	-	-	1	-	-	-	-	-	16	11
Tennessee.....	1	-	-	-	-	-	-	-	-	21	12
Alabama.....	1	-	-	-	-	-	1	1	-	12	6
Mississippi.....	2	-	-	2	-	-	-	-	-	10	3
WEST SOUTH CENTRAL...	3	3	3	4	-	-	-	1	1	74	56
Arkansas.....	-	-	-	2	-	-	-	-	1	5	9
Louisiana.....	-	-	-	-	-	-	-	1	-	12	16
Oklahoma.....	1	-	1	2	-	-	-	-	-	8	1
Texas.....	2	3	2	-	-	-	-	-	-	49	30
MOUNTAIN.....	-	2	-	-	7	-	-	-	-	30	38
Montana.....	-	-	-	-	2	-	-	-	-	4	4
Idaho.....	-	-	-	-	-	-	-	-	-	3	2
Wyoming.....	-	-	-	-	1	-	-	-	-	-	3
Colorado.....	-	-	-	-	3	-	-	-	-	7	10
New Mexico.....	-	1	-	-	-	-	-	-	-	2	9
Arizona.....	-	1	-	-	1	-	-	-	-	11	6
Utah.....	-	-	-	-	-	-	-	-	-	3	4
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	19	15	-	3	11	3	-	-	15	154	110
Washington.....	-	1	-	-	2	1	-	-	-	15	7
Oregon.....	-	-	-	-	1	-	-	-	-	22	14
California.....	19	14	-	3	8	2	-	-	15	113	87
Alaska.....	-	-	-	-	-	-	-	-	-	2	-
Hawaii.....	-	-	-	-	-	-	-	-	-	2	2
Puerto Rico.....	-	-	-	-	1	-	-	-	-	16	16

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## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

NOVEMBER 19, 1966 AND NOVEMBER 20, 1965 (46th 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...	1,159	195,405	249,331	50	3,071	2,692	3	-	3	83	263
NEW ENGLAND.....	39	2,473	37,114	2	141	138	-	-	-	-	41
Maine.....	8	268	2,884	-	12	17	-	-	-	-	19
New Hampshire.....	-	80	382	-	9	9	-	-	-	-	-
Vermont.....	14	316	1,369	-	4	8	-	-	-	-	-
Massachusetts.....	5	815	19,352	2	59	51	-	-	-	-	7
Rhode Island.....	1	73	3,951	-	17	15	-	-	-	-	1
Connecticut.....	11	921	9,176	-	40	38	-	-	-	-	14
MIDDLE ATLANTIC.....	61	18,299	15,988	6	388	358	-	-	-	-	16
New York City.....	10	8,350	2,767	1	62	59	-	-	-	-	11
New York, Up-State.	7	2,592	4,278	-	105	101	-	-	-	-	4
New Jersey.....	14	1,913	2,989	2	109	95	-	-	-	-	-
Pennsylvania.....	30	5,444	5,954	3	112	103	-	-	-	-	1
EAST NORTH CENTRAL...	161	69,671	58,249	7	489	405	2	-	2	7	57
Ohio.....	15	6,403	8,974	4	142	109	1	-	1	2	3
Indiana.....	15	5,774	2,132	-	85	47	-	-	-	1	17
Illinois.....	10	11,457	3,118	1	87	109	-	-	-	3	4
Michigan.....	55	14,863	27,081	1	127	93	1	-	1	1	21
Wisconsin.....	66	31,174	16,944	1	48	47	-	-	-	-	12
WEST NORTH CENTRAL...	56	9,013	17,031	1	158	134	-	-	-	1	4
Minnesota.....	5	1,665	748	-	35	32	-	-	-	1	1
Iowa.....	3	5,361	9,186	-	22	12	-	-	-	-	-
Missouri.....	-	537	2,635	-	61	53	-	-	-	-	-
North Dakota.....	29	1,262	3,890	-	11	12	-	-	-	-	3
South Dakota.....	-	40	115	-	5	3	-	-	-	-	-
Nebraska.....	19	148	457	-	9	10	-	-	-	-	-
Kansas.....	NN	NN	NN	1	15	12	-	-	-	-	-
SOUTH ATLANTIC.....	102	15,696	26,039	8	520	504	-	-	-	1	23
Delaware.....	-	262	508	1	5	10	-	-	-	-	3
Maryland.....	-	2,121	1,203	-	49	50	-	-	-	-	2
Dist. of Columbia..	-	388	88	-	14	11	-	-	-	-	-
Virginia.....	3	2,208	4,179	1	63	65	-	-	-	-	-
West Virginia.....	45	5,457	14,383	2	41	26	-	-	-	-	6
North Carolina.....	40	559	405	1	132	105	-	-	-	-	-
South Carolina.....	-	660	1,119	-	53	63	-	-	-	-	3
Georgia.....	2	238	626	2	68	60	-	-	-	1	-
Florida.....	12	3,803	3,528	1	95	114	-	-	-	-	9
EAST SOUTH CENTRAL...	117	20,097	14,752	7	267	206	1	-	1	4	19
Kentucky.....	19	4,773	2,983	3	93	79	-	-	-	-	12
Tennessee.....	21	12,488	8,280	2	92	65	-	-	-	-	7
Alabama.....	13	1,738	2,347	2	58	37	-	-	-	1	-
Mississippi.....	64	1,098	1,142	-	24	25	1	-	1	3	-
WEST SOUTH CENTRAL...	203	25,549	31,482	6	416	339	-	-	-	67	-
Arkansas.....	-	979	1,088	-	36	18	-	-	-	1	-
Louisiana.....	-	99	114	5	157	186	-	-	-	1	-
Oklahoma.....	4	538	219	-	21	21	-	-	-	1	-
Texas.....	199	23,933	30,061	1	202	114	-	-	-	64	-
MOUNTAIN.....	57	12,330	20,370	3	94	96	-	-	-	-	24
Montana.....	11	1,882	3,828	-	5	2	-	-	-	-	3
Idaho.....	7	1,664	2,918	-	5	11	-	-	-	-	-
Wyoming.....	3	217	857	-	6	5	-	-	-	-	-
Colorado.....	28	1,376	5,883	-	49	27	-	-	-	-	18
New Mexico.....	3	1,153	685	-	10	11	-	-	-	-	-
Arizona.....	2	5,335	1,390	3	13	20	-	-	-	-	3
Utah.....	-	648	4,595	-	1	17	-	-	-	-	-
Nevada.....	3	55	214	-	5	3	-	-	-	-	-
PACIFIC.....	363	22,277	28,306	10	598	512	-	-	-	3	79
Washington.....	190	4,439	7,382	1	44	39	-	-	-	2	41
Oregon.....	112	2,117	3,395	-	37	36	-	-	-	-	19
California.....	45	14,975	13,333	9	495	411	-	-	-	1	18
Alaska.....	11	592	197	-	18	18	-	-	-	-	-
Hawaii.....	5	154	3,999	-	4	8	-	-	-	-	1
Puerto Rico.....	63	3,230	2,727	-	16	11	-	-	-	1	17

## Morbidity and Mortality Weekly Report

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
 FOR WEEKS ENDED  
 NOVEMBER 19, 1966 AND NOVEMBER 20, 1965 (46th 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
UNITED STATES...	8,248	3	171	6	159	7	347	4	239	85	3,606
NEW ENGLAND.....	1,162	-	4	-	1	2	13	-	3	-	83
Maine.....	95	-	-	-	-	-	-	-	-	-	25
New Hampshire.....	8	-	-	-	-	-	-	-	-	-	28
Vermont.....	46	-	-	-	-	-	-	-	-	-	25
Massachusetts.....	162	-	2	-	1	2	9	-	1	-	4
Rhode Island.....	84	-	-	-	-	-	-	-	-	-	-
Connecticut.....	767	-	2	-	-	-	4	-	2	-	1
MIDDLE ATLANTIC.....	246	-	14	-	-	1	57	2	46	4	209
New York City.....	15	-	5	-	-	-	25	-	-	-	1
New York, Up-State.	191	-	2	-	-	-	12	-	13	3	195
New Jersey.....	NN	-	2	-	-	1	8	2	15	-	-
Pennsylvania.....	40	-	5	-	-	-	12	-	18	1	13
EAST NORTH CENTRAL...	767	-	20	1	20	-	41	-	19	6	468
Ohio.....	48	-	4	-	3	-	20	-	9	3	197
Indiana.....	128	-	4	1	10	-	4	-	-	1	107
Illinois.....	191	-	4	-	6	-	5	-	10	2	70
Michigan.....	312	-	6	-	-	-	6	-	-	-	41
Wisconsin.....	88	-	2	-	1	-	6	-	-	-	53
WEST NORTH CENTRAL...	278	1	15	-	19	2	33	-	4	14	820
Minnesota.....	13	-	3	-	1	-	1	-	-	4	195
Iowa.....	109	-	2	-	-	-	5	-	-	1	155
Missouri.....	10	-	8	-	10	2	17	-	3	3	241
North Dakota.....	96	-	-	-	-	-	1	-	-	2	48
South Dakota.....	21	-	-	-	4	-	-	-	-	4	97
Nebraska.....	-	1	1	-	2	-	2	-	-	-	23
Kansas.....	29	-	1	-	2	-	7	-	1	-	61
SOUTH ATLANTIC.....	1,004	-	32	-	12	1	66	-	109	7	458
Delaware.....	26	-	-	-	-	-	1	-	2	-	-
Maryland.....	140	-	3	-	2	-	11	-	26	-	3
Dist. of Columbia..	-	-	-	-	-	-	2	-	-	-	-
Virginia.....	220	-	6	-	2	1	16	-	31	2	234
West Virginia.....	219	-	-	-	1	-	1	-	-	1	54
North Carolina.....	25	-	4	-	3	-	6	-	27	-	4
South Carolina.....	19	-	2	-	1	-	13	-	5	-	-
Georgia.....	12	-	7	-	3	-	4	-	18	3	99
Florida.....	343	-	10	-	-	-	12	-	-	1	64
EAST SOUTH CENTRAL...	1,258	2	24	1	24	-	43	1	43	12	457
Kentucky.....	57	-	2	-	2	-	10	-	9	7	107
Tennessee.....	1,001	1	6	1	14	-	22	1	25	5	309
Alabama.....	163	-	8	-	4	-	6	-	7	-	20
Mississippi.....	37	1	8	-	4	-	5	-	2	-	21
WEST SOUTH CENTRAL...	867	-	42	4	71	-	36	1	10	8	718
Arkansas.....	3	-	4	4	54	-	4	-	2	1	80
Louisiana.....	3	-	10	-	4	-	10	-	-	1	49
Oklahoma.....	67	-	3	-	7	-	9	1	7	2	176
Texas.....	794	-	25	-	6	-	13	-	1	4	413
MOUNTAIN.....	1,330	-	2	-	9	-	17	-	4	1	95
Montana.....	64	-	-	-	2	-	-	-	-	-	7
Idaho.....	131	-	-	-	-	-	-	-	-	-	-
Wyoming.....	40	-	-	-	3	-	-	-	1	-	-
Colorado.....	757	-	2	-	-	-	4	-	2	-	18
New Mexico.....	216	-	-	-	1	-	2	-	1	-	16
Arizona.....	65	-	-	-	1	-	5	-	-	1	42
Utah.....	56	-	-	-	2	-	5	-	-	-	3
Nevada.....	1	-	-	-	-	-	1	-	-	-	9
PACIFIC.....	1,336	-	18	-	3	1	41	-	1	33	298
Washington.....	265	-	-	-	-	-	11	-	-	-	15
Oregon.....	32	-	1	-	-	-	1	-	-	-	4
California.....	954	-	17	-	3	1	27	-	1	33	279
Alaska.....	47	-	-	-	-	-	-	-	-	-	-
Hawaii.....	38	-	-	-	-	-	2	-	-	-	-
Puerto Rico.....	6	-	53	-	-	1	17	-	-	-	18



# Morbidity and Mortality Weekly Report

399

Week No.  
46

## DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED NOVEMBER 19, 1966

(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>	815	487	38	40	<b>SOUTH ATLANTIC:</b>	1,248	622	55	89
Boston, Mass.-----	275	147	16	14	Atlanta, Ga.-----	123	56	4	11
Bridgeport, Conn.-----	45	29	4	2	Baltimore, Md.-----	276	145	5	11
Cambridge, Mass.-----	37	25	1	1	Charlotte, N. C.-----	47	27	1	4
Fall River, Mass.-----	31	21	1	2	Jacksonville, Fla.-----	94	37	5	6
Hartford, Conn.-----	57	27	1	5	Miami, Fla.-----	99	53	-	5
Lowell, Mass.-----	22	14	-	3	Norfolk, Va.-----	40	14	1	1
Lynn, Mass.-----	37	25	-	2	Richmond, Va.-----	71	34	2	10
New Bedford, Mass.-----	37	21	3	2	Savannah, Ga.-----	35	13	1	3
New Haven, Conn.-----	67	39	1	2	St. Petersburg, Fla.-----	101	81	8	2
Providence, R. I.-----	67	40	4	5	Tampa, Fla.-----	79	43	13	7
Somerville, Mass.-----	20	14	1	-	Washington, D. C.-----	235	96	10	24
Springfield, Mass.-----	41	29	2	-	Wilmington, Del.-----	48	23	5	5
Waterbury, Conn.-----	23	17	-	-					
Worcester, Mass.-----	56	39	4	2	<b>EAST SOUTH CENTRAL:</b>	693	352	34	57
<b>MIDDLE ATLANTIC:</b>	3,635	2,068	139	175	Birmingham, Ala.-----	102	61	1	7
Albany, N. Y.-----	53	26	2	1	Chattanooga, Tenn.-----	65	38	3	2
Allentown, Pa.-----	29	20	1	1	Knoxville, Tenn.-----	36	20	2	-
Buffalo, N. Y.-----	152	83	2	6	Louisville, Ky.-----	141	76	12	10
Camden, N. J.-----	53	28	2	3	Memphis, Tenn.-----	152	63	1	21
Elizabeth, N. J.-----	40	22	1	1	Mobile, Ala.-----	56	23	2	6
Erie, Pa.-----	47	28	2	3	Montgomery, Ala.-----	41	20	6	2
Jersey City, N. J.-----	91	53	3	6	Nashville, Tenn.-----	100	51	7	9
Newark, N. J.-----	109	51	7	4	<b>WEST SOUTH CENTRAL:</b>	1,193	628	49	62
New York City, N. Y.-----	1,850	1,054	71	91	Austin, Tex.-----	54	31	4	3
Paterson, N. J.-----	41	27	3	3	Baton Rouge, La.-----	50	24	1	5
Philadelphia, Pa.-----	495	275	14	22	Corpus Christi, Tex.-----	30	12	-	4
Pittsburgh, Pa.-----	252	139	5	14	Dallas, Tex.-----	155	84	5	8
Reading, Pa.-----	43	27	2	1	El Paso, Tex.-----	26	16	2	-
Rochester, N. Y.-----	102	62	7	4	Fort Worth, Tex.-----	79	52	3	-
Schenectady, N. Y.-----	32	23	2	-	Houston, Tex.-----	223	99	6	13
Scranton, Pa.-----	36	24	3	1	Little Rock, Ark.-----	62	22	2	4
Syracuse, N. Y.-----	68	41	1	5	New Orleans, La.-----	190	95	13	9
Trenton, N. J.-----	67	32	7	6	Oklahoma City, Okla.-----	106	57	3	5
Utica, N. Y.-----	32	23	3	2	San Antonio, Tex.-----	91	58	1	7
Yonkers, N. Y.-----	43	30	1	1	Shreveport, La.-----	53	30	2	2
					Tulsa, Okla.-----	74	48	7	2
<b>EAST NORTH CENTRAL:</b>	2,798	1,560	89	163	<b>MOUNTAIN:</b>	468	271	17	33
Akron, Ohio-----	74	47	-	7	Albuquerque, N. Mex.-----	44	24	7	4
Canton, Ohio-----	43	28	3	-	Colorado Springs, Colo.-----	21	16	1	1
Chicago, Ill.-----	771	400	25	50	Denver, Colo.-----	121	65	1	10
Cincinnati, Ohio-----	199	123	8	14	Ogden, Utah-----	22	12	1	2
Cleveland, Ohio-----	261	141	6	19	Phoenix, Ariz.-----	104	58	3	5
Columbus, Ohio-----	145	76	3	15	Pueblo, Colo.-----	22	15	1	1
Dayton, Ohio-----	86	50	1	6	Salt Lake City, Utah-----	69	37	2	8
Detroit, Mich.-----	357	194	6	14	Tucson, Ariz.-----	65	44	1	2
Evansville, Ind.-----	52	32	3	5	<b>PACIFIC:</b>	1,599	930	48	67
Flint, Mich.-----	55	37	6	1	Berkeley, Calif.-----	15	10	1	-
Fort Wayne, Ind.-----	60	28	1	1	Fresno, Calif.-----	57	33	2	4
Gary, Ind.-----	54	25	2	3	Glendale, Calif.-----	21	14	-	3
Grand Rapids, Mich.-----	55	31	6	3	Honolulu, Hawaii-----	59	30	-	2
Indianapolis, Ind.-----	116	59	2	7	Long Beach, Calif.-----	93	63	5	5
Madison, Wis.-----	31	16	1	1	Los Angeles, Calif.-----	395	225	9	14
Milwaukee, Wis.-----	143	96	4	4	Oakland, Calif.-----	23	12	-	1
Peoria, Ill.-----	43	26	2	2	Pasadena, Calif.-----	37	25	-	1
Rockford, Ill.-----	25	17	4	-	Portland, Oreg.-----	173	99	6	7
South Bend, Ind.-----	38	20	3	2	Sacramento, Calif.-----	77	45	5	3
Toledo, Ohio-----	118	63	2	6	San Diego, Calif.-----	93	50	4	7
Youngstown, Ohio-----	72	51	1	3	San Francisco, Calif.-----	219	118	5	5
<b>WEST NORTH CENTRAL:</b>	939	554	35	51	San Jose, Calif.-----	50	36	3	2
Des Moines, Iowa-----	59	31	4	6	Seattle, Wash.-----	180	98	4	12
Duluth, Minn.-----	34	21	5	3	Spokane, Wash.-----	63	41	-	-
Kansas City, Kans.-----	52	31	5	3	Tacoma, Wash.-----	44	31	4	1
Kansas City, Mo.-----	116	70	3	4					
Lincoln, Nebr.-----	43	32	1	2	<b>Total</b>	<b>13,388</b>	<b>7,472</b>	<b>504</b>	<b>737</b>
Minneapolis, Minn.-----	122	70	2	6	Cumulative Totals including reported corrections for previous weeks				
Omaha, Nebr.-----	84	41	1	4	All Causes, All Ages-----				575,864
St. Louis, Mo.-----	293	178	10	9	All Causes, Age 65 and over-----				329,931
St. Paul, Minn.-----	84	53	-	7	Pneumonia and Influenza, All Ages-----				23,717
Wichita, Kans.-----	52	27	4	7	All Causes, Under 1 Year of Age-----				30,761

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

## MEASLES - 1966

(Continued from page 395)

school. A survey of susceptibles is now being conducted throughout the elementary schools in Powell.

(Reported by Dr. E.C. Ridgway, Health Officer of Park County, Wyoming; Dr. Lester F. Allison, Assistant Health Officer of Park County, Wyoming; Dr. Robert Alberts, Director of Public Health, Wyoming State Department of Public Health; and an EIS Officer.)

**Washington County, Oregon**

For the past 4 weeks (ending November 12, 1966), Washington County, Oregon, which is suburban Portland, reported a total of 147 cases of measles (MMWR, Vol. 15, Nos. 42-45). Of approximately 12,000 kindergarten through fourth grade students, 6,000 have been estimated to be susceptible. A school measles vaccination program is scheduled on November 23 to eliminate these susceptibles. A school surveillance system will be set up to report to the County Health Officer any absences due to measles. (Reported by Dr. Edward Goldblatt, State Epidemiologist, Oregon State Board of Health.)

**Waushara County, Wisconsin**

Within the past 2 weeks, an outbreak of 22 cases of measles has occurred in two grade schools in the rural county of Waushara, Wisconsin. This outbreak was uncovered as a result of the accelerated reporting of measles cases to the State Board of Health. Of the approximately 750 students in grades one through three, an estimated 400 children are susceptible to measles. Consequently, a grade school immunization program has been scheduled for November 23, 1966; in addition, a routine program is planned for early December to immunize preschoolers in the county. Jet injector guns are to be used in the programs. (Reported by Dr. Josef Preizler, State Epidemiologist, Wisconsin State Board of Health.)

**Browning, Montana**

The Indian Health Service in Browning, Montana, reported an increase in the number of measles cases seen at their clinic during October and early November. Investigation disclosed that during October an estimated 120 cases occurred in the City among all age groups. On November 7, 650 children in grades one through six were immunized with measles vaccine.

A sample survey of 60 homes, which included 298 people, was conducted 2 days later. Results indicated that 28 susceptible children remain: 20 in the 0 to 4 year age group, 7 in the 5 to 9 year age group, and one child over 9 years of age. Of the total population, an estimated 10 percent remain susceptible to measles at this time.

A measles surveillance reporting system has been set up in the two grammar schools to report any further cases in the students. The Indian Health Service Clinic will also maintain surveillance for measles in their clinic population.

(Reported by Dr. Mary E. Soules, Director of Disease Control, Montana State Board of Health; and an EIS Officer.)

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  
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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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