

Morbidity and Mortality

Weekly Report

PUBLIC HEALTH SERVICE

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

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Provisional Information on Selected Notifiable Diseases in the United States and on Deaths in Selected Cities for Week Ended May 25, 1957

EPIDEMIOLOGICAL REPORTS

Influenza

The exact extent of epidemic influenza in the Far East which was first reported in Hong Kong, and later in Singapore, Formosa, the Philippines, and other areas, is not yet fully defined although it is known to be extensive. The disease has been reported to be mild, with illness of about 3-days duration. It has been occurring principally in children or young persons in both natives and American personnel stationed in the Far East. Persons who previously had received influenza vaccine did not appear to be protected.

All respiratory disease outbreaks occurring in the United States or its Territories, particularly in ports of entry, should be investigated immediately and reported promptly to the Public Health Service. Specimens should be sent to collaborating laboratories of the Influenza Study Program, a list of which are available in State health departments.

Dr. M. R. Hilleman, Department of Respiratory Diseases, and Dr. H. M. Meyer, Jr., Department of Virus Diseases, Walter Reed Army Institute of Research, have provided the following information.

Influenza viruses recovered at the 406th Medical General Laboratory in Zama, Japan, by Dr. J. H. Hale at the University of Malaya, Singapore, and at the Walter Reed Army Institute of Research, have been analyzed in extensive laboratory investigations carried out at the Walter Reed Army Institute of Research in Washington, D. C. The strains analyzed to date include 2 strains recovered from American military personnel in Japan, 1 strain from the Hong Kong outbreak, and 2 strains from Malaya.

The new Far East agents have been identified as type A influenza viruses which are strikingly different from any influenza A virus recovered heretofore, including viruses from the past winter (1956-57) outbreaks in Japan and the U. S. A. These

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Table 1. Cases of Specified Notifiable Diseases: Continental United States

(Numbers after diseases are category numbers of the Sixth Revision of the International Lists, 1948)

DISEASE	21st WEEK			CUMULATIVE NUMBER					Approximate seasonal low point	
	Ended May 25, 1957 ¹	Ended May 26, 1956	Median 1952-56	First 21 weeks			Since seasonal low week			
				1957 ¹	1956	Median 1952-56	1956-57 ²	1955-56		Median 1951-52 to 1955-56
Anthrax-----062	-	1	1	10	26	17	(²)	(²)	(²)	(²)
Botulism-----049.1	-	-	-	-	-	6	(²)	(²)	(²)	(²)
Brucellosis (undulant fever)-----044	29	22	34	392	394	595	(²)	(²)	(²)	(²)
Diphtheria-----055	7	15	21	403	710	787	1,158	2,040	2,101	July 1
Epidemic typhus, infectious-----082	45	40	37	534	594	531	2,098	1,516	1,516	June 1
Hepatitis, infectious, and serum-----092, N998.5 pt.	307	398	525	7,694	10,087	14,080	12,893	17,590	---	Sept. 1
Malaria-----110-117	3	9	10	33	78	151	(²)	(²)	(²)	(²)
Measles-----085	19,192	32,771	27,758	352,515	443,130	443,130	389,719	472,228	475,697	Sept. 1
Meningococcal infections-----057	54	56	84	1,187	1,436	2,275	1,918	2,359	3,504	Sept. 1
Meningitis, other-----340	45	26	---	711	614	---	---	---	---	---
Poliomyelitis-----080	60	112	155	901	1,743	2,286	374	676	858	Apr. 1
Paralytic-----080.0, 080.1	32	53	---	444	934	---	170	351	---	Apr. 1
Nonparalytic-----080.2	19	38	---	325	504	---	162	219	---	Apr. 1
Unspecified-----080.3	9	21	---	132	305	---	42	106	---	Apr. 1
Psittacosis-----096.2	8	8	6	120	177	125	(²)	(²)	(²)	(²)
Rabies in man-----094	-	-	-	2	5	3	(²)	(²)	(²)	(²)
Typhoid fever-----040	32	54	36	414	643	622	157	331	244	Apr. 1
Typhus fever, endemic-----101	4	1	3	43	33	56	18	14	23	Apr. 1
Rabies in animals-----	99	101	135	2,136	2,445	3,467	3,100	3,472	4,982	Oct. 1

¹Data exclude report from Kansas for the current week.

²Data show no pronounced seasonal change in incidence.

Symbols.—1 dash [-]: no cases reported; 3 dashes [---]: data not available.

EPIDEMIOLOGICAL REPORTS—Continued

conclusions are based on the following laboratory observations:

1. High titer chicken and ferret antisera against prototype influenza strains covering the period from 1957 back through 1933 (WS) and also swine influenza virus failed entirely to suppress hemagglutination by the new Far East viruses.

2. High titer (1:800) chicken antisera against one of the new Far East prototype viruses inhibited hemagglutination by all of the other new isolates, but failed completely to cross-react with the prototype viruses of previous years.

3. The only means by which the Far East influenza viruses could be typed as influenza A was in tests employing "soluble" complement-fixing antigen prepared from the Far East viruses and paired sera from proved cases of influenza A from previous outbreaks.

The new viruses were related etiologically to the cases which occurred in the Far East by tests with paired sera from cases in the epidemic. Twelve of 20 pairs of sera from cases which occurred in the Far East showed a diagnostic (4-fold or greater) hemagglutination-inhibition titer against Far East viruses. The acute phase serum titer was <1:10 in all but 1 case (1:20) and the convalescent titers ranged from 1:20 to 1:80. Only 1 serum pair showed a significant increase (<1:10 to 1:20) for the A-FLW-1-52 strain. None showed a significant increase against type B viruses.

Paired sera from proved cases of influenza A from prior outbreaks (1956-1957) which showed marked hemagglutination-inhibition titer rises against the older viruses, showed no increase against the Far East agents. In fact, the titer in both specimens in these sera was <1:10.

Tests of 30 serum specimens collected at random from enlisted military personnel at Walter Reed Army Medical Center showed no detectable hemagglutination-inhibition antibody (<1:5) against the Far East isolates even though these sera contained the expected antibody spectrum for the older viruses. Additionally, high titer convalescent sera from 14 1956-57 influenza cases showed no detectable body (<1:10) against the Far East isolates.

The Far East viruses grow readily in embryonated eggs giving hemagglutination titers as high as 1:320 when tested with human "O" cells at room temperature or in the cold. The hemagglutination titers obtained with human O cells compared with chicken cells are the same. Elution occurs slowly at room temperature. Electron micrographs prepared by Dr. R. E. Hartman at Walter Reed give evidence of the primarily filamentous form of the virus.

In summary, the data permit the conclusion that the current Far East epidemic is caused by influenza A virus of unusual antigenic characteristics representing a major shift from influenza A strains recovered in previous years, including the winter of 1956-57.

Dr. Keith Jensen, WHO Influenza Center for the Americas, states that WHO Centers have confirmed the above observations. He is distributing samples of the prototype strain of virus to influenza laboratories in the Americas.

Listeriosis

Dr. Martin P. Hines, Veterinary Public Health Section, North Carolina State Board of Health, has reported a fatal case of listeriosis in a 2-week-old infant. Laboratory-confirmed cases in humans have been extremely rare, and this is the second case ever reported in North Carolina. The baby was born, normal delivery, on March 18, 1957. On March 27 he was circumcised and became ill that evening; he refused food and was feverish. The following day the baby was admitted to a hospital where he died. A spinal fluid count revealed 1,944 cells on April 2 and 4,686 on April 3. A gram-positive bacillus, cultured from the blood, was identified as *Listeria monocytogenes*. Microscopic pathology sections will be available at a later date. An autopsy showed an acute diffuse meningitis and acute passive congestion. An epidemiological investigation did not reveal the source of infection. The mother had developed a cold 3 days before the baby was born and it lasted until after his death. A pet dog was kept on the home premises. The patient had not been

in contact with this dog or other animals. Sanitation was good in the home. No rats or mice were observed. Subsequent throat cultures from the mother were negative.

Listeriosis is a specific infection and often a fatal disease of sheep, cattle, rabbits, guinea pigs, and chickens. In sheep, cattle, and man the disease is characterized by symptoms involving the central nervous system. Little is known regarding the mode of infection in man or animals. Sporadic outbreaks have occurred among animals in different sections of the United States. Cases of the disease in cattle and sheep have been reported in North Carolina, and in 1956, an outbreak in a dog kennel was laboratory confirmed.

Taeniasis

Dr. D. S. Fleming, Minnesota Department of Health, reports that *Cysticercus bovis* was found in 22 of 27 animals received for slaughter from a farm in the southwestern part of the State. Investigation by a public health veterinarian disclosed a hired man to be the probable source of infestation. The man, aged 31, denied having any symptoms but ova of *Taenia* were present in his stool specimen. No ova were found in stool specimens from 8 other persons residing on the farm. Although adequate toilet facilities were provided on the farm, these were not used by the infested man. The source of infestation of this man was not determined. He had spent about 5 years in the Armed Forces in France and Germany. His discharge occurred about 18 months ago.

Psittacosis

Dr. Stanley H. Osborn, Connecticut State Department of Health, has reported 1 diagnosed and 2 suspected cases of psittacosis. Early in April a 51-year-old woman purchased 6 apparently healthy parakeets in Massachusetts. She kept 2 birds and gave 2 to each of her daughters. Early in May she became ill with headache, malaise, myalgia, chills, and fever. Later she was hospitalized and a chest X-ray showed density in the right upper lobe. A blood specimen collected 9 days after onset was positive for psittacosis in a dilution of 1:64. The suspect cases were in one daughter and in the husband of the other daughter. Blood specimens are to be collected for laboratory examination. Also, all 6 birds have been submitted for laboratory examination but the report is not yet available.

Shigellosis

The Los Angeles City (California) Department of Health has reported 2 outbreaks of bacillary dysentery among patrons of 2 restaurants. In one instance, 12 of 16 patrons became ill with cramps, diarrhea, fever, nausea, and vomiting from 26 to 72 hours after eating "guacamole." The ingredients of this food were avocado, onions, and peppers mixed as a paste and placed on a tortilla shell. The paste was kept refrigerated and laded onto the tortilla on order. None of the food was available for laboratory tests. Stool specimens collected from 24 food handlers were all negative; but 3 of the 4 specimens collected from the patients were positive for the disease. In the other instance, 3 persons became ill with high fever, cramps, and diarrhea from 1 to 2 days after eating hamburgers. The meat was received ground by the restaurant. Patties were made by hand and kept refrigerated until fried. No hamburgers were available for laboratory tests. Of stool specimens collected from 5 food handlers, 1 was positive for the dysentery organism.

Salmonellosis

The California State Department of Public Health has reported that 3 persons in a family of 7 became ill with diarrhea. Two of the patients were hospitalized. Stool specimens were collected from each of the family and 6 were found positive for *Salmonella paratyphi B* (schottmulleri). The father, who became ill first, was asymptomatic at the time the specimens were collected and his stool specimen was negative. The mother was asymptomatic but her stool specimen was positive, and she was probably the source of the outbreak.

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Table 2. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES, EACH DIVISION AND STATE, ALASKA, HAWAII, AND PUERTO RICO, FOR WEEKS ENDED MAY 26, 1956 AND MAY 25, 1957

(By place of occurrence. Numbers under diseases are category numbers of the Sixth Revision of the International Lists, 1948)

AREA	BRUCELLOSIS (UNDULANT FEVER) 044		DIPHTHERIA 055				ENCEPHALITIS, INFECTIOUS 082		HEPATITIS, INFECTIOUS, AND SERUM 092, N998.5 pt.			
			21st week		Cumulative first 21 weeks				21st week		Cumulative first 21 weeks	
	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956
CONT. UNITED STATES ¹ -----	29	22	7	15	403	710	45	40	307	398	7,694	10,087
NEW ENGLAND-----	-	-	2	2	15	7	2	-	17	34	404	656
Maine-----	-	-	1	-	3	-	-	-	4	13	119	159
New Hampshire-----	-	-	-	-	-	1	-	-	-	-	7	24
Vermont-----	-	-	-	-	-	-	-	-	2	2	75	92
Massachusetts-----	-	-	1	2	12	6	2	-	3	6	110	147
Rhode Island-----	-	-	-	-	-	-	-	-	-	4	33	76
Connecticut-----	-	-	-	-	-	-	-	-	8	9	60	158
MIDDLE ATLANTIC-----	1	1	-	4	34	32	13	19	65	90	1,120	2,142
New York-----	1	-	-	-	20	10	13	19	44	47	640	1,103
New Jersey-----	-	-	-	2	6	10	-	-	5	8	164	184
Pennsylvania-----	-	1	-	2	8	12	-	-	16	35	316	855
EAST NORTH CENTRAL-----	3	7	1	2	31	139	6	5	40	73	1,429	1,585
Ohio-----	-	-	-	1	6	13	-	1	15	16	360	390
Indiana-----	-	1	-	1	8	72	2	1	4	12	211	253
Illinois-----	2	5	1	-	2	3	-	1	10	17	300	361
Michigan-----	-	1	-	-	14	50	4	2	10	22	407	394
Wisconsin-----	1	-	-	-	1	1	-	-	1	6	151	167
WEST NORTH CENTRAL ¹ -----	14	6	-	1	36	76	-	-	8	20	477	872
Minnesota-----	3	-	-	1	20	25	-	-	5	4	163	253
Iowa-----	7	2	-	-	4	16	-	-	1	11	116	226
Missouri-----	1	1	-	-	1	8	-	-	-	-	91	46
North Dakota-----	1	-	-	-	1	-	-	-	-	-	60	74
South Dakota-----	2	2	-	-	5	1	-	-	1	1	24	110
Nebraska-----	-	-	-	-	2	24	-	-	1	1	12	73
Kansas-----	-	1	-	-	13	2	-	-	-	1	11	90
SOUTH ATLANTIC-----	2	2	2	2	118	140	3	4	28	31	576	598
Delaware-----	-	-	-	-	1	-	-	-	1	2	66	55
Maryland-----	-	-	-	-	-	1	-	-	-	-	9	8
District of Columbia-----	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	1	1	-	1	5	21	-	-	10	13	229	256
West Virginia-----	-	-	-	-	2	4	-	-	-	-	48	25
North Carolina-----	-	-	2	-	18	17	-	3	2	2	42	54
South Carolina-----	-	-	-	1	18	28	1	-	-	-	13	27
Georgia-----	1	1	-	-	24	25	-	-	2	4	66	77
Florida-----	-	-	-	-	50	44	2	1	9	9	98	77
EAST SOUTH CENTRAL-----	3	4	1	1	60	96	-	1	36	27	1,096	872
Kentucky-----	-	1	-	-	11	5	-	-	12	6	475	262
Tennessee-----	2	1	-	1	6	18	-	-	14	13	425	405
Alabama-----	-	1	1	-	24	48	-	1	6	4	122	90
Mississippi-----	1	1	-	-	19	25	-	-	4	4	74	115
WEST SOUTH CENTRAL-----	3	2	1	3	91	179	1	1	21	30	540	752
Arkansas-----	2	-	-	-	6	17	-	-	-	2	42	73
Louisiana-----	1	-	-	1	8	18	-	-	1	6	30	47
Oklahoma-----	-	1	-	-	14	51	1	-	1	1	76	49
Texas-----	-	1	1	2	63	93	-	1	19	21	392	583
MOUNTAIN-----	1	-	-	-	12	14	-	-	36	27	724	1,012
Montana-----	1	-	-	-	2	-	-	-	5	2	99	265
Idaho-----	-	-	-	-	1	1	-	-	2	4	45	132
Wyoming-----	-	-	-	-	1	3	-	-	2	-	27	56
Colorado-----	-	-	-	-	1	3	-	-	2	10	101	214
New Mexico-----	-	-	-	-	6	1	-	-	7	2	265	89
Arizona-----	-	-	-	-	1	5	-	-	14	4	136	205
Utah-----	-	-	-	-	-	1	-	-	4	5	30	49
Nevada-----	-	-	-	-	-	-	-	-	-	-	21	2
PACIFIC-----	2	-	-	-	6	27	20	10	56	66	1,328	1,598
Washington-----	1	-	-	-	-	3	-	-	6	7	201	342
Oregon-----	-	-	-	-	2	8	-	-	8	22	279	308
California-----	1	-	-	-	4	16	20	10	42	37	848	948
Alaska-----	-	-	-	-	-	-	-	-	6	1	42	56
Hawaii-----	-	-	-	-	-	-	-	-	-	-	19	20
Puerto Rico-----	-	-	-	-	27	22	-	-	18	3	69	107

¹Data exclude report from Kansas for the current week.

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Table 2. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES, EACH DIVISION AND STATE, ALASKA, HAWAII, AND PUERTO RICO, FOR WEEKS ENDED MAY 26, 1956 AND MAY 25, 1957—Continued

(By place of occurrence. Numbers under diseases are category numbers of the Sixth Revision of the International Lists, 1948)

AREA	POLIOMYELITIS 080								MALARIA		MEASLES	
	Total ²				Paralytic		Nonparalytic		110-117		085	
	21st week		Cumulative first 21 weeks		080.0,080.1		080.2					
	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956
CONT. UNITED STATES ¹ -----	60	112	901	1,743	32	53	19	38	3	9	19,192	32,771
NEW ENGLAND-----	1	-	9	45	1	-	-	-	-	-	1,458	264
Maine-----	-	-	1	8	-	-	-	-	-	-	200	18
New Hampshire-----	-	-	-	2	-	-	-	-	-	-	3	3
Vermont-----	1	-	2	8	1	-	-	-	-	-	207	17
Massachusetts-----	-	-	2	20	-	-	-	-	-	-	508	100
Rhode Island-----	-	-	-	2	-	-	-	-	-	-	43	16
Connecticut-----	-	-	4	5	-	-	-	-	-	-	497	110
MIDDLE ATLANTIC-----	1	7	28	112	1	2	-	-	-	-	4,211	6,928
New York-----	1	3	18	79	1	2	-	-	-	-	2,081	2,971
New Jersey-----	-	-	2	10	-	-	-	-	-	-	1,458	1,370
Pennsylvania-----	-	4	8	23	-	-	-	-	-	-	672	2,587
EAST NORTH CENTRAL-----	3	14	89	143	-	3	1	7	-	-	3,831	11,214
Ohio-----	-	3	16	29	-	-	-	-	-	-	282	4,278
Indiana-----	-	-	21	8	-	-	-	-	-	-	527	1,013
Illinois-----	2	7	12	35	-	3	-	3	-	-	425	2,293
Michigan-----	1	3	28	42	-	-	1	3	-	-	847	2,254
Wisconsin-----	-	1	12	29	-	-	-	1	-	-	1,750	1,376
WEST NORTH CENTRAL ¹ -----	7	8	74	89	3	4	2	3	-	2	1,441	668
Minnesota-----	-	-	3	14	-	-	-	-	-	-	267	69
Iowa-----	-	4	5	25	-	2	-	1	-	-	696	242
Missouri-----	3	2	21	22	2	-	1	2	-	1	299	161
North Dakota-----	-	-	1	2	-	-	-	-	-	-	170	89
South Dakota-----	-	-	2	8	-	-	-	-	-	-	2	9
Nebraska-----	4	2	28	10	1	2	1	-	-	-	7	67
Kansas-----	-	-	14	8	-	-	-	-	-	1	-	31
SOUTH ATLANTIC-----	8	4	123	138	5	2	3	2	1	-	1,259	3,519
Delaware-----	-	1	1	2	-	-	-	1	-	-	16	66
Maryland-----	-	-	-	4	-	-	-	-	-	-	49	180
District of Columbia-----	-	-	-	-	-	-	-	-	-	-	37	28
Virginia-----	1	-	14	6	1	-	-	-	-	-	190	1,310
West Virginia-----	-	-	4	10	-	-	-	-	-	-	62	532
North Carolina-----	3	1	18	28	1	-	2	1	-	-	89	589
South Carolina-----	2	1	25	12	2	1	-	-	-	-	326	495
Georgia-----	1	-	19	13	1	-	-	-	-	-	277	109
Florida-----	1	1	42	63	-	1	1	-	1	-	213	210
EAST SOUTH CENTRAL-----	2	10	55	82	-	3	-	4	-	-	1,057	3,296
Kentucky-----	-	2	5	27	-	2	-	-	-	-	358	1,301
Tennessee-----	-	3	15	17	-	1	-	1	-	-	338	1,378
Alabama-----	2	2	14	5	-	-	-	-	-	-	332	491
Mississippi-----	-	3	21	33	-	-	-	3	-	-	29	126
WEST SOUTH CENTRAL-----	19	41	239	434	14	19	5	15	1	5	1,571	3,317
Arkansas-----	-	-	15	13	-	-	-	-	-	-	28	507
Louisiana-----	1	7	41	78	-	7	1	-	-	-	13	41
Oklahoma-----	-	2	7	19	-	-	-	1	1	-	25	311
Texas-----	18	32	176	324	14	12	4	14	-	5	1,505	2,458
MOUNTAIN-----	6	1	71	95	1	-	2	-	-	1	1,249	1,352
Montana-----	-	-	3	6	-	-	-	-	-	-	206	285
Idaho-----	-	-	3	12	-	-	-	-	-	-	178	209
Wyoming-----	-	-	4	3	-	-	-	-	-	1	2	15
Colorado-----	2	-	12	9	1	-	1	-	-	-	117	476
New Mexico-----	-	1	7	7	-	-	-	-	-	-	152	212
Arizona-----	-	-	21	39	-	-	-	-	-	-	294	160
Utah-----	4	-	19	8	-	-	1	-	-	-	298	15
Nevada-----	-	-	2	11	-	-	-	-	-	-	2	-
PACIFIC-----	13	27	213	605	7	20	6	7	1	1	3,115	2,213
Washington-----	-	-	2	24	-	-	-	-	-	-	706	582
Oregon-----	1	2	18	40	1	1	-	1	1	-	680	114
California-----	12	25	193	541	6	19	6	6	-	1	1,729	1,517
Alaska-----	-	-	2	4	-	-	-	-	-	-	42	26
Hawaii-----	-	-	2	47	-	-	-	-	1	-	57	17
Puerto Rico-----	-	1	4	16	-	1	-	-	-	-	70	39

¹Data excludes report from Kansas for the current week.²Includes cases not specified by type, category number 080.3.

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Table 2. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES, EACH DIVISION AND STATE, ALASKA, HAWAII, AND PUERTO RICO, FOR WEEKS ENDED MAY 26, 1956 AND MAY 25, 1957—Continued

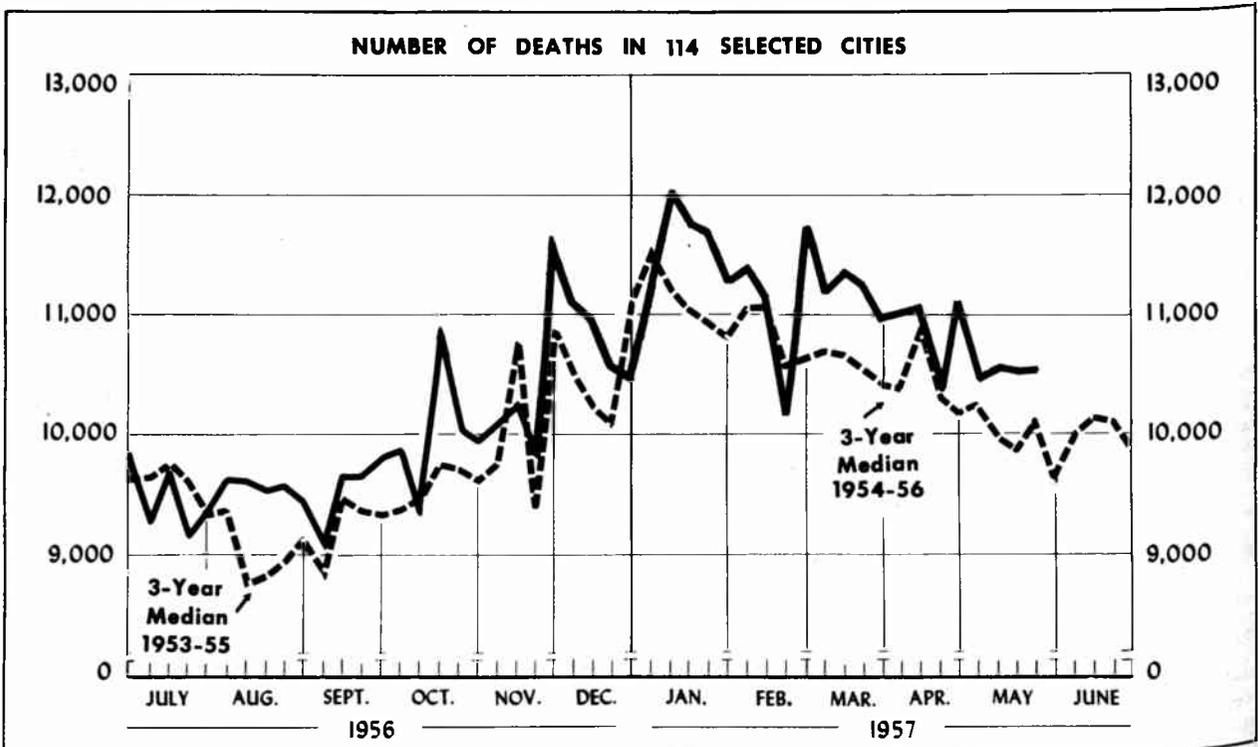
(By place of occurrence. Numbers under diseases are category numbers of the Sixth Revision of the International Lists, 1948)

AREA	MENINGOCOCCAL INFECTIONS		MENINGITIS, OTHER	PSITTACOSIS		TYPHOID FEVER 040				TYPHUS FEVER, ENDEMIC	RABIES IN ANIMALS	
	057		340	096.2		21st week		Cumulative first 21 weeks		101	1957	1956
	1957	1956	1957	1957	1956	1957	1956	1957	1956	1957	1957	1956
CONT. UNITED STATES ¹ -----	54	56	45	8	8	32	54	414	643	4	99	101
NEW ENGLAND-----	2	3	5	-	-	-	1	11	24	-	-	-
Maine-----	-	-	2	-	-	-	-	1	10	-	-	-
New Hampshire-----	-	1	-	-	-	-	-	1	-	-	-	-
Vermont-----	-	-	-	-	-	-	-	-	1	-	-	-
Massachusetts-----	2	1	2	-	-	-	-	3	6	-	-	-
Rhode Island-----	-	1	1	-	-	-	1	4	2	-	-	-
Connecticut-----	-	-	-	-	-	-	-	2	5	-	-	-
MIDDLE ATLANTIC-----	7	12	-	1	-	1	5	41	79	-	3	13
New York-----	3	2	-	-	-	1	-	18	23	-	3	9
New Jersey-----	2	1	-	-	-	-	2	13	5	-	-	-
Pennsylvania-----	2	9	-	1	-	-	3	10	51	-	-	4
EAST NORTH CENTRAL-----	19	9	19	1	1	4	12	49	100	-	4	12
Ohio-----	2	-	-	1	-	1	-	21	21	-	-	3
Indiana-----	-	1	5	-	1	1	1	11	11	-	-	6
Illinois-----	8	2	14	-	-	1	3	6	14	-	2	3
Michigan-----	5	6	-	-	-	-	5	6	23	-	-	-
Wisconsin-----	4	-	-	-	-	1	3	5	31	-	2	-
WEST NORTH CENTRAL ¹ -----	2	4	-	1	5	1	5	32	96	-	20	9
Minnesota-----	-	2	-	-	4	-	-	4	30	-	7	2
Iowa-----	-	1	-	1	1	-	5	7	33	-	10	4
Missouri-----	1	1	-	-	-	1	-	13	19	-	2	-
North Dakota-----	1	-	-	-	-	-	-	1	5	-	1	-
South Dakota-----	-	-	-	-	-	-	-	3	2	-	-	-
Nebraska-----	-	-	-	-	-	-	-	7	7	-	-	3
Kansas-----	-	-	-	-	-	-	-	14	-	-	-	-
SOUTH ATLANTIC-----	8	4	9	-	-	9	13	89	104	-	29	23
Delaware-----	-	-	-	-	-	-	-	1	1	-	-	1
Maryland-----	-	-	-	-	-	-	2	2	6	-	-	-
District of Columbia-----	1	-	1	-	-	1	-	6	9	-	-	-
Virginia-----	2	1	6	-	-	3	3	16	13	-	15	7
West Virginia-----	1	-	1	-	-	1	1	13	11	-	-	1
North Carolina-----	2	2	1	-	-	1	-	9	16	-	4	1
South Carolina-----	-	-	-	-	-	-	2	4	11	-	6	11
Georgia-----	1	1	-	-	-	1	4	15	22	-	2	-
Florida-----	1	-	-	-	-	2	1	23	15	-	2	2
EAST SOUTH CENTRAL-----	11	6	7	-	1	7	5	69	69	2	12	10
Kentucky-----	5	3	1	-	-	1	2	21	15	-	7	5
Tennessee-----	-	1	5	-	1	4	2	29	37	-	-	-
Alabama-----	5	2	-	-	-	2	-	6	4	-	5	4
Mississippi-----	1	-	1	-	-	-	1	13	13	2	-	1
WEST SOUTH CENTRAL-----	2	8	3	-	-	5	9	75	108	2	19	28
Arkansas-----	-	-	1	-	-	2	1	14	19	-	3	5
Louisiana-----	1	2	-	-	-	-	3	13	22	-	6	13
Oklahoma-----	-	3	-	-	-	-	-	9	17	-	1	-
Texas-----	1	3	2	-	-	3	5	39	50	2	9	10
MOUNTAIN-----	1	1	2	-	-	-	1	20	17	-	2	-
Montana-----	-	-	-	-	-	-	1	2	-	-	-	-
Idaho-----	-	-	-	-	-	-	-	1	1	-	-	-
Wyoming-----	-	-	-	-	-	-	-	2	1	-	-	-
Colorado-----	-	1	1	-	-	-	1	4	5	-	-	-
New Mexico-----	1	-	-	-	-	-	-	6	7	-	-	-
Arizona-----	-	-	1	-	-	-	-	5	2	-	2	-
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-
Nevada-----	-	-	-	-	-	-	-	-	1	-	-	-
PACIFIC-----	2	9	-	5	1	5	3	28	46	-	10	6
Washington-----	-	2	-	1	-	1	-	1	1	-	-	-
Oregon-----	-	-	-	1	-	-	-	3	5	-	-	-
California-----	2	7	-	3	1	4	3	24	40	-	10	6
Alaska-----	-	-	-	-	-	1	-	1	-	-	-	-
Hawaii-----	-	-	-	-	-	-	-	1	-	-	-	-
Puerto Rico-----	-	-	-	-	-	1	-	12	20	-	-	1

¹Data exclude report from Kansas for the current week.

Symbols.—1 dash [-]: no cases reported; 3 dashes [---]: data not available.

Morbidity and Mortality Weekly Report



The chart shows the number of deaths reported for 114 major cities of the United States by week for the current year, and, for comparison, the median of the number of deaths reported for the corresponding weeks of the 3 previous calendar years. (The median is the central one of the three values arranged in order of magnitude.) If a report is not received from a city in time to be included in the total for the current week, an estimate is made to maintain comparability for graphic presentation.

The figures reported represent the number of death certificates received in the vital statistics offices during the week indicated for deaths occurring in that city. Figures compiled in this way, by week of receipt, usually approximate closely the number of deaths occurring during the week. However, differences are to be expected because of variations in the

interval between death and receipt of the certificate.

While week-to-week changes in the total number of deaths reported for all major cities generally represent a change in mortality conditions, this may not be true for variations in weekly figures for each city. For example, in a city with a weekly average of 50 deaths, the number of deaths occurring in a week may be expected to vary by chance alone from 36 to 64 ($d \pm 2\sqrt{d}$, where d represents the average number of deaths per week).

The number of deaths in cities of the same size may also differ because of variations in the age, race, and sex composition of their populations, and because some cities are hospital centers serving the surrounding areas. Changes from year to year in the number of deaths may be due in part to population increases or decreases.

Table 3. DEATHS IN SELECTED CITIES BY GEOGRAPHIC DIVISIONS

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

AREA	21st week ended May 25, 1957	20th week ended May 18, 1957	21st week median 1954-56	Percent change, median to current week	CUMULATIVE NUMBER FIRST 21 WEEKS		
					1957	1956	Percent change
TOTAL: 111 REPORTING CITIES-----	10,288	10,262	9,835	+4.6	226,629	223,209	+1.5
New England----- (13 cities)	456	466	427	+6.8	10,153	9,820	+3.4
Middle Atlantic----- (20 cities)	2,986	3,043	3,023	-1.2	67,778	67,834	-0.1
East North Central----- (19 cities)	2,398	2,361	2,226	+7.7	50,206	49,770	+0.9
West North Central----- (9 cities)	710	697	712	-0.3	16,392	16,115	+1.7
South Atlantic----- (10 cities)	817	875	802	+1.9	18,908	18,504	+2.2
East South Central----- (8 cities)	473	474	450	+5.1	10,390	10,325	+0.6
West South Central----- (12 cities)	861	788	693	+27.1	18,619	17,327	+7.5
Mountain----- (8 cities)	252	265	240	+5.0	5,753	5,352	+7.5
Pacific----- (12 cities)	1,315	1,293	1,257	+4.6	28,430	28,162	+1.0

Morbidity and Mortality Weekly Report

Table 4. DEATHS IN SELECTED CITIES

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

AREA	21st week ended May 25, 1957	20th week ended May 18, 1957	CUMULATIVE NUMBER FIRST 21 WEEKS		AREA	21st week ended May 25, 1957	20th week ended May 18, 1957	CUMULATIVE NUMBER FIRST 21 WEEKS	
			1957	1956				1957	1956
NEW ENGLAND					WEST NORTH CENTRAL—Con.				
Boston, Mass.-----	---	(213)	---	(5,146)	St. Louis, Mo.-----	199	204	5,050	5,190
Bridgeport, Conn.-----	36	32	797	781	St. Paul, Minn.-----	56	76	1,461	1,419
Cambridge, Mass.-----	23	35	663	665	Wichita, Kans.-----	36	50	949	853
Fall River, Mass.-----	24	24	586	622	SOUTH ATLANTIC				
Hartford, Conn.-----	46	46	1,082	1,017	Atlanta, Ga.-----	99	111	2,373	2,395
Lovell, Mass.-----	23	34	590	535	Baltimore, Md.-----	229	256	5,161	4,961
Lynn, Mass.-----	19	19	461	461	Charlotte, N. C.-----	21	23	719	671
New Bedford, Mass.-----	32	24	575	515	Jacksonville, Fla.-----	32	61	1,150	1,143
New Haven, Conn.-----	40	36	1,000	1,010	Miami, Fla.-----	47	43	1,057	1,123
Providence, R. I.-----	73	60	1,376	1,337	Norfolk, Va.-----	---	(23)	---	(705)
Somerville, Mass.-----	12	18	304	356	Richmond, Va.-----	54	78	1,596	1,497
Springfield, Mass.-----	44	57	939	900	Savannah, Ga.-----	39	32	631	614
Waterbury, Conn.-----	29	25	540	557	Tampa, Fla.-----	61	54	1,412	1,305
Worcester, Mass.-----	55	56	1,240	1,064	Washington, D. C.-----	198	173	4,005	4,037
MIDDLE ATLANTIC					Wilmingon, Del.-----	37	44	784	758
Albany, N. Y.-----	55	46	1,086	1,066	EAST SOUTH CENTRAL				
Allentown, Pa.-----	34	40	815	820	Birmingham, Ala.-----	76	72	1,655	1,674
Buffalo, N. Y.-----	162	135	3,148	3,069	Chattanooga, Tenn.-----	38	42	1,005	919
Camden, N. J.-----	36	43	843	841	Knorrville, Tenn.-----	31	20	644	767
Elizabeth, N. J.-----	30	24	613	628	Louisville, Ky.-----	102	119	2,314	2,327
Erie, Pa.-----	30	33	736	717	Memphis, Tenn.-----	111	85	2,283	2,150
Jersey City, N. J.-----	58	47	1,457	1,588	Mobile, Ala.-----	38	41	742	705
Newark, N. J.-----	96	95	2,291	2,125	Montgomery, Ala.-----	18	33	469	630
New York City, N. Y.-----	1,473	1,575	34,155	34,154	Nashville, Tenn.-----	59	62	1,278	1,153
Paterson, N. J.-----	46	42	867	783	WEST SOUTH CENTRAL				
Philadelphia, Pa.-----	445	460	10,496	10,613	Austin, Tex.-----	---	(25)	---	(622)
Pittsburgh, Pa.-----	162	181	3,855	4,033	Baton Rouge, La.-----	22	28	575	476
Reading, Pa.-----	28	27	502	482	Corpus Christi, Tex.-----	19	21	436	393
Rochester, N. Y.-----	116	93	2,047	2,053	Dallas, Tex.-----	105	105	2,360	2,210
Schenectady, N. Y.-----	19	19	474	483	El Paso, Tex.-----	36	24	622	568
Scranton, Pa.-----	38	34	818	753	Fort Worth, Tex.-----	65	58	1,308	1,240
Syracuse, N. Y.-----	53	58	1,236	1,300	Houston, Tex.-----	156	134	3,184	2,853
Trenton, N. J.-----	51	48	975	976	Little Rock, Ark.-----	70	35	1,134	996
Utica, N. Y.-----	32	20	712	679	New Orleans, La.-----	164	153	3,603	3,520
Yonkers, N. Y.-----	22	23	652	671	Oklahoma City, Okla.-----	59	45	1,293	1,333
EAST NORTH CENTRAL					San Antonio, Tex.-----	95	90	2,019	1,815
Akron, Ohio-----	48	62	1,140	1,147	Shreveport, La.-----	36	55	1,028	965
Canton, Ohio-----	30	35	672	627	Tulsa, Okla.-----	54	40	1,057	958
Chicago, Ill.-----	809	745	16,176	16,061	MOUNTAIN				
Cincinnati, Ohio-----	141	133	3,305	3,351	Albuquerque, N. Mex.-----	24	28	545	480
Cleveland, Ohio-----	208	183	4,489	4,460	Colorado Springs, Colo.-----	14	11	295	282
Columbus, Ohio-----	114	125	2,423	2,342	Denver, Colo.-----	103	109	2,400	2,350
Dayton, Ohio-----	65	74	1,583	1,420	Ogden, Utah-----	14	11	257	276
Detroit, Mich.-----	377	341	6,936	6,928	Phoenix, Ariz.-----	19	23	614	582
Evansville, Ind.-----	28	32	679	762	Pueblo, Colo.-----	13	13	270	261
Flint, Mich.-----	32	44	802	825	Salt Lake City, Utah-----	46	49	933	1,001
Fort Wayne, Ind.-----	43	30	766	771	Tucson, Ariz.-----	19	21	439	120
Gary, Ind.-----	19	29	633	621	PACIFIC				
Grand Rapids, Mich.-----	29	46	866	916	Berkeley, Calif.-----	12	32	413	392
Indianapolis, Ind.-----	108	138	2,570	2,524	Long Beach, Calif.-----	53	49	1,173	1,143
Milwaukee, Wis.-----	141	138	2,795	2,653	Los Angeles, Calif.-----	440	436	10,248	10,376
Peoria, Ill.-----	31	30	624	591	Oakland, Calif.-----	112	125	2,098	2,016
South Bend, Ind.-----	25	32	524	519	Pasadena, Calif.-----	35	35	771	770
Toledo, Ohio-----	102	82	2,006	2,056	Portland, Oreg.-----	109	87	2,043	2,057
Youngstown, Ohio-----	48	62	1,217	1,196	Sacramento, Calif.-----	59	55	1,109	1,042
WEST NORTH CENTRAL					San Diego, Calif.-----	82	59	1,741	1,629
Des Moines, Iowa-----	55	42	1,113	1,079	San Francisco, Calif.-----	209	188	4,145	4,227
Duluth, Minn.-----	28	18	547	571	Seattle, Wash.-----	125	138	2,849	2,713
Kansas City, Kans.-----	26	21	646	654	Spokane, Wash.-----	43	44	996	1,001
Kansas City, Mo.-----	127	97	2,494	2,358	Tacoma, Wash.-----	36	45	844	796
Minneapolis, Minn.-----	130	126	2,655	2,596	Honolulu, Hawaii-----	(38)	(38)	(832)	(761)
Omaha, Nebr.-----	53	63	1,477	1,395					

Symbols.—parentheses (): data not included in table 3; 3 dashes --- : data not available.

EPIDEMIOLOGICAL REPORTS—Continued

Typhoid fever

Dr. R. D. Fear, District Health Officer, New York State Department of Health, has reported an outbreak of typhoid fever among 25 persons employed in a factory. The number of cases was not given. An investigation revealed that a chronic typhoid fever carrier was living nearby. The sewage from this home was disposed of by cesspool, and the sewer line for the cesspool ran within 25 feet of a well serving the factory. After the cases were reported water purification equipment was installed in the factory.

Gastro-enteritis

Dr. A. M. Washburn, Arkansas State Board of Health, has reported an outbreak of gastro-enteritis involving 16 persons in 3 families. The suspected vehicle of infection was ice cream which was prepared from raw milk mixed with evaporated milk, eggs, sugar, and flavoring. The illness was characterized by cramps, diarrhea, vomiting, nausea, headache, and fever. The first symptoms were exhibited in 11 to 18 hours, except in 3 persons who suffered no ill effects until after 36 hours from the time the food was eaten. Specimens of the raw milk and ice cream have been examined and coliform organisms were found in the ice cream. Further studies are being made to determine the species of the organism.

Dr. Mason Romaine, Virginia State Department of Health, has reported an outbreak of gastro-enteritis among 211 students in a school. An investigation revealed that the students had a luncheon of turkey salad and éclairs in a restaurant. That evening they had supper of ham salad in the school. About 3 a. m. the following morning the students started vomiting and having diarrhea. Seventy were reported to have developed symptoms. Some unsanitary conditions were found in the kitchens of both the school and the restaurant. No soap or towels were provided in the kitchen of the restaurant. The éclairs were from a bakery which was described as generally filthy. Apparently no food was available for laboratory tests. The source of this outbreak was not definitely determined.

The California State Department of Public Health has also reported an outbreak of gastro-enteritis associated with chocolate éclairs. The éclairs were filled with cold custard, iced, boxed, and placed under refrigeration. Later they were taken out of the refrigerator and left at room temperature for about 12 hours until sold. Two persons are known to have become ill, and reports of other complaints were received. Laboratory tests revealed no staphylococci but there were a large number of other organisms.

Another report from California was of an outbreak of gastro-enteritis among patrons of an eating establishment. Six persons are known to have become ill from 4 to 7½ hours after eating in the establishment. Five of these had eaten meat balls, sauce, and spaghetti. The sixth had the "Chef's Special" which included scrambled eggs and hamburger. Bacteriologic examination of food samples revealed only a few coagulase-positive colonies resembling staphylococci in the ground meat. No specimens were collected from the food handlers or the patients.

QUARANTINE MEASURES

Immunization Information for International Travel

Public Health Service Publication No. 384

Africa.—Egypt (p. 19). During the 1957 Mecca Pilgrimage foreign pilgrims passing through Egypt on their way to the Hejaz must be in possession of international certificates of vaccination against smallpox and cholera, otherwise they shall be vaccinated by the quarantine authorities. The usual measures shall be applied in respect to pilgrims coming from yellow fever endemic or infected areas.

Europe. (p. 40). Persons traveling to Europe should be encouraged to receive smallpox vaccination before leaving the United States. The information should be recorded on an International Certificate of Vaccination form and authenticated by a local or State health officer. The recent introduction of the disease into Europe and its widespread prevalence in other areas of the world emphasize the importance of this vaccination as a personal health precaution for international travel.

SOURCE AND NATURE OF MORBIDITY DATA

These provisional data are based on reports to the Public Health Service from health departments of each State and of Alaska, Hawaii, and Puerto Rico. They give the total number of cases of certain communicable diseases reported during the week usually ended the preceding Saturday. Cases of anthrax, botulism, and rabies in man are not shown in table 2, but a footnote to table 1 shows the States reporting on these diseases. In addition, when diseases of rare occurrence (cholera, dengue, plague, louse-borne relapsing fever, smallpox, louse-borne epidemic typhus, and yellow fever) are reported, this will be noted at the end of table 1.

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