



# Morbidity and Mortality

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

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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EPIDEMIOLOGIC NOTES AND REPORTS  
RUBELLA - Minnesota

Between April 7 and June 10, 1972, a total of 163 cases of rubella were reported in Olmsted County, Minnesota [population 84,104 (1970 census)]. No more than six cases had been noted in this county since 1967, when reporting of rubella began in Minnesota. All patients had rash and/or fever lasting 1-5 days, and 93 (57%) had occipital lymph node enlargement. A total of 74 (45%) reported joint pain, which was more common in patients 12 years and older (49%) than in those under 12 years (16%); joint pain occurred more frequently in females (55%) than in males (41%). The diagnosis of rubella was confirmed in four cases by virus isolation or by 4-fold rise in rubella hemagglutination-inhibition antibody titer.

The first case occurred on April 7 in a 13-year-old boy in the 8th grade attending Kellogg Junior High School (serving grades 7-9); the source of his infection could not be traced.

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No cases occurred in the following week, but a second case at Kellogg was reported in the week ending April 22 (Figure 1). Subsequently, the number of cases at this school rose rapidly and reached a peak of 65 in the week of May 13. Cases in other junior and senior high schools in the county began to appear in the week of May 6. A total of 15 cases were reported in five other secondary schools. Precise routes of spread from Kellogg were not determined, but frequent contact through intramural sports does occur between the schools. Two cases occurred in adults, one in a physical education teacher at Kellogg and one in the father of a patient in high

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

DISEASE	26th WEEK ENDING		MEDIAN 1967-1971	CUMULATIVE, FIRST 26 WEEKS		
	July 1, 1972	July 3, 1971		1972	1971	MEDIAN 1967-1971
Aseptic meningitis . . . . .	68	99	62	997	1,310	889
Brucellosis . . . . .	4	4	8	78	77	95
Chickenpox . . . . .	1,770	---	---	106,617	---	---
Diphtheria . . . . .	1	2	2	52	84	84
Encephalitis, primary:						
Arthropod-borne and unspecified . . . . .	13	38	27	423	588	539
Encephalitis, post-infectious . . . . .	7	23	12	148	201	241
Hepatitis, serum (Hepatitis B) . . . . .	172	168	97	4,709	4,282	2,604
Hepatitis, infectious (Hepatitis A) . . . . .	1,023	1,094	833	28,262	30,831	23,618
Malaria . . . . .	7	51	52	586	1,795	1,315
Measles (rubeola) . . . . .	594	1,004	682	24,841	64,088	36,119
Meningococcal infections, total . . . . .	27	23	31	817	1,501	1,541
Civilian . . . . .	27	23	28	784	1,322	1,387
Military . . . . .	---	---	3	33	179	163
Mumps . . . . .	948	1,537	---	51,712	91,915	---
Rubella (German measles) . . . . .	341	469	895	19,132	35,066	39,958
Tetanus . . . . .	3	2	5	53	51	64
Tuberculosis, new active . . . . .	668	---	---	16,605	---	---
Tularemia . . . . .	9	10	6	58	60	77
Typhoid fever . . . . .	8	11	10	156	141	141
Typhus, tick-borne (Rky. Mt. spotted fever) . . . . .	23	17	11	161	132	121
Veneral Diseases:†						
Gonorrhea . . . . .	14,682	11,781	---	345,730	304,427	---
Syphilis, primary and secondary . . . . .	476	441	---	12,012	11,614	---
Rabies in animals . . . . .	84	72	72	2,217	2,278	1,902

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax: . . . . .	---	Poliomyelitis, total: . . . . .	6
Botulism: . . . . .	---	Paralytic: . . . . .	6
Congenital rubella syndrome: Calif. - 2 . . . . .	20	Psittacosis: . . . . .	16
Leprosy: Calif. - 3, N.Y.C. - 3, Tex. - 2 . . . . .	59	Rabies in man: . . . . .	1
Leptospirosis: . . . . .	11	Trichinosis: Ill. - 1, Mo. - 2 . . . . .	43
Plague: . . . . .	1	Typhus, murine: . . . . .	9

†Numbers for 1971 are estimated from quarterly reports to the Venereal Disease Branch, CDC

## RUBELLA - Continued

school. Finally, there were 19 cases in elementary and preschool children with the first of these cases occurring in the week of May 13. More than half of these cases could be traced to contact with secondary school students in neighborhoods, school buses, or families.

A total of 93 (73%) of the 127 cases at Kellogg occurred in males (Table 1). In contrast, the male-to-female ratio in elementary and preschool cases was almost 1:1 (10/9).

Prior to this outbreak, the Olmsted County Health Department had limited rubella vaccination to pre-adolescent females. In 1970, rubella vaccine was administered to girls in grades 4-7. In 1971 and 1972, only girls in the 4th grade were vaccinated. The total number of doses administered in this period was 4,103. When this outbreak occurred, these girls

Figure 1  
RUBELLA CASES, BY WEEK OF ONSET  
OLMSTED COUNTY, MINNESOTA - APRIL 1-JUNE 17, 1972

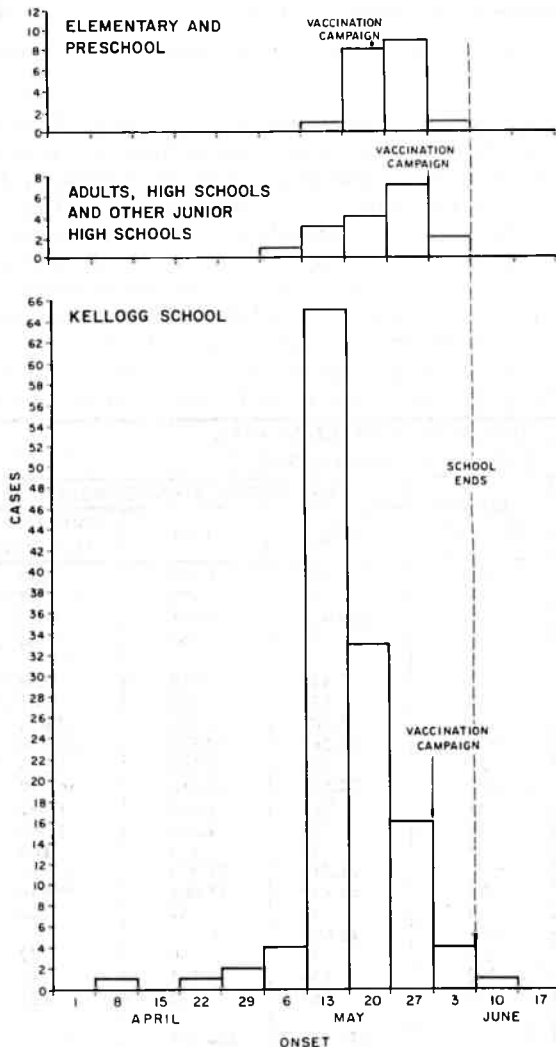


Table 1  
Rubella Attack Rates Among Students  
at Kellogg Junior High School, by Grade and Sex  
Olmsted County, Minnesota - April-June 1972

Grade	Male			Female		
	Number of Cases	Number of Students	Attack Rate (per 1,000)	Number of Cases	Number of Students	Attack Rate (per 1,000)
7	36	199	181	14	179	78
8	40	195	205	10	190	52
9	17	191	89	10	182	55
Total	93	585	159	34	551	62

were in grades 4-9. The health department had given none of this vaccine to younger children, and private physicians had given very little rubella vaccine to any children.

A random review of 222 health records at Kellogg indicated that 70 (63%) of the girls surveyed had received rubella vaccine, while none of the boys in the survey group had been vaccinated. Results of a confirmatory serologic survey in an adjacent junior high school are pending. The attack rates for unvaccinated males and females at Kellogg were almost identical (157 per 1,000 versus 132).

On May 22 and 23, a vaccination campaign was conducted for elementary school children and junior high school boys in the county. A total of 14,000 persons were vaccinated. (Reported by Raymond J. Jackman, M.D., Health Officer, Olmsted County, Minnesota; D. S. Fleming, M.D., State Epidemiologist, Minnesota State Department of Health; and an EIS Officer.)

## Editorial Note

Restricting rubella vaccination in childhood to pre-pubertal females has been adopted as public policy in Great Britain (1) and other European countries but has not been widely accepted in the United States. The European policy is based on concern over the quality and duration of vaccine-induced rubella immunity and embodies the concept that as many children as possible should experience the natural disease. Furthermore, the delay in administering vaccine to those near adulthood is intended to increase the likelihood that vaccine-induced immunity to rubella will last through the childbearing years (2).

The present outbreak indicates that the strategy of selective vaccination of pre-pubertal females will not prevent rubella epidemics and will not prevent spread of disease to susceptible pregnant females; however, it will protect vaccinated individuals against clinical rubella.

## References

1. Questions in the Commons: Vaccination against rubella. *Brit Med J* 4:378, 1970
2. Dudgeon JA: Rubella: Proposed vaccination programs in Europe. In *International Conference on the Application of Vaccines against Viral, Rickettsial, and Bacterial Diseases of Man*, Washington, 14-18, December 1970. Washington, PAHO, Scientific Publication 226, p 251, 1971

## LEISHMANIASIS - North Carolina

In May 1972, nine confirmed and one suspect case of leishmaniasis were reported at the Camp Lejeune Naval Hospital in North Carolina. All patients reported having had "sores" on their hands, legs, wrists, or face since late February or early March 1972. In most cases, the lesions were

slightly pruritic but not painful until reaching 1-1.5 cm in size. The sores had started as edematous, erythematous, and papular lesions, and as they enlarged the central portion became necrotic. The fully matured lesions were centrally crusted, round, and approximately 1-3 cm in diameter. In six

patients, slightly tender 0.5 cm subcutaneous nodules were linearly arranged, apparently following the lymphatics extending up the arms of those patients with upper extremity lesions. The diagnosis was confirmed for seven cases when parasites were seen on the giemsa stained smears of the lesions. The one suspect case had atypical lesions and a negative smear. The patients will be treated with Pentostam\*, a penta-

\*Available from the Parasitic Diseases Drug Service, CDC

SHIGA DYSENTERY – Texas

On May 21, 1972, a 14-month-old boy in Fort Worth, Texas, had onset of fever and diarrhea. The following day, he vomited twice and passed 12 watery stools containing blood and mucus. On May 23, the diarrhea became worse, and the boy was taken to the emergency room of a local hospital where he was noted to be acutely ill but not unduly toxic. His temperature was 102°F. He was hospitalized with a tentative diagnosis of shigellosis; a rectal swab was obtained at that time. He was treated with clear fluids by mouth, and ampicillin was prescribed.

Approximately 5 hours after admission, before the patient received the ampicillin, the parents withdrew him from this hospital and took him to another hospital in the nearby town of Grand Prairie. There, he was treated for gastroenteritis with clysis, an injection of bicillin, and chloramphenicol palmitate. No specimens were obtained. On May 28, the patient experienced a generalized seizure and was treated with valium intravenously. That same day, his mother had onset of bloody diarrhea, chills, and fever. A stool specimen was obtained for culture.

On May 29, the patient and his mother were referred to the Children's Medical Center of Dallas. On admission, the child was comatose, cool, and pale, and showed evidence of decerebrate posturing. His abdomen was distended, and there were no bowel sounds; he passed grossly bloody urine. Abnormal laboratory findings included a white blood cell count of 64,800 cells/mm<sup>3</sup>, Na 112 mEq/l, and Ca 6.1 mg%. The patient was started on ampicillin and gentamicin. The next day, his hemoglobin dropped to 7.3 gm%, the platelets to 9,000, and the BUN, which had been normal on admission, was elevated.

The patient's sensorium was still very clouded, and a diagnosis of encephalopathy secondary to hyponatremia was considered. The abdominal distension persisted, with frequent passage of small, bloody stools. On May 31, he was seen by a surgical consultant because of the severity of the abdominal distension and diarrhea. A barium enema was performed on June 1, and the findings were consistent with ulcerative colitis complicated by toxic megacolon. That day, the patient was evaluated by the infectious disease service which felt his illness was compatible with severe shigellosis, possibly due to Shiga's bacillus. His subsequent course was complicated by a severe hemolytic-uremic syndrome requiring treatment with nine packed-cell blood transfusions. The last transfusion was given on June 8, and the BUN peaked at 181 mg%. By June 25, the patient's hemoglobin had stabilized, and his renal status improved, but serious neurologic sequelae persisted. Within the next 3 days, his renal status remained stable, while his neurologic status greatly improved. The patient was discharged on June 29, and his condition is being followed closely.

The rectal swab obtained from the child in the first hospital and from the mother in the second hospital both grew *Shigella dysenteriae* 1 which was resistant to chloramphenicol, sulfadiazine, streptomycin, and tetracycline. Stool and blood

specimens obtained from the patient on admission to the hospital in Dallas were negative for shigella. A stool specimen from his mother on June 1 was also negative. Specimens from both persons after 5 days of ampicillin therapy were negative.

The patients were part of a battalion of approximately 1,500 men who had been in Panama for jungle warfare training for 11 days in February 1972.

(Reported by LCDR Frank Kern, Dermatology Service, Capt. G. O. Geib, Commanding Officer, Naval Hospital, Camp Lejeune, North Carolina; and the Preventive Medicine Division, Bureau of Medicine and Surgery, Navy Department.)

specimens obtained from the patient on admission to the hospital in Dallas were negative for shigella. A stool specimen from his mother on June 1 was also negative. Specimens from both persons after 5 days of ampicillin therapy were negative.

The patient, his parents, and his grandparents had not traveled outside of the country in recent years. On May 8, however, the patient's family had been visited by friends who had recently returned from San Luis, Mexico; these friends stayed for several days. At the time of their visit, their 16-month-old child experienced fever, irritability, anorexia, and diarrhea with mucus of several days duration; the illness was treated symptomatically. On approximately May 12, the patient's 4-year-old sister had onset of anorexia, fever, and diarrhea with mucus, alternating with constipation. Her illness persisted for 8-10 days and ended spontaneously.

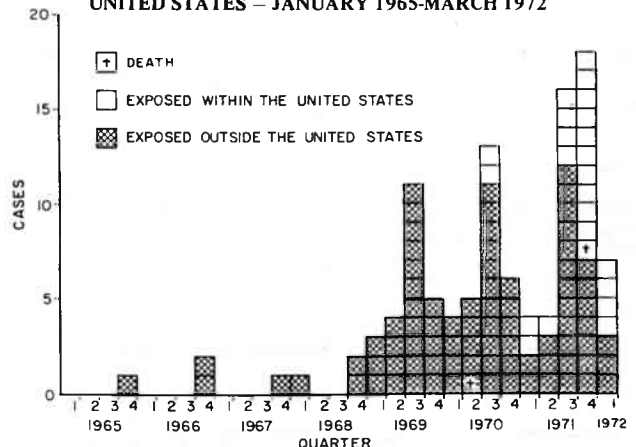
Blood specimens were obtained from the patient's family, the grandparents, and the visiting family on June 26. Titers of *S. dysenteriae* 1 antibodies (≥ 1:40) were elevated in the specimens from the patient's mother and sister and the mother of the visiting family. Cultures of stool specimens from the two families were negative.

(Reported by Kenneth C. Haltalin, M.D., Associate Professor of Pediatrics, Department of Pediatrics, The University of Texas, Southwestern Medical School at Dallas; M. S. Dickerson, M.D., Chief, Communicable Disease Services Section, Texas State Department of Health; and an EIS Officer.)  
Editorial Note

These cases of Shiga dysentery emphasize the delay and confusion in diagnosis commonly encountered with this disease. The diagnoses most commonly confused with Shiga dysentery are ulcerative colitis, amebiasis, and nonspecific "gastroenteritis." This disease, although still rare in the United States, is increasing in occurrence (Figure 2). An increasing number of such cases, including the present ones, were ex-

(Continued on page 228)

Figure 2  
PERSONS WITH SHIGA'S BACILLUS INFECTION  
UNITED STATES – JANUARY 1965-MARCH 1972



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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING JULY 1, 1972 AND JULY 3, 1971 (26th WEEK) - Continued

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unspec. cases		Post In- fectious	Serum (Hepatitis B)	Infectious (Hepatitis A)	
						1972	1971			1972	1972
UNITED STATES	68	4	1,770	1	52	13	38	7	172	1,023	1,094
NEW ENGLAND	-	-	562	-	-	-	-	-	7	81	72
Maine *	-	-	6	-	-	-	-	-	-	6	7
New Hampshire *	-	-	16	-	-	-	-	-	-	7	9
Vermont	-	-	31	-	-	-	-	-	-	9	6
Massachusetts	-	-	199	-	-	-	-	-	-	47	27
Rhode Island	-	-	69	-	-	-	-	-	-	2	11
Connecticut	-	-	241	-	-	-	-	-	7	10	12
MIDDLE ATLANTIC	22	-	145	-	1	4	5	-	62	164	212
Upstate New York	-	-	-	-	1	1	2	-	12	52	26
New York City	16	-	145	-	-	-	-	-	21	55	46
New Jersey *	6	-	NN	-	-	3	-	-	29	57	73
Pennsylvania	---	---	---	---	-	---	3	---	---	---	67
EAST NORTH CENTRAL	2	-	504	-	3	5	2	2	17	148	142
Ohio *	-	-	56	-	-	2	-	-	-	26	22
Indiana	-	-	90	-	-	-	-	-	1	7	13
Illinois	2	-	-	-	2	2	-	2	11	49	35
Michigan	-	-	358	-	1	1	1	-	4	57	68
Wisconsin	-	-	-	-	-	-	1	-	1	9	4
WEST NORTH CENTRAL	1	-	22	-	9	-	1	-	9	42	64
Minnesota	1	-	6	-	-	-	-	-	-	6	5
Iowa	-	-	2	-	-	-	-	-	6	3	3
Missouri	-	-	3	-	-	-	-	-	-	16	48
North Dakota	-	-	5	-	-	-	-	-	1	7	1
South Dakota	-	-	3	-	6	-	-	-	-	1	-
Nebraska	-	-	3	-	3	-	-	-	-	1	3
Kansas	-	-	-	-	-	-	1	-	2	8	4
SOUTH ATLANTIC	14	1	274	-	9	2	24	2	23	206	170
Delaware	-	-	3	-	-	-	-	-	1	5	3
Maryland	2	-	35	-	1	-	-	-	6	18	12
District of Columbia	-	-	11	-	-	-	-	-	2	-	1
Virginia	4	-	49	-	-	1	1	1	3	23	70
West Virginia	-	-	154	-	-	-	-	-	-	4	9
North Carolina	2	-	NN	-	-	1	-	-	3	103	12
South Carolina	-	1	15	-	1	-	-	-	-	5	5
Georgia	-	-	7	-	2	-	-	-	-	4	14
Florida	6	-	-	-	5	-	23	1	8	44	44
EAST SOUTH CENTRAL	2	-	28	-	2	-	-	-	1	46	45
Kentucky	-	-	28	-	-	-	-	-	-	12	7
Tennessee	1	-	NN	-	-	-	-	-	1	23	26
Alabama	1	-	-	-	2	-	-	-	-	5	6
Mississippi	-	-	-	-	-	-	-	-	-	6	6
WEST SOUTH CENTRAL	10	1	106	-	21	1	-	-	12	90	111
Arkansas	-	1	-	-	-	-	-	-	-	-	6
Louisiana	1	-	NN	-	4	1	-	-	6	26	19
Oklahoma *	-	-	-	-	-	-	-	-	-	4	10
Texas	9	-	106	-	17	-	-	-	6	60	76
MOUNTAIN	-	-	66	-	5	-	1	1	6	49	67
Montana	-	-	21	-	-	-	-	-	-	3	5
Idaho	-	-	-	-	2	-	1	-	-	11	4
Wyoming	-	-	-	-	-	-	-	-	-	-	-
Colorado	-	-	-	-	-	-	-	-	4	11	25
New Mexico	-	-	14	-	1	-	-	1	1	8	9
Arizona	-	-	31	-	2	-	-	-	-	9	9
Utah	-	-	-	-	-	-	-	-	1	6	15
Nevada	-	-	-	-	-	-	-	-	-	1	-
PACIFIC	17	2	63	1	2	1	5	2	35	197	211
Washington	2	-	36	-	1	-	-	-	-	23	21
Oregon	1	-	-	-	-	-	-	-	-	21	18
California	13	2	-	1	1	-	5	2	34	139	165
Alaska	1	-	27	-	-	1	-	-	-	9	-
Hawaii	-	-	-	-	-	-	-	-	1	5	7
Guam	-	-	2	-	-	-	---	-	-	9	---
Puerto Rico *	-	-	25	-	-	-	-	-	2	14	29
Virgin Islands *	-	-	-	-	-	-	-	-	-	-	-

\*Delayed reports: Chickenpox: Me. 31, N.H. 17, Ohio delete 1, Okla. 2  
Encephalitis: primary: N.J. 1Hepatitis B: N.H. 1, P.R. 1  
Hepatitis A: Me. 13, N.H. delete 1, V.I. 1

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**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING JULY 1, 1972 AND JULY 3, 1971 (26th WEEK) - Continued**

AREA	MALARIA		MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		RUBELLA	
	1972	Cum. 1972	1972	Cumulative		1972	Cumulative		1972	Cum. 1972	1972	Cum. 1972
				1972	1971		1972	1971				
UNITED STATES	7	586	594	24,841	64,088	27	817	1,501	948	51,712	341	19,132
NEW ENGLAND	-	15	90	2,839	3,216	1	35	68	34	2,184	11	888
Maine *	-	1	6	233	1,405	-	3	8	3	237	1	65
New Hampshire *	-	3	-	221	191	-	2	10	1	168	-	31
Vermont	-	-	6	120	102	-	-	-	2	107	2	66
Massachusetts	-	5	28	550	219	-	17	27	4	532	2	416
Rhode Island	-	-	13	514	220	-	10	3	4	353	2	84
Connecticut	-	6	37	1,201	1,079	1	3	20	20	787	4	226
MIDDLE ATLANTIC	2	46	16	847	6,979	4	100	194	64	2,565	96	1,778
Upstate New York	1	9	1	116	513	1	24	51	NN	NN	2	215
New York City	1	7	6	207	3,522	3	33	40	45	1,299	5	174
New Jersey	-	14	9	475	1,141	-	20	46	19	673	89	1,148
Pennsylvania	---	16	---	49	1,803	---	23	57	---	593	---	241
EAST NORTH CENTRAL	1	56	337	10,218	14,065	2	108	166	279	14,361	62	5,124
Ohio	-	9	-	224	3,776	1	40	49	25	2,059	-	367
Indiana	-	1	27	1,179	2,575	1	11	12	30	909	13	587
Illinois	1	20	156	3,784	2,735	-	24	48	23	2,583	13	958
Michigan	-	24	70	1,841	1,977	-	29	47	55	2,487	20	1,196
Wisconsin	-	2	84	3,190	3,002	-	4	10	146	6,323	16	2,016
WEST NORTH CENTRAL	-	39	4	907	6,417	1	63	119	32	8,090	6	1,239
Minnesota	-	4	-	18	51	1	14	19	7	666	6	487
Iowa	-	3	1	639	2,198	-	2	8	7	5,635	-	377
Missouri	-	10	1	157	2,529	-	20	43	12	443	-	101
North Dakota	-	1	1	49	220	-	-	5	2	295	-	21
South Dakota	-	4	1	5	198	-	2	5	3	115	-	12
Nebraska	-	3	-	18	62	-	9	14	1	238	-	50
Kansas	-	14	-	21	1,159	-	16	25	-	698	-	191
SOUTH ATLANTIC	2	82	50	1,977	6,701	9	187	253	154	4,639	32	1,432
Delaware	-	-	3	46	34	-	1	2	6	67	1	7
Maryland	2	4	-	14	471	-	31	36	19	255	-	38
District of Columbia	-	1	-	2	12	-	7	8	1	15	-	6
Virginia	-	3	-	56	1,175	-	42	20	61	901	2	62
West Virginia	-	1	9	236	465	-	6	7	20	2,198	8	363
North Carolina	-	33	-	28	1,879	1	25	44	NN	NN	-	24
South Carolina	-	10	-	208	869	4	18	19	3	151	1	49
Georgia	-	20	18	153	183	3	6	21	12	14	14	56
Florida	-	10	20	1,234	1,613	1	51	96	32	1,038	6	827
EAST SOUTH CENTRAL	-	157	3	990	7,935	-	63	132	50	2,697	19	1,415
Kentucky	-	138	1	498	3,783	-	20	37	4	423	-	804
Tennessee	-	-	1	185	960	-	24	50	45	1,714	18	466
Alabama	-	15	1	128	1,789	-	13	26	-	453	-	39
Mississippi	-	4	-	179	1,403	-	6	19	1	107	1	106
WEST SOUTH CENTRAL	1	65	18	1,322	11,986	5	102	132	107	4,301	23	1,357
Arkansas	-	4	-	13	766	-	8	5	-	154	-	29
Louisiana	-	5	1	81	1,638	1	31	44	19	275	-	83
Oklahoma	1	4	-	9	742	-	6	6	-	154	-	32
Texas	-	52	17	1,219	8,840	4	57	77	88	3,718	23	1,213
MOUNTAIN	-	39	18	1,673	2,985	-	13	46	38	2,687	10	1,000
Montana	-	2	-	12	903	-	2	5	3	157	-	28
Idaho	-	3	-	19	248	-	3	6	7	194	-	24
Wyoming	-	1	-	51	84	-	1	2	-	218	-	8
Colorado	-	26	6	499	792	-	2	7	10	708	1	510
New Mexico	-	1	-	105	284	-	1	3	-	529	1	79
Arizona *	-	5	11	834	358	-	1	8	18	710	7	324
Utah	-	1	1	153	309	-	2	12	-	126	1	24
Nevada	-	-	-	-	7	-	1	3	-	45	-	3
PACIFIC	1	87	58	4,068	3,804	5	146	391	190	10,188	82	4,899
Washington	-	-	2	964	889	-	11	20	20	3,506	2	816
Oregon	-	10	1	70	349	-	11	29	22	1,298	7	329
California	1	66	55	2,934	2,256	5	116	336	105	5,087	71	3,689
Alaska	-	2	-	11	51	-	5	-	-	94	2	19
Hawaii	-	9	-	89	259	-	3	6	43	203	-	46
Guam	-	2	2	4	---	-	11	---	-	2	-	6
Puerto Rico	-	3	7	514	351	-	4	2	23	620	-	12
Virgin Islands	-	-	-	1	9	-	2	-	-	123	-	3

\*Delayed reports: Measles: Me. 3, N.H. 1  
Mumps: Me. 1, N.H. 4, Ariz. delete 4

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING JULY 1, 1972 AND JULY 3, 1971 (26th WEEK) - Continued

AREA	TETANUS	TB (New Active)	TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES		RABIES IN ANIMALS	
	1972	1972	1972	Cum. 1972	1972	Cum. 1972	1972	Cum. 1972	GONOR- RHEA	SYPHILIS (Pri. & Sec.)	1972	Cum. 1972
									1972	1972		
UNITED STATES .....	3	668	9	58	8	156	23	161	14,682	476	84	2,217
NEW ENGLAND .....	-	49	-	-	-	6	-	-	476	8	1	74
Maine .....	-	6	-	-	-	-	-	-	16	1	1	60
New Hampshire .....	-	-	-	-	-	1	-	-	18	-	-	1
Vermont .....	-	1	-	-	-	-	-	-	8	-	-	8
Massachusetts .....	-	37	-	-	-	3	-	-	229	-	-	2
Rhode Island .....	-	2	-	-	-	-	-	-	30	1	-	1
Connecticut .....	-	3	-	-	-	2	-	-	175	6	-	2
MIDDLE ATLANTIC .....	-	73	-	1	1	30	-	10	1,948	101	1	50
Upstate New York .....	-	13	-	-	-	9	-	3	463	9	1	23
New York City .....	-	46	-	-	1	17	-	-	1,158	82	-	-
New Jersey .....	-	14	-	1	-	3	-	3	327	10	-	-
Pennsylvania .....	---	---	---	-	---	1	---	4	---	---	---	27
EAST NORTH CENTRAL .....	-	104	-	1	-	13	3	11	1,984	33	7	235
Ohio* .....	-	40	-	1	-	5	3	11	606	8	-	70
Indiana .....	-	25	-	-	-	-	-	-	337	6	1	55
Illinois .....	-	20	-	-	-	2	-	-	505	1	2	44
Michigan .....	-	12	-	-	-	5	-	-	442	18	-	4
Wisconsin .....	-	7	-	-	-	1	-	-	94	-	4	62
WEST NORTH CENTRAL .....	-	17	1	12	-	4	-	6	923	8	37	569
Minnesota .....	-	1	-	-	-	-	-	-	157	2	5	127
Iowa .....	-	-	-	-	-	-	-	-	100	-	20	197
Missouri .....	-	6	1	11	-	3	-	4	326	3	1	49
North Dakota .....	-	1	-	-	-	-	-	-	15	-	5	88
South Dakota .....	-	3	-	1	-	-	-	1	30	-	1	32
Nebraska .....	-	1	-	-	-	-	-	-	146	2	-	8
Kansas* .....	-	5	-	-	-	1	-	1	149	1	5	68
SOUTH ATLANTIC .....	-	157	1	7	4	22	15	91	2,962	156	5	189
Delaware .....	-	1	-	-	-	-	-	1	21	-	-	-
Maryland .....	-	18	-	-	3	5	4	17	322	5	-	5
District of Columbia .....	-	17	-	-	-	2	-	-	163	14	-	-
Virginia .....	-	21	1	5	1	7	9	26	339	52	1	52
West Virginia .....	-	7	-	-	-	1	1	1	18	-	1	40
North Carolina .....	-	26	-	-	-	-	1	35	754	11	-	-
South Carolina .....	-	-	-	-	-	1	-	7	274	9	-	8
Georgia .....	-	22	-	1	-	1	-	4	478	33	2	49
Florida .....	-	45	-	1	-	5	-	-	593	32	1	35
EAST SOUTH CENTRAL .....	-	68	-	3	1	16	3	20	1,096	39	5	448
Kentucky* .....	-	19	-	-	-	4	-	-	136	18	3	170
Tennessee .....	-	25	-	2	1	5	2	18	606	9	2	232
Alabama .....	-	18	-	1	-	2	-	1	176	7	-	45
Mississippi .....	-	6	-	-	-	5	1	1	178	5	-	1
WEST SOUTH CENTRAL .....	3	65	5	29	2	23	1	21	2,345	53	23	479
Arkansas .....	1	9	4	19	2	8	-	3	452	5	3	68
Louisiana* .....	-	16	1	2	-	4	-	-	322	16	4	24
Oklahoma .....	1	4	-	5	-	1	1	16	319	4	9	206
Texas .....	1	36	-	3	-	10	-	2	1,252	28	7	181
MOUNTAIN .....	-	14	2	4	-	3	1	2	542	5	2	41
Montana .....	-	-	-	-	-	-	-	-	24	-	-	-
Idaho .....	-	-	-	-	-	-	1	2	31	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	3	-	-	-
Colorado .....	-	3	1	2	-	-	-	-	181	3	-	-
New Mexico .....	-	3	-	-	-	1	-	-	144	-	2	8
Arizona* .....	-	7	-	1	-	1	-	-	114	2	-	31
Utah .....	-	1	1	1	-	1	-	-	45	-	-	1
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	1
PACIFIC .....	-	121	-	1	-	39	-	-	2,406	73	3	132
Washington .....	-	14	-	-	-	2	-	-	159	16	-	-
Oregon .....	-	6	-	-	-	-	-	-	145	2	-	-
California .....	-	98	-	-	-	34	-	-	2,024	55	3	125
Alaska .....	-	3	-	1	-	-	-	-	48	-	-	7
Hawaii .....	-	-	-	-	-	3	-	-	30	-	-	-
Guam .....	-	1	-	-	-	-	-	-	8	1	-	-
Puerto Rico* .....	-	11	-	-	-	4	-	-	33	30	-	30
Virgin Islands .....	-	-	-	-	-	-	-	-	-	-	-	-

\*Delayed reports: Tetanus: P.R. 1

Tuberculosis: Ohio delete 2, Kans. delete 1, Ky. 1, Ariz. delete 1  
Gonorrhoea: La. delete 4

# Morbidity and Mortality Weekly Report

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TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDING JULY 1, 1972

Week No.  
26

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

Area	All Causes			Pneumonia and Influenza All Ages	Area	All Causes			Pneumonia and Influenza All Ages
	All Ages	65 years and over	Under 1 year			All Ages	65 years and over	Under 1 year	
<b>NEW ENGLAND</b>	625	390	28	26	<b>SOUTH ATLANTIC</b>	1,134	621	58	27
Boston, Mass.	186	116	10	11	Atlanta, Ga.	109	57	2	2
Bridgeport, Conn.	23	10	1	1	Baltimore, Md.	167	81	8	—
Cambridge, Mass.	16	10	—	2	Charlotte, N. C.	53	27	4	—
Fall River, Mass.	34	24	2	—	Jacksonville, Fla.	63	40	5	2
Hartford, Conn.	37	21	3	—	Miami, Fla.	108	64	3	3
Lowell, Mass.	22	19	—	—	Norfolk, Va.	61	32	4	3
Lynn, Mass.	18	12	1	—	Richmond, Va.	96	54	10	8
New Bedford, Mass.	28	17	—	—	Savannah, Ga.	37	14	6	2
New Haven, Conn.	59	33	4	—	St. Petersburg, Fla.	89	74	1	1
Providence, R. I.	58	32	2	6	Tampa, Fla.	77	39	—	3
Somerville, Mass.	11	5	—	—	Washington, D. C.	219	106	14	2
Springfield, Mass.	43	29	2	4	Wilmington, Del.	55	33	1	1
Waterbury, Conn.	28	15	—	—	<b>EAST SOUTH CENTRAL</b>	647	356	18	26
Worcester, Mass.	62	47	3	2	Birmingham, Ala.	110	61	4	1
<b>MIDDLE ATLANTIC</b>	2,860	1,682	80	85	Chattanooga, Tenn.	52	31	—	6
Albany, N. Y.	35	23	—	—	Knoxville, Tenn.	37	26	—	—
Allentown, Pa.	27	16	1	2	Louisville, Ky.	95	52	3	5
Buffalo, N. Y.**	129	74	4	2	Memphis, Tenn.	150	79	2	2
Camden, N. J.	39	17	1	2	Mobile, Ala.	57	32	1	2
Elizabeth, N. J.	21	15	—	2	Montgomery, Ala.	34	20	—	4
Erie, Pa.	39	29	—	6	Nashville, Tenn.	112	55	8	6
Jersey City, N. J.	54	29	—	4	<b>WEST SOUTH CENTRAL</b>	1,213	623	94	30
Newark, N. J.	70	33	3	3	Austin, Tex.	65	37	2	4
New York City, N. Y.**	1,441	853	36	41	Baton Rouge, La.	27	13	1	1
Paterson, N. J.	49	32	1	4	Corpus Christi, Tex.	35	17	1	1
Philadelphia, Pa.	493	263	21	2	Dallas, Tex.	173	87	11	1
Pittsburgh, Pa.	63	37	1	3	El Paso, Tex.	35	16	2	4
Reading, Pa.	53	36	2	1	Fort Worth, Tex.	74	40	5	1
Rochester, N. Y.	103	70	5	5	Houston, Tex.	261	109	39	7
Schenectady, N. Y.	22	12	—	2	Little Rock, Ark.	87	44	7	—
Scranton, Pa.	46	30	—	3	New Orleans, La.	137	82	—	2
Syracuse, N. Y.	78	54	2	—	Oklahoma City, Okla.**	86	48	6	1
Trenton, N. J.	38	21	3	—	San Antonio, Tex.	116	62	12	3
Utica, N. Y.	23	13	—	3	Shreveport, La.	52	27	4	4
Yonkers, N. Y.	37	25	—	—	Tulsa, Okla.	65	41	4	1
<b>EAST NORTH CENTRAL</b>	2,403	1,371	122	53	<b>MOUNTAIN</b>	426	253	27	13
Akron, Ohio	56	33	5	—	Albuquerque, N. Mex.	40	22	2	5
Canton, Ohio	34	24	2	—	Colorado Springs, Colo.	27	19	1	2
Chicago, Ill.	623	353	35	14	Denver, Colo.	111	66	9	2
Cincinnati, Ohio	153	91	9	4	Ogden, Utah	11	8	—	2
Cleveland, Ohio	183	97	7	—	Phoenix, Ariz.	108	59	9	—
Columbus, Ohio	139	73	4	3	Pueblo, Colo.	12	9	—	1
Dayton, Ohio	96	65	4	2	Salt Lake City, Utah	58	38	4	1
Detroit, Mich.	328	167	18	7	Tucson, Ariz.	59	32	2	—
Evansville, Ind.	43	33	2	—	<b>PACIFIC</b>	1,629	1,007	61	24
Flint, Mich.**	48	26	4	1	Berkeley, Calif.	15	13	—	—
Fort Wayne, Ind.	43	27	1	2	Fresno, Calif.	59	26	6	1
Gary, Ind.	32	15	1	2	Glendale, Calif.	36	28	—	—
Grand Rapids, Mich.	51	36	2	5	Honolulu, Hawaii**	52	26	4	1
Indianapolis, Ind.	149	75	10	3	Long Beach, Calif.	96	61	2	2
Madison, Wis.	39	21	3	2	Los Angeles, Calif.	499	309	13	8
Milwaukee, Wis.	114	74	2	3	Oakland, Calif.	83	52	4	—
Peoria, Ill.	36	22	2	1	Pasadena, Calif.	31	24	1	1
Rockford, Ill.	34	15	3	1	Portland, Oreg.	117	86	2	2
South Bend, Ind.	29	15	—	1	Sacramento, Calif.	58	35	4	—
Toledo, Ohio	111	73	6	1	San Diego, Calif.	125	69	9	1
Youngstown, Ohio	62	36	2	1	San Francisco, Calif.	193	116	5	2
<b>WEST NORTH CENTRAL</b>	760	468	25	24	San Jose, Calif.	66	43	2	1
Des Moines, Iowa	50	29	1	1	Seattle, Wash.	126	68	8	2
Duluth, Minn.	23	11	—	1	Spokane, Wash.	42	30	—	2
Kansas City, Kans.	25	12	2	2	Tacoma, Wash.	31	21	1	1
Kansas City, Mo.	128	72	4	—	<b>Total</b>	11,697	6,771	513	308
Lincoln, Nebr.	21	15	—	1	<b>Expected Number</b>	12,428	7,022	567	414
Minneapolis, Minn.	103	70	6	1	<b>Cumulative Total</b> (includes reported corrections for previous weeks)	338,038	197,611	13,254	14,406
Omaha, Nebr.	92	51	3	4					
St. Louis, Mo.	195	128	7	4					
St. Paul, Minn.	71	49	—	5					
Wichita, Kans.**	52	31	2	5					
Las Vegas, Nev.*	22	9	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.

\*\*Estimate based on average percent of divisional Total

**SHIGA DYSENTERY – Continued**

posed to infected persons within the United States. It is probable that the patient, his mother, and his sister acquired their illnesses from a member(s) of the visiting family who had

just returned from Mexico. This is supported by the incubation periods, usually 5-7 days, and the serologic evidence. Cases of Shiga dysentery respond readily to ampicillin, but full therapeutic doses should be given for 5 days.

**ERRATA**

Vol. 21, No. 21, p. 179

In the article "Measles Costs in Massachusetts – 1965-1971," Tables 1 and 2 were incorrect. The corrected tables are shown below. In addition, the last sentence in the article regarding the amount of the net savings also should be corrected to \$2,076,529.

**Table 1**  
Estimated Prevention of Measles Morbidity and Mortality Resulting from Measles Eradication Program Massachusetts – 1966-1971

Morbidity and Mortality	Expected Occurrence – Without Vaccination	Observed Occurrence – With Vaccination	Number of Cases Prevented
Number of cases	117,072	2,680	114,392
Number of deaths	12	0	12
Patients hospitalized with encephalitis	117	3	114
Mentally retarded patients	39	1	38
Other patients hospitalized	585	14	571

**Table 2**  
Estimated Economic Costs Due to Measles and Benefits Due to Measles Vaccination Massachusetts – 1966-1971

Costs	Without Vaccination	With Vaccination	Benefits
Physician's services	\$ 585,360	\$13,400	\$ 571,960
Hospital services:			
Encephalitis cases	153,738	3,942	149,796
Other cases	323,213	7,735	315,478
Lifetime care for mentally retarded	2,413,710	61,890	2,351,820
Total Savings			3,389,054
Cost of Vaccine			1,312,525
Net Savings			\$2,076,529

Vol. 21, No. 24, p. 207

In the article "Recommendation of the Public Health Service Advisory Committee on Immunization Practices – Influenza Vaccine" correct the fifth sentence under the heading Influenza Virus Vaccines to read "... and 300 CCA units type B (B/Massachusetts/1/71). This correction should also be made in the section on Influenza Vaccine (page 10) in the ACIP Recommendations, Supplement to MMWR, Vol. 21, No. 25.

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The data in this report are provisional, based on weekly telegraphs to CDC by 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.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting outbreaks or case investigations of current interest to health officials.

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