

EPIDEMIOLOGIC NOTES AND REPORTS MYCOPLASMA PNEUMONIAE - Atlanta, Georgia

Between September 23 and October 16, 1968, 27 cases of Mycoplasma pneumoniae occurred at a university in Atlanta, Georgia, among the members and pledges of one fraternity; nine persons were hospitalized with clinical pneumonia, four were treated as outpatients, and 14 others reported illness on questionnaires distributed to the fraternity. Symptoms for the cases included malaise, fever, myalgia, severe headache, dizziness, coryza, sore throat, and non-productive cough. Physical findings of the hospitalized students included temperature elevation (102° to 104°F.), erythema of the mucous membranes with occasional (Continued on page 414)

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and the second sec	45th WEI	EK ENDED	MEDIAN	CUMULA	CUMULATIVE, FIRST 45 WEEKS			
DISEASE	November 9, November 11, 1968 1967		1963 - 1967	1968	1967	MEDIAN 1963 - 1967		
Aseptic meningitis	72	72	41	3,895	2,677	1,862		
Brucellosis	4	2	2	196	216	217		
Diphtheria	1	15	5	192	140	171		
Encephalitis, primary:	00	05		1 920	1 422			
Arthropod-borne & unspecified	20	25		1,239	1,433			
Encephalitis, post-infectious	3	1		9441	1 019	and the second		
Hepatitis, serum	86 876	57	672	3,959	33,253	33,084		
Malaria	25	48	3	2 037	1,800	93		
Manalas (mbeola)	214	260	1 235	20 779	59 892	247 629		
Moningeogoacel infections total	31	200	42	2 253	1 890	2 408		
Civilian	20	20		2 065	1 769	2,100		
Military	29	20		188	121			
Mumps	1 661			134:062				
Poliomvelitis total		4	4	53	36	87		
Paralytic	and the second	i i	3	53	29	82		
Rubella (German measles)	314	275		46.078	41.815			
Streptococcal sore throat & scarlet fever	8 230	8.273	7.208	362,954	384.564	340.481		
Tetanus	3	4	4	150	194	234		
Tularemia	1	-	2	159	150	224		
Typhoid fever	8	6	6	345	364	383		
Typhus tick-horne (Rky Mt spotted fever)	1	-	2	269	293	239		
Rabies in animals	55	69	59	2.976	3 745	3 745		

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax: Botulism: Leptospirosis:* Ill1 Plague: Psittacosis:*	3 7 43 3 40	Rabies in man: Rubella, Congenital Syndrome; Trichinosis; Conn1 Typhus, murine; Ga1	1 5 55 29

Psittacosis: Calif. delete 1

MYCOPLASMA PNEUMONIAE - (Continued from front page)

pharyngeal exudate, posterior cervical lymphadenopathy, and fine, localized rales; four students developed otitis media. White blood cell counts were within the normal range, but atypical lymphocytes were present on some peripheral blood smears. Duration of illness was approximately 8 days for about one half of the cases. Similar illnesses occurred in five social acquaintances of five members and in the father and brother of another member. The laboratory partner of a non-ill fraternity member developed clinical primary atypical pneumonia on October 30.

On October 21, serum was collected from 55 members and pledges. Complement fixation and indirect hemagglutination geometric mean titers against *M. pneumoniae* on sera from 18 non-ill members were 1:13 and 1:28, respectively, and on sera from 18 convalescent students, 1:129 and 1:142, respectively. Complement fixation titers on these same sera showed no rises against influenza A and B, para-influenza 1, 2, and 3, adenoviruses, and psittacosis. Cultures of throat washings are in progress.

The epidemic curve suggested a common source of exposure for the outbreak (Figure 1). The only period when members and pledges shared a common environment prior to the outbreak was September 18 when all were present for pledge initiation and a catered dinner at a local cafeteria. Other common exposures which may account for later cases occurred on September 28 and October 6 and 8.

(Reported by McLaren Johnson, Jr., M.D., Atlanta, Georgia; T. O. Vinson, M.D., Dekalb County Health Department;



John E. McCroan, Ph.D., Director, Epidemiologic Investigations Branch, Georgia State Department of Health; Respiratory Virus Infections Unit, Virology Section, Laboratory Program, NCDC; and a team of EIS Officers.)

VENEZUELAN EQUINE ENCEPHALITIS - Dade County, Florida

The first reported case in North America of naturally acquired clinical Venezuelan equine encephalitis (VEE) occurred in early September in a 53-year-old woman. The woman was a resident of Dade County, Florida, and had no history of travel outside southern Florida. She was hospitalized in mid-September with an illness characterized by high fever, sore throat, cough, dyspnea, severe headache, diplopia, and stiff neck. On admission, a lumbar puncture revealed 900 white blood cells, 65 percent of which were mononuclears. Complement fixation and hemagglutination-inhibition tests on paired sera demonstrated fourfold rises in antibody titer against VEE, and neutralization tests demonstrated a significant titer rise. Stool cultures for enteroviruses have been negative to date, and antibody titers against respiratory viruses and other arbovirus antigens were negative. The patient is presently recovering at home.

Although naturally acquired clinical disease due to VEE had not previously been recognized in North America, VEE virus had been isolated in mosquitoes and a cotton rat. Serologic surveys have demonstrated antibody levels in Seminole and Miccosukee Indian residents in southern Florida. Intensive studies are underway to elucidate the human, zootic, and entomologic distribution of the VEE virus in and around Dade County, Florida.

(Reported by E. Charlton Prather, M.D., M.P.H., Director, Division of Epidemiology, and Elsie Buff, M.S., Microbiologist in Charge, Virology Department, Florida State Board of Health; Milton S. Saslaw, M.D., M.P.H., Assistant County Health Director for Disease Control, and other personnel, Dade County Department of Public Health; N. Joel Ehrenkranz, M.D., Professor of Medicine, University of Miami School of Medicine; and the Laboratory Program, NCDC; and two EIS Officers.)

POLIOMYELITIS IN A PATIENT WITH THYMIC DYSPLASIA AND DYSGAMMAGLOBULINEMIA Washington, D.C.

A case of poliomyelitis in an 8-month-old, unimmunized girl with thymic dysplasia and dysgammaglobulinemia has been reported from Washington, D.C. The patient was

hospitalized in early June with a diagnosis of pneumonia 4 days after an older sibling had received trivalent oral poliovaccine. Following admission, a number of gram negative organisms were cultured, but the pulmonary condition proved resistant to antibiotic treatment. A segmental lobectomy of the right upper lobe for persistent atelectasis did not result in improvement. Aseptic meningitis followed by paralysis of the left lower extremity developed in the child 4 weeks after hospitalization and death supervened 2 months after the onset of paralysis. At no time was paralysis of the muscles of respiration noted.

An antemortem immunoglobulin determination had demonstrated markedly low IgG (200 mg percent) and increased IgM (132 mg percent) and IgA (192 mg percent) immunoglobulins. Poliovirus type 3 was cultured from throat swab and stool specimens collected throughout the course of illness and from nervous tissue cultured at autopsy. The virus has been characterized antigenically as vaccine-like. Neutralizing antibody titers to poliovirus type 3 were 1:30, 1:30, and 1:15 on sera drawn at the onset, 3 weeks, and 6 weeks, respectively. Autopsy findings were consistent with poliomyelitis, pneumonitis, and an alymphocytic, but otherwise normal, thymus gland.

The case represents an instance of paralytic disease occurring in a patient with abnormal globulin levels who had been in recent intimate contact with an oral poliovaccine recipient.

(Reported by John R. Pate, M.D., M.P.H., Chief, Communicable Disease Control, District of Columbia Department of Public Health.)

TRANSFUSION MALARIA - Fort Sill, Oklahoma

On July 30, 1968, a 25-year-old American woman, the wife of a U.S. Army officer, was admitted to the obstetrical service of the base hospital at Fort Sill, Oklahoma, and delivered a normal child. Because of a postpartum hemorrhage, she received six units of whole blood between July 30 and August 3. She was discharged from the hospital and remained well until August 16, when she developed a persistent severe headache, nausea, and fever. She was hospitalized on August 18 and was treated with antibiotics for suspected endometritis. However, over the next 5 days, she continued to have temperatures to 104°F. On August 22, she became semicomatose. On August 23, trophozoites of Plasmodium falciparum were detected on a routine peripheral blood smear. She was then treated with quinine, pyrimethamine, and diaminodiphenylsulfone (DDS) and made an uneventful recovery.

The patient had no history of malaria or use of shared syringes and had not traveled outside the United States. The six blood donors were all contacted; none had ever experienced malaria attacks, but three had traveled to malarious areas within the past 5 years. Serum was obtained from each donor and analyzed for the presence of malaria antibodies by the indirect fluorescent technique. Only one donor had a positive serology; the dilution end points in his serum were 1:256 against *P. falciparum* and 1:64 against both *P. vivax* and *P. brasilianum*, thus indicating a recent *P. falciparum* infection. The positive donor, a 21-year-old white American male, had served with the U.S. Army in Vietnam for 1 year, returning to the United States on January 18, 1968; otherwise, he had never traveled

to malarious areas. He had no history of malaria and had not been ill while in Vietnam. In February 1968, he experienced headache and weakness without fever for 4 days; this illness resolved spontaneously, and to date, he has remained well. While in Vietnam, he took a combination tablet containing 300 mg chloroquine base and 45 mg primaguine base once weekly in addition to 25 mg of DDS daily. He continued the chloroquine-primaquine for 8 weeks and the DDS for 14-28 days after returning to the United States. He used no antimalarial medication thereafter. He donated his blood on July 17, 1968, and it was given to the patient on July 30. Blood smears obtained from this donor in late August and mid-September 1968 did not contain malaria parasites; after the last blood smears were obtained, he was treated with quinine and pyrimethamine. (Reported by James T. Howell, Captain, MC, USA, Chief, and Philip H. Perkins, Captain, MC, USA, Post Sanitarian, Preventive Medicine Division, U.S. Reynolds Army Hospital, Fort Sill, Oklahoma; and R. Leroy Carpenter, M.D., M.P.H., Director, Division of Epidemiology, Oklahoma State Department of Health.) **Editorial Note:**

This is the third transfusion-induced case of *P. fal*ciparum malaria reported in 1968. It seems unlikely that the responsible donor in this case could have acquired significant immunity to his infection, since he never had clinical attacks of malaria; nontheless, he was able to maintain an asymptomatic falciparum infection for a minimum of 6 months. The mechanisms underlying this unusual host-parasite relationship remain obscure.

CLOSTRIDIUM PERFRINGENS FOOD POISONING - New York City

An outbreak of food poisoning occurred on September 14, 1968, in New York City, among members of a company following a banquet dinner at a hotel. Of a total of 1,800 members present at the banquet, it was estimated that more than 900 individuals became ill with symptoms characterized by headache, nausea, abdominal cramps, and diarrhea, giving an attack rate of over 50 percent. The mean incubation period was 15 hours with a range from 2-26, hours. The illness was mild and lasted 12-24 hours. (Continued on page 416)

CLOSTRIDIUM PERFRINGENS FOOD POISONING - (Continued from page 415)

Food histories implicated roast beef as the vehicle of infection. On the day of the banquet, 90 ribs of beef were prepared. After cooking, the roasts were deboned, trimmed, and sliced by machine, processed in succession with no intervening cleaning or sanitizing of work surfaces. The meat was then placed in warming cabinets until serving time. Cultures of "check-up"* roast beef scraps revealed contamination by Clostridium perfringens while cultures of cooked but unsliced whole roast beef were negative for C. perfringens.

It was believed by the New York City Department of Health that one or several ribs of beef were contaminated at the time of delivery to the hotel. Since all meat was

exposed to the same work surfaces during the deboning and slicing processes after cooking, cross-contamination could easily have occurred. Incubation in the warming cabinets created a situation favoring replication. This would explain the presence of C. perfringens in the roast beef scraps and its absence in the cooked but intact roast beef.

(Reported by Carol S. Schachner, M.D., Epidemiologist, Tibor Fodor, M.D., Chief, Division of Epidemiology, Bureau of Preventable Diseases, and Charles Reisberg, Senior Public Health Sanitarian, New York City Department of Health.)

*Identically processed beef prepared the following day.

CURRENT TRENDS **MEASLES** - United States

For the week ending November 9, 1968, 214 cases of measles were reported to the NCDC. This is a decrease of 18 percent from the 260 cases reported in the comparable week last year.

From October 6 through November 2, 1968 (weeks 41-44), 565 cases of measles were reported. This is an increase of 85 cases over the 480 cases reported in the preceding 4-week period but is less than one half of the 1,187 cases reported during the corresponding 4 weeks in 1967 (Figure 2).

The frequency distribution of states according to the number of measles cases reported during the 4-week period (weeks 41-44), in 1967 and 1968 is shown in Table 1. The



Figure 2 **REPORTED CASES OF MEASLES BY 4-WEEK PERIODS** Table 1 Frequency Distribution of States According to Measles Cases Reported, Weeks 41-44, 1967 and 1968

	Number of States*				
Cases Reported	1968	1967			
0	19	11			
1-9	20	19			
10-24	6	7			
≥25	7	15			

*Includes the District of Columbia and New York City.

major difference in the distribution between 1967 and 1968 is in the number of states that did not report a single case of measles and in the number that reported 25 or more cases. For this 4-week period in 1968, 18 states and the District of Columbia did not report a single case of measles in contrast to only 11 in 1967. There was essentially no change in the number of states reporting at least one case but fewer than 25 cases. In those states reporting 25 or more cases, however, there was slightly more than a 50 percent reduction for the current year over the preceding year.

For this 4-week period in 1968, 37 states showed a decrease in reported cases from the cases reported in 1967; five states and New York City showed an increase and nine areas showed no change. Of these nine, seven states and the District of Columbia did not report a single case in the 4-weeks in either year and the other state reported only three cases in each year.

(Reported by State Services Section, and Statistics Section, Epidemiology Program, NCDC.)

EPIDEMIOLOGIC NOTES AND REPORTS AN OUTBREAK OF SALMONELLOSIS – Shelby County, Tennessee

An outbreak of salmonellosis involving 130 persons who had attended a church supper occurred on October 16, 1968, in Shelby County, Tennessee. Of 116 people contacted following the dinner, 98 (84.5 percent) had been ill. Onset of illness occurred from 2 to 118 hours after the dinner with a median onset of 23 hours. The mean duration of illness was not determined; however, one third of the cases were still ill when contacted 5 days after the supper. Symptoms included diarrhea (90 percent), abdominal cramps (89 percent), fever (80 percent), prostration (76 percent), nausea (73 percent), and vomiting (37 percent). None of those ill required hospitalization, and no deaths were reported. Stool cultures were obtained from 24 of those ill, and 21 were positive for salmonella, of which 10 have been identified as Salmonella saint-paul.

Food histories implicated turkey as the vehicle of infection. Cultures of two samples of turkey frozen after the dinner were positive for S. saint-paul. This turkey was prepared from frozen turkeys purchased on October 14. The turkeys were thawed overnight in a refrigerator, unwrapped, and held on flat metal trays prior to cooking. They were cooked in a large steamer for 5-1/2 hours at 400°F. and returned to the same metal trays. The turkeys were deboned and refrigerated until 3 hours before the meal. They were then sliced and held at room temperature until served. Two food handlers were involved in the preparation of the meal. Neither reported illness, and stool cultures from both were negative for salmonella. Further investigation of the food handling practices revealed that the refrigerator in which the meat had been stored was not functioning properly. In addition, the supply of hot water was inadequate for dishwashing and the bottles of sanitizing compound attached to the sink water supply had insufficient solution present in the bottles to allow for any to be in the sink water supply. Swabs from the metal trays on which the turkeys were placed after thawing as well as after cooking were positive for S. saint-paul. These trays had been washed twice prior to culture, first, after holding the raw turkey and second, after holding the cooked turkey.

Turkeys from the same lot as those purchased for the church dinner were obtained from the distributor. Cultures of swabs from these were also positive for salmonella. S. saint-paul was isolated from other flocks on the farm on which the turkeys were raised. In addition, salmonella was isolated from the environment of the turkey processing plant from which this lot had originated and from samples of feed concentrate fed to the flock. (This feed contained rendered animal by-products.) Serotyping of these isolates has not yet been completed. Further study to trace the source of contamination in the feed is in progress.

(Reported by Cecil B. Tucker, M.D., M.P.H., Director, Division of Preventable Diseases, and W. M. Arnold, Director, Memphis Branch Laboratory, and J. H. Barrick, Ph.D., Director, Division of Laboratories, Tennessee Department of Public Health; Eugene Fowinkle, M.D., Director, and Donald R. Daffron, Sanitation Division, Memphis-Shelby County Health Department; Epidemiologic Services Laboratory Section, Epidemiology Program, NCDC; and a team of EIS Officers.)

Editorial Note:

Poultry and poultry products are an important source of epidemic salmonellosis in the United States. Of 25 foodborne outbreaks of salmonellosis reported in the NCDC Salmonella Surveillance Reports in 1967, five involving 2,195 persons were traced to contaminated turkey and seven involving 2,101 persons were traced to contaminated eggs. The outbreak reported above is characteristic of salmonella outbreaks traced to contaminated poultry. Turkeys fed on feed containing contaminated poultry byproducts may become infected with salmonellae. During processing of the infected birds, organisms may spread through the environment of the processing plant to other (Continued on page 418)

SALMONELLOSIS - (Continued from page 417)

birds processed at the same time. Potentially contaminated by-products may be returned to the renderer and incorporated in new batches of feed, thus completing the cycle of infection.

Outbreaks may occur when contaminated processed turkey is imporperly handled. In this outbreak, although cooked adequately to eliminate salmonella, the turkeys become recontaminated in the kitchen. Although the level of recontamination may have been low, the meat was inadequately refrigerated prior to serving, permitting the initial inoculum to multiply. As has been seen many times in the past, the use of contaminated raw poultry and the existance of improper food handling combined to produce an outbreak. By interrupting the cycle of contamination in the flocks and by improving the education of food handlers, similar outbreaks may be prevented in the future.

FOODBORNE EPIDEMIC OF SHIGELLOSIS - Ohio

Several common source outbreaks of shigellosis occurred in Montgomery and Butler Counties, Ohio, from September 24 through October 14, 1968, following the ingestion of food supplied by a caterer in Dayton, Ohio, (Figure 3). Of a total of 130 individuals known to have eaten food supplied by this caterer, more than 98 persons became ill with symptoms characterized by severe diarrhea (many with mucous and blood), fever, abdominal cramps, and less frequently, nausea and vomiting, giving an overall attack rate of approximately 75 percent. The epidemic curves demonstrate four common source exposures with mean incubation periods ranging from 12-70 hours and mean duration of illness from 6-8 days.

Food histories implicated potato salad and chicken salad as the vehicles of infection. The food was delivered (Continued on page 424)



*TIME OF ONSET UNAVAILABLE FOR 7 CASES

RECOMMENDATION OF THE PUBLIC HEALTH SERVICE ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

The Public Health Service Advisory Committee on Immunization Practices meeting on October 9, 1968, issued the following recommendation on use of attenuated mumps virus vaccine in public health and preventive medical programs, a revision of the initial recommendation which appeared in the MMWR, Vol. 16, No. 51, December 23, 1967.

MUMPS VACCINE

INTRODUCTION

Mumps, one of the common communicable diseases, is observed with greatest frequency in young school-age children. However, approximately 15 percent of reported cases occur after the onset of puberty.

Overt evidence of central nervous system disease with sequelae is rare in mumps, although meningeal involvement appears to be common. Orchitis has been reported in up to 20 percent of clinical cases occurring in post-pubertal males. Symptomatic involvement of other glands and organs is observed less frequently. Nerve deafness is a very rare, but serious, complication of mumps.

All naturally acquired mumps infections, including the estimated 30 percent which are subclinical, confer durable immunity.

LIVE MUMPS VACCINE*

Live mumps vaccine is prepared in chick embryo cell culture. It produces an inapparent, non-communicable infection following administration. Since its introduction approximately 1 year ago, mumps vaccine has been given to more than 1 million persons without report of significant side reactions clearly attributable to vaccination.

More than 95 percent of susceptible vaccinees develop detectable antibodies after vaccination. Although titers are lower than those induced by natural infection, the pattern of antibody persistence parallels that seen following clinical mumps. The long-term duration of vaccine induced immunity is unknown but 3-year observations show continuing protection against natural infections and, in two small groups of children, antibody levels which are persisting without decline.

RECOMMENDATIONS FOR VACCINE USE

Live mumps vaccine may be used at any age from 12 months. It should not be administered to children less than 12 months old because of possible persistence of interfering maternal antibody. The vaccine is of particular value in children approaching puberty, adolescents, and adults, especially males, who have not had mumps parotitis, either unilateral or bilateral.**

Since the Committee's initial statement on live, attenuated mumps vaccine in 1967, further experience with the vaccine has been accumulated. In view of evidence showing continued vaccine efficacy and safety, the Committee has modified its recommendation for limited vaccination of young children and now suggests that consideration be given to immunizing all susceptible children over 1 year of age. The Committee reaffirms its position, however, that mumps vaccination programs should not be allowed to take priority over essential ongoing health activities.

Vaccine Dose

A single dose of vaccine should be administered subcutaneously in the volume specified by the manufacturer.

Prevention of Mumps Following Exposure

It is not known whether live mumps vaccine will provide protection when administered after exposure. There is, however, no contraindication to its use at that time.***

Precautions in Using Live Mumps Vaccine

Severe Febrile Illnesses: Vaccination should be postponed until the patient is completely recovered.

Marked Hypersensitivity to Vaccine Components: Mumps vaccine is produced in chick embryo cell culture and should not be given to persons hypersensitive to ingested egg proteins. Also, the vaccine contains small amounts of neomycin, so it should not be given to individuals known to be sensitive to this antibiotic.

Leukemia, Lymphomas, and Other Generalized Malignancies: Theoretically, attenuated mumps virus infection might be potentiated by other severe underlying diseases, such as lymphomas and generalized malignancies.

Altered Resistance from Therapy: Steroids, alkylating drugs, antimetabolites, and radiation may predispose to untoward complications due to altered resistance.

Pregnancy: On theoretical grounds, it is reasonable to avoid using the live mumps vaccine during pregnancy.

Simultaneous Administration of Live Mumps Vaccine with Other Antigens

In order to evaluate the live mumps vaccine adequately, its simultaneous administration with other vaccines should be deferred until results of controlled clinical investigations are available. Until then, it is recommended that mumps vaccination be separated from other immunization procedures by about one month whenever possible.

CONTINUED SURVEILLANCE

Careful surveillance of mumps is important. There is need to improve reporting of mumps cases and their complications, to demonstrate continuing vaccine effectiveness, and to document patterns of vaccine use.

^{*}Official name: Mumps virus vaccine, live.

^{**}The mumps skin test with currently available antigens is an unreliable indicator of immunity.

^{***}Inactivated mumps vaccine and mumps hyperimmune globulin globulin are of questionable effectiveness under these circumstances.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED NOVEMBER 9, 1968 AND NOVEMBER 11, 1967 (45th WEEK)

	J. 1				1	NCEPHALIT	IS		HEPATITIS		
AREA	ASE MENI	PTIC NGITIS	BRUCELLOSIS	DIPHTHERIA	Pri incl unsp.	mary uding cases	Post- Infectious	Serum	Infec	tious	MALARIA
Angeline and second	1968	1967	1968 -	1968	1968	1967	1968	1968	1968	1967	1968
UNITED STATES	72	72	4	1	20	25	3	86	876	724	25
NEW ENGLAND	3	3	-		1	194 - C	4	6	31	27	1
Maine.*		1	-		-	-	-	-	1	1	100 C
Vermont		-				-		1	-	-	-
Massachusetts		2			-	-	10	ī	20	17	_
Rhode Island	3		0.000					_	1	1	- 11 - 11 - 11 - 1
Connecticut	-	-		- Sector	1		1.1	4	9	8	1
MIDDLE ATLANTIC	18	6	iio	-	2	5		21	105	122	3
New York City	8	2	1	-				14	36	58	
New fork, up-state.	2	1			1	2		2	21	13	2
Pennsylvania	5	2	and R a	0.0200	-	3		-	17	32	-
EAST NORTH CENTRAL	15	16	-	÷	5	7	2	3	189	111	4
Ohio	5	5	-	-	3	6	1	0.01	60	37	
Indiana	2	4			-			-	11	16	2
Michigan*	5	7	a	Transel	1	1	-	2	48	23	-
Wisconsin			1112-11		2				16	3	
WEST NORTH CENTRAL	4	4	3		2	5	1	2	37	42	-
Minnesota	3	4	-		1	-	-	2	17	3	
Iowa		-	3		- 0 C - CR	100 - 10		-	4	5	-
Missouri	1		-	-	-	-	-	-	10	24	n de la color
South Dakota	1.0	1.7.000							-	2	
Nebraska		1			-	_	_	_	1040	2	
Kansas	100 - 100 aug			-	1	5	1		5	6	
SOUTH ATLANTIC	2	15			-	3	-	9	85	91	4
Delaware	100 100			-19-2		1		1	16	2	-
Dist. of Columbia.		2		144		1		1	4	20	
Virginia	1	1			-		1 /2 - C 1	î	1	16	10-10-21
West Virginia	1	-		-	-	. • . D		i nationi	7	16	
North Carolina	-	1		-	10.00	1	-	1	2	9	1
Georgia	-					1		2	26	9	
Florida		3				- 1	-	3	20	12	-
EAST SOUTH CENTRAL	2	4	-	-	3	1			67	46	
Kentucky		1	-	-	-	1		100	32	21	
Alabama	1	2		-	3				14		
Mississippi		1	1.22		1.1.1	1000			10	7	
WEST SOUTH CENTRAL	4	5	and the second second	1	1	-	a parata d	1	65	57	2
Arkansas		1	1	-	1	-	-	-	2	9	-
Louisiana	and the second	1	All second second	a dia biny				1	15	12	2
Texas	3	3	1.00	1	-		1 3 4 3	100AY 3	48	35	100.04
MOUNTAIN			Arrest March			1		3	40	39	4
Montana				1994 - Miles	-			-	2	3	
Idaho	C. 199	-		-	3		1.1.1		2		10.00
Wyoming.		-	-	-	- 0	0.01	N. 30 11 1	-	0 1	1	-
New Mexico		100.00	a sann nait	1012100		1	en antier	2	5	26	
Arizona.*	di, heriot	The second	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	- 1-	-	-	-		14	3	i
Utah		Sec. Sec.		-	-	-		1	6	3	-
Nevada					-		-		5		
PACIFIC	24	19	1	-	6	3	-	41	257	189	7
Washington.*	2	1	-	-		-		-	36	7	3
California	2	17	i i	-	2	-	24.1	2	13	14	1
Alaska	-		1	111124	4	-	T-D-U-D-U-T	-	200	- 108	1
Hawaii		1						шци			
Puerto Rico.*	12 - A	-	-	_			and the second second		27	15	
						<u></u>	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	

*Delayed reports: Aseptic meningitis: Okla. 1

Encephalitis, primary: Mich. 3 Hepatitis, infectious: Me. 2, N.H. 4, N.J. 43, Ariz. 3, Wash. 5, P.R. 2

Malaria: Wash. 2

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

NOVEMBER 9, 1968 AND NOVEMBER 11, 1967 (45th WEEK) - CONTINUED

1234	MEA	SLES (Rube	ola)	MENINGO	MENINGOCOCCAL INFECTIONS, TOTAL			P	OLIOMYELIT	TIS	RUBELLA
AREA		Cumu 1	ative		Cumula	ative		Total Paralytic		lytic	
	1968	1968	1967	1968	1968	1967	1968	1968	1968	1968	1968
UNITED STATES	214	20,779	59,892	31	2,253	1,890	1,661			53	314
NEW ENGLAND	2	1,189	897	2	132	74	218			1	38
Maine*		38	254	-	6	3	16	-		-	
New Hampshire*	-	141	77		7	2	_	1.			and set
Massachusette t	-	2	34	-	40	25	30	-		-	14
Rhode Island	2	5/4	62	-	9	4	10			1	- 14
Connecticut		628	93		40	29	77		- 10		23
MIDDLE ATLANTIC	55	4,334	2,405	6	404	310	73		-	1	26
New York City	19	2,2/1	486	1	81	54	20				10
New Jorcov*	13	1,275	545	2	140	101	47				4
Pennsylvania.*	2	119	760	3	111	77	NN		51	1 - 1	4
EAST NORTH CENTRAL	34	3,990	5,822	8	280	259	383			7	78
Ohio	2	312	1,168	1	77	90	36	-	-	2	9
Indiana	5	699	625	-	38	28	36		-	1	16
Illinois	8	1,394	1,058	3	63	60	32	-	-	2	8
Michigan	5	301	979	- 4	82	63	126		-	2	29
Wisconsin	14	1,284	1,992		20	18	153		-	-	16
WEST NORTH CENTRAL	1	398	2,920	3	123	91	152			3	14
Minnesota	-	17	135		29	21	1		-	and the second	-
Iowa		104	764		8	18	136		- 1944	1	13
Missouri	-	81	339	1	40	17	3	-		2	
North Dakota	-	138	8//	1	4	3	8 NN	-			1
Nebraska	1	4	653		9	15	4			_	
Kansas	-	10	94	1	28	10	-	- 1	1 - 1	-	
SOUTH ATLANTIC	20	1,571	7,109	5	447	364	132			3	20
Delaware		16	50	- 1	9	7	3	1 - X		-	1
Maryland	I	103	169	1	39	50	16	1			1
Dist. of Columbia	-	6	24		16	14	6			1	-
Virginia	10	315	2,227	1	43	42	5		-	-	2
West Virginia	9	308	1,444		85	35	47 NN			1	4
South Carolina		12	512		58	30	19			-	5
Georgia		12	37	1	89	56	-				-
Florida	1	523	1,729	1	95	58	36	-	-	-	7
EAST SOUTH CENTRAL	-	501	5,401	2	202	148	52	1	I.	1	16
Kentucky	-	103	1,407	-	92	44	20			1	8
Tennessee	-	62	1,976	2	27	04	30				0
Alabama		95	1,345		27	14	2	1.1			
MISSISS1pp1		241	0/5		25						
WEST SOUTH CENTRAL	48	5,037	17,853	1	326	237	117	- E.		24	25
Arkansas	-	2	1,404		20	11			-	1	and the second
Louisiana	-	24	156	1	93	95	1			2	
Texas	48	4,886	12,935		161	91	116	1 - S		21	25
MOUNTAIN	8	1.033	4,793		39	39	95	1.0		1	20
Montana	-	58	319	1	6	5			1.1.1.1.1.1.1.1.1		-
Idaho	-	21	393		11	3	3			-	1
Wyoming	-	54	188	-	3	1					
Colorado.		518	1,606		11	13	33	- 16		-	11
New Mexico	8	130	598	-	-	5	24	2	-		
Arizona *	-	226	1,037	-	4	5	25	101-106		1	· · · · ·
Utah Nevada		21	383 269	1.1	3	4	-				
PACIETO	46	2.726	12,692	4	300	368	439		-	12	77
Washington*	13	579	5,579	1	47	35	115		-	1	16
Oregon	7	554	1,676		23	30	18				10
California	25	1,547	5,116	3	214	288	276			11	46
Alaska.	1	11	140	•	3	11	30				5
Hawaii		35	181		13	4					
Puerto Rico	20	466	2,223		20	14	31		-	-	

*Delayed reports: Measles: Mass. delete 1, N.J. 32, Pa. delete 1, Ariz. 2, Wash. 9 Meningococcal infections: Okla. 1, Wash. 1 Mumps: Me. 5, N.H. 14, Ariz. 16, Wash. 111 Rubella: Me. 1, Ariz. 1, Wash. 17

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDED

NOVEMBER 9, 1968 AND NOVEMBER 11, 1967 (45th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETA	TETANUS		REMIA	TYP	HOID	TYPHU TICK (Rky. Mt	S FEVER -BORNE . Spotted)	RA B AN	BIES IN NIMALS	
	1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	
UNITED STATES	8,230	3	150	1	159	8	345	1	269	55	2,976	
NEW ENGLAND	1,061	1.00	4		47	1.1	12	12 m - 1	1	1	72	
Maine*	11	- 7			-		2	-	· · · · · · ·	- 14 T.C.	53	
New Hampshire.*	20		1	-	-	-	1			12/19/24/11	2	
Vermont	62	T - 15	10.57		47	-	-	-	- - \$-1	200 B	11	
Massachusetts	209		1		-		6		1	T 1.	5	
Rhode Island	55	3. 705			-		1 1					
Connecticut	704		2	1.0	-		3		-		1	
MIDDLE ATLANTIC	258		19 11	1.	7	-	32		22	1254	49	
New York City	179	- 1	4		7	1 1 1	1 8		5		40	
New York, Up-State.	NN		1	1000	<u>'</u>		4		7		-	
Pennsylvania	68	1.0	3		-		5		10		9	
EAST NORTH CENTRAL	577	1	15		11		47	10.0	9	4	272	
Ohio	52	- 10	2	- 11	1	-	19	L.	7	1	91	
Indiana	126	-	2	- 1	1	-)	7	S	N	2	88	
Illinois	152	1	7	-00	8	-	19		2	1	38	
Michigan	139		3		1	-	-	-	1 Sec 1 A.		14	
Wisconsin	108	-	1	-	- 1	-	2		-	10 T. 1	41	
WEST NORTH CENTRAL	188	1	15		15	2	37	-	9	10	734	
Minnesota	30	1.1	2	-	- 11-	1	2	1 - T		2	229	
Iowa	58		4	-	į –		2		1	1	117	
Missouri	4	-	5	-		1	26	-	1	2	105	
North Dakota	00	1			-					4	97	
South Dakota	22	1	1		3		2		4	1	26	
Kansas	7	1 F 1	-		5	-	2	6. H I	-		44	
SOUTH ATLANTIC	883	1 140	32	1.1.1	12	4	60		141	12	357	
Delaware	6	_				-	-	1 C - 1			1	
Maruland	120	11 - M	3				9		18	1	6	
Dist of Columbia	3	-	2	-	-		1	-		1	1	
Virginia	175	- <u>-</u> -	4	-	3		10	244 C • 1	44	4	124	
West Virginia	160	1.1	2	_			J	- C - F	2	and the second	47	
North Carolina	23	-	2		3	2	4	et 11-1	39	- 10 - Co.	12	
South Carolina	251		4	-8	-	1	3	1.0 - 1	9	- HERRICH	2 M -	
Georgia	7	3	3	11	4	1	15		26	4	70	
Florida	138	-	12		2		18	· 【一】	3	3	96	
EAST SOUTH CENTRAL	1,295	1 -5	15	-3023	8	1	40		52	14	639	
Kentucky	133		1		1			1000	10	11	332	
Tennessee	914		6	1.0	2	1	1/	2 1 2 3	30	<u>2</u> .	215	
Alabama	60	1 2 .	2		-	1.2	12		4	CAN 1995	25	
Mississippi	100						12					
WEST SOUTH CENTRAL	776	1	29	1	47	- 1 U	48	1	29	9	459	
Arkansas	14	1	5	-0.	15		17		6	3	61	
Louisiana	34	-	10		7	- 3.2	6		1	2	44	
Oklahoma. Texas.	8 720	0	- 14	-	16	- 18	14	1	9	4	236	
MOUNTAIN	1 840	1.4	1	Sec.	8	1	16	100	5	Sec.	83	
MOUNTAIN	1,040		-		-	5 I L	-	2.444	1	1102.2	-	
Idaho	161	1.15	1.1.1		1.1.1	1.1		1 TV _ 1	1	1000		
Wyoming *	319			-	1		1	1 T - 1	- 1 - 13	- 10	3	
Colorado	881	1.12		-	3		2		4	- 10 · 1	4	
New Mexico	230	- 252		-			8	- 1			35	
Arizona.*	135	-12	1		-	- 3	4	as			37	
Utah	91		-	100 <u>-</u> 00	4			3 · · · ·		ALC: NOTION OF	1	
Nevada	4	1.1	-		-	-	1				3	
PACIFIC	1,352	1.85	20	1.1	4	1	53	53L - 1	1	6	311	
Washington.*	632	the faile	1				2	10 10 1	Sec. Bo	a su tan	2	
Oregon	82		1		1		5	5 Jac *	30. 16.	10-10-	0	
California	609	1. 1.	18		3	1	46	the state of the	1	6	505	
Alaska	29	1.		1.51			1	S-84	The law line	H		
Hawaii		1					1.		the course			
Puerto Rico	6	1.1	12		-		4	-	-	1	19	

*Delayed reports: SST: Me. 15, N.H. 14, Wyo. 300, Ariz. 73, Wash. 565 Tetanus: N.J. 1 Rabies in animals: Ariz. 1

Week No.

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED NOVEMBER 9, 1968

All Causes All Causes Under Pneumonia Pneumonia Under and 1 year and 65 years l year Area A11 Area A11 65 years Influenza A11 Influenza A11 and over Ages Ages and over Causes All Ages All Ages Causes NEW ENGLAND: 1,166 SOUTH ATLANTIC: Boston, Mass.-----Atlanta, Ga.-----Bridgeport, Conn.----Baltimore, Md.------Cambridge, Mass.------Charlotte, N. C .------Fall River, Mass.------Jacksonville, Fla.-----Hartford, Conn.-----Miami, Fla.------Norfolk, Va.-----Lowell, Mass.----Lynn, Mass.----Richmond, Va.-----Savannah, Ga.-----New Bedford, Mass .----New Haven, Conn.-----St. Petersburg, Fla.--Providence, R. I.-----Tampa, Fla.-----Washington, D. C.-----Somerville, Mass.----Springfield, Mass.----Wilmington, Del.------Waterbury, Conn.------Worcester, Mass.-----EAST SOUTH CENTRAL: Birmingham, Ala.-----3,329 2,004 MIDDLE ATLANTIC: Chattanooga, Tenn.-----Albany, N. Y .-----Knoxville, Tenn.-----Allentown, Pa.-----Louisville, Ky.-----Buffalo, N. Y .-----Memphis, Tenn.-----Camden, N. J.----Mobile, Ala.-----Elizabeth, N. J.-----Montgomery, Ala.-----Erie, Pa.----Nashville, Tenn.-----Jersey City, N. J.----Newark, N. J.-----WEST SOUTH CENTRAL: 1.186 New York City, N. Y .--1,033 1,725 Austin, Tex.-----Paterson, N. J.-----Baton Rouge, La.-----Philadelphia, Pa.----Corpus Christi, Tex.---Dallas, Tex.-----El Paso, Tex.-----Pittsburgh, Pa.-----Reading, Pa.-----Rochester, N. Y .-----Fort Worth, Tex.-----Schenectady, N. Y .-----Houston, Tex.-----Scranton, Pa.-----_ Little Rock, Ark.-----New Orleans, La.-----Syracuse, N. Y.-----Trenton, N. J.-----Oklahoma City, Okla .---Utica, N. Y.-----San Antonio, Tex.----Yonkers, N. Y.-----Shreveport, La.-----Tulsa, Okla.-----1,453 EAST NORTH CENTRAL: 2,635 Akron, Ohio-----MOUNTAIN: Canton, Ohio-----Albuquerque, N. Mex .---Chicago, Ill.-----Colorado Springs, Colo. Cincinnati, Ohio-----Denver, Colo.-----Cleveland, Ohio-----Ogden, Utah-----Columbus, Ohio------Phoenix, Ariz.-----Dayton, Ohio-----Pueblo, Colo.-----Detroit, Mich.-----Salt Lake City, Utah---Evansville, Ind.-----Tucson, Ariz.------Flint, Mich .-----Fort Wayne, Ind.-----PACIFIC: 1,516 Berkeley, Calif.-----Gary, Ind.-----Fresno, Calif.-----Grand Rapids, Mich .----Glendale, Calif.-----Indianapolis, Ind .-----Madison, Wis.-----Honolulu, Hawaii------Milwaukee, Wis.-----Long Beach, Calif.-----Los Angeles, Calif.----Peoria, Ill.-----Rockford, Ill.-----Oakland, Calif.-----Pasadena, Calif .-----South Bend, Ind .-----Portland, Oreg.-----Toledo, Ohio-----Sacramento, Calif.-----Youngstown, Ohio-----San Diego, Calif.-----San Francisco, Calif .--WEST NORTH CENTRAL: San Jose, Calif.-----Seattle, Wash.----Des Moines, Iowa------Duluth, Minn.-----Spokane, Wash.----Kansas City, Kans.-----Kansas City, Mo.-----Lincoln, Nebr.-----Minneapolis, Minn.----12,560 7,185 Total Omaha, Nebr.-----St. Louis, Mo.-----Cumulative Totals including reported corrections for previous weeks St. Paul, Minn.-----Wichita, Kans.-----All Causes, All Ages ----- 570,543 All Causes, Age 65 and over----- 327,899 22,571 Pneumonia and Influenza, All Ages-----

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

26,989

All Causes, Under 1 Year of Age-----

SHIGELLOSIS - (Continued from page 418)

by the caterers in an improperly refrigerated truck. The temperature in the truck was adequate for incubation and the delivery time sufficient for replication of organisms. Both incriminated food items were prepared by six food handlers at the catering service. At least two of these food handlers reported illnesses compatible with shigellosis during the week of the outbreaks. Stool cultures from 29 patients and one food handler were positive for *Shigella sonnei*. Inspection of the caterer's kitchen facilities revealed crowded conditions and many violations of recommended sanitary practices.

(Reported by Calvin B. Spencer, M.D., Acting State Epidemiologist, Jack Russell, D.V.M., Public Health Veterinarian, and Charles Croft, M.S., Dr.Sc., Chief, Public Health Laboratories, Ohio Department of Health; Robert A. Vogel, M.D., Health Commissioner, Montgomery County Health Department; Robert F. McConaughy, Health Commissioner, Butler County Health Department; Joseph E. Orthoefer, D.V.M., Administrative Assistant to the Commissioner of Health, Dayton City Health Department; Epidemiologic Services Laboratory Section, Epidemiology Program, NCDC; and a team of EIS Officers.)

INTERNATIONAL NOTES QUARANTINE MEASURES

Additional Immunization Information for International Travel 1967-68 edition—Public Health Service Publication No. 384

The following new Yellow Fever Vaccination Centers should be included in Section 6:

City and State:	New Rochelle, New York
Center:	New Rochelle Department of Public Health 30 Church Street, 10801 Telephone NE 2-2315
Clinic Hours:	Daily, 2:00-4:00 p.m.
Fee:	No
City and State:	New York City, New York
Center:	Pan Medical Associates 77 Park Avenue, 10016 Telephone MU 4-0621
Clinic Hours: Fee:	Tuesday, Thursday, and Friday, 2:00 p.m. No

ERRATUM, Vol. 17, No. 44, p. 412

In the article "Quarantine Measures" under Eloise Michigan, Wayne County Department of Health, the telephone number should be changed to "274-2800, Ext. 6891" and the "No" after fee to "Yes." THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULA-TION OF 17,000, IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

DIRECTOR, NATIONAL COMMUNICABLE	DISEASE CENTER
	DAVID J. SENCER, M.D.
CHIEF, EPIDEMIOLOGY PROGRAM	A.D. LANGMUIR, M.D.
CHIEF, STATISTICS SECTION	IDA L. SHERMAN, M.S.
EDITOR	MICHAEL B. GREGG, M.D.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE NATIONAL 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:

D TO: NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA, GEORGIA 30333 ATTN: THE EDITOR MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY! COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION HEALTH, EDUCATION, AND WELFARE COMMUNICABLE DISEASE CENTER ATLANTA, GEORGIA 30333 PUBLIC HEALTH SERVICE U.S. DEPARTMENT OF OFFICIAL BUSINESS BRARY NATIONAL COMMUNICABLE DISEASE CENTER -U. S. DEPARTMENT OF H. E. POSTAGE AND FEES PAID *