

M M M M R

MORBIDITY AND MORTALITY WEEKLY REPORT

RECEIVED
 MAR 18 1976

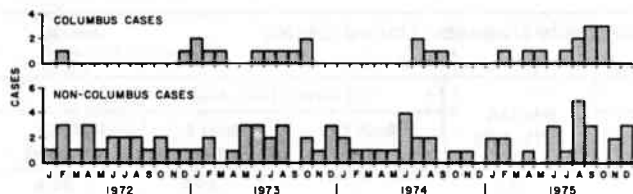
- Epidemiologic Notes and Reports
- 77 Acute Childhood Leukemia — Columbus, Ohio
 - 83 Follow-up on Lassa Fever — Washington, D.C.
 - 84 Leptospirosis, Tennessee
- Current Trends
- 78 Influenza — United States
 - 83 Primary and Secondary Syphilis — United States, December 1975
- ATLANTA, GA. 30333

Epidemiologic Notes and Reports

Acute Childhood Leukemia — Columbus, Ohio

From August-October 1975, 8 cases of acute leukemia were diagnosed at Columbus Children's Hospital in Columbus, Ohio, in children living in that city. During any consecutive 3-month period in 1972-1974, the greatest number of cases of acute leukemia diagnosed at this hospital in Columbus children was 4 (Figure 1).

FIGURE 1. Acute Leukemia, Columbus Children's Hospital, 1972-1975 — by Place of Residence and Date of Diagnosis



To evaluate this cluster of illness, all cases of acute leukemia diagnosed at Columbus Children's Hospital in 1972-1975 were reviewed with respect to age, race, sex, type of leukemia, date of diagnosis, and residence in and outside of Columbus (Table 1). The hospital provides care for most children with leukemia in Columbus and for many such patients from surrounding areas. In the 3-year period 1972-1974, an average of 5.3 cases of acute childhood leukemia were seen each year among Columbus residents (the expected number is 6.1, based on age-specific rates from the Third National Cancer Survey [1]). Over the 4-year period 1972-1975, 107 cases were seen, 28 among Columbus residents. Both Columbus and non-Columbus patients in 1975 were somewhat older and included relatively more females than in earlier years. Case distributions by race and leukemic cell type were not unusual.

Twelve cases were diagnosed in Columbus residents in 1975, compared with a total of 16 for all 3 preceding years. To assess the possibility of time-space clustering among Columbus cases over the entire 4-year period a statistical analysis was performed using the procedure devised by Knox (2). No statistically significant clustering was found; 13 case-pairs were observed in which dates of diagnosis were less than 1 year apart and places of residence 1

mile or less apart, whereas 14.4 pairs were to be expected on a random basis. Inspection of the 1975 case data showed no geographic clustering and no obvious community or family interrelationships among cases. No evidence of seasonal periodicity was found on statistical testing by month of diagnosis for pooled data from all 4 years.

Reported by I Ertel, MD, W Newton, MD, Children's Hospital, Columbus, Ohio; TJ Halpin, MD, MPH, State Epidemiologist, Ohio Department of Health; Field Services Div and Cancer and Birth Defects Div, Bur of Epidemiology, CDC.

Editorial Note: The question of time-space clustering among cases of leukemia and lymphoma has received considerable epidemiologic attention, particularly in connection with hypotheses regarding the possible viral etiology of cancer. While no evidence has been found of statistically significant time-space clustering among adult cases, several studies have suggested such a tendency among cases of childhood acute leukemia (2-5). The significance of such observations remains unclear. In the present investigation no evidence, statistical or otherwise, was found to suggest that the recent case cluster in Columbus might be due to factors other than

TABLE 1. Acute Leukemia, Columbus Children's Hospital, 1972-1975 — By Age, Sex, Race, Place of Residence, and Year of Diagnosis

	Year of Diagnosis			
	1972-1974		1975	
	Columbus Residents	Other	Columbus Residents	Other
Total number of cases	16	57	12	22
Mean age at diagnosis	4.5	5.4	7.0	6.5
Sex: Male	10	33	5	11
Female	6	19	7	11
Race: White	13	55	9	21
Black	3	2	0	1
Other	0	0	1	0
Unknown	0	0	2	0
Leukemic Cell Type:				
Myelocytic	3	11	3	4
Monocytic	2	2	0	0
Lymphocytic or Stem Cell	11	44	9	18

Leukemia (continued)

chance. Further investigations of such clusters may be desirable, however, as a potential source of clues regarding the etiology of childhood tumors.

References

1. Third National Cancer Survey: Incidence Data, National Cancer Institute Monograph No. 41, 1975, pp 102-103
2. Knox G: Epidemiology of childhood leukaemia in Northumber-

land and Durham. Br J Prev Soc Med 18:17-24, 1964

3. Till MM, Hardesty RM, Pike MC, et al: Childhood leukaemia in greater London: A search for evidence of clustering. Br Med J 3: 755-758, 1967

4. Gunz, FW, Spears GFS: Distribution of acute leukaemia in time and space. Studies in New Zealand. Br Med J 4:604-608, 1968

5. Evatt BL, Chase GA, Heath CW, Jr: Time-space clustering among cases of acute leukemia in two Georgia counties. Blood 41:265-272, 1973

Current Trends

Influenza – United States

Influenza remained widespread in 21 states, Puerto Rico, and the District of Columbia, according to a CDC telephone survey on March 11 (Figure 2). Twenty-one states reported regional outbreaks; isolated cases occurred in the remaining 8 states.

Nationwide, the peak of the epidemic appears to have passed, as 34 states and the District of Columbia reported declining rates of influenza-like illness. The number of pneumonia and influenza deaths from 121 United States cities, however, rose slightly; the only significant increases were in the West South Central and Mountain regions. No marked changes in pneumonia and influenza deaths occurred in the other 6 regions.

Reported by Virology Div, Bur of Laboratories, and Viral Diseases Div, Bur of Epidemiology, CDC.

FIGURE 2. Reported Influenza Activity, March 11, 1976 – CDC Telephone Survey

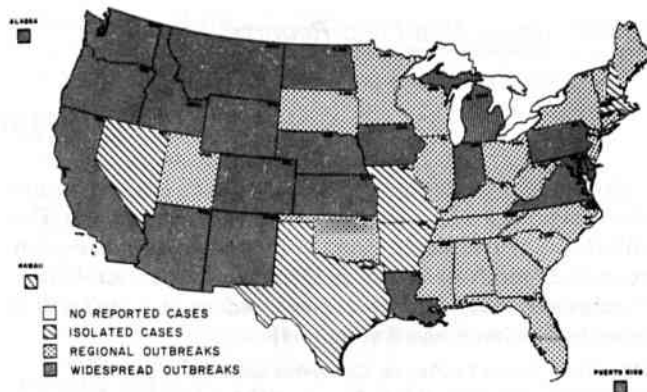


Table I. Summary—Cases of Specified Notifiable Diseases: United States

[Cumulative totals include revised and delayed reports through previous weeks]

DISEASE	10th WEEK ENDING		MEDIAN 1971-1975	CUMULATIVE, FIRST 10 WEEKS		
	March 13, 1976	March 8, 1976		March 13, 1976	March 8, 1976	MEDIAN 1971-1975
Aseptic meningitis	40	21	31	375	345	351
Brucellosis	4	2	2	47	25	17
Chickenpox	7,335	4,623	---	52,633	38,709	---
Diphtheria	8	21	9	76	87	41
Encephalitis	Primary	13	19	146	122	159
	Post-Infectious	7	1	42	37	37
Hepatitis, Viral	Type B	460	174	2,638	2,012	1,648
	Type A	806	699	6,933	6,914	9,580
	Type unspecified	228	166	1,711	1,450	---
Malaria	6	4	7	54	51	51
Measles (rubeola)	1,124	741	943	6,667	3,846	6,490
Meningococcal infections, total	47	41	41	370	350	350
Civilian	47	40	41	367	340	340
Military	---	1	1	3	10	11
Mumps	1,709	1,525	2,262	12,548	14,263	18,473
Pertussis	15	12	---	225	236	---
Rubella (German measles)	455	455	849	2,576	2,671	5,650
Tetanus	---	---	---	6	11	11
Tuberculosis	625	625	---	5,892	5,336	---
Tularemia	1	---	2	24	9	21
Typhoid fever	5	7	7	66	43	49
Typhus, tick-borne (Rky. Mt. spotted fever)	---	---	---	5	10	10
Veneral Diseases:						
Gonorrhea	17,558	16,766	---	187,495	175,783	---
Civilian	---	---	---	---	---	---
Military	675	750	---	5,836	5,991	---
Syphilis, primary and secondary	494	459	---	5,156	4,917	---
Civilian	---	---	---	---	---	---
Military	2	4	---	74	68	---
Rabies in animals	50	42	60	343	365	567

Table II. Notifiable Diseases of Low Frequency: United States

	CUM.		CUM.
Anthrax:	2	Poliomyelitis, total:	2
Botulism:	4	Paralytic:	2
Congenital rubella syndrome:	5	Painful:	20
Leprosy: Calif. 1:	21	Rabies in man:	---
Leptospirosis:	9	Trichinosis: Mass. 1, Conn. 1, Alaska 3	40
Plague:	1	Typhus, murine: Ky. 1:	3

Table III
Cases of Specified Notifiable Diseases: United States
Weeks Ending March 13, 1976 and March 8, 1975 - 10th Week

AREA REPORTING	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
						1976	1975	1976	1976	1976	1976		
UNITED STATES	40	4	7,335	8	76	8	13	7	460	806	228	6	54
NEW ENGLAND	1	-	460	-	-	-	-	1	3	22	5	-	4
Maine*	-	-	15	-	-	-	-	-	-	1	-	-	-
New Hampshire	1	-	35	-	-	-	-	-	-	4	-	-	-
Vermont	-	-	4	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	222	-	-	-	-	1	1	4	5	-	3
Rhode Island	-	-	112	-	-	-	-	-	-	4	-	-	-
Connecticut	-	-	68	-	-	-	-	-	2	9	-	-	1
MIDDLE ATLANTIC	14	-	446	-	-	1	5	-	197	135	88	3	12
Upstate New York	-	-	163	-	-	-	-	-	9	14	3	1	3
New York City	1	-	101	-	-	-	-	-	20	27	-	2	8
New Jersey	13	-	NN	-	-	-	1	-	160	89	85	-	-
Pennsylvania*	-	-	162	-	-	1	4	-	8	5	-	-	1
EAST NORTH CENTRAL	2	-	2,777	-	-	2	3	-	68	131	6	-	1
Ohio	-	-	262	-	-	-	-	-	18	49	-	-	1
Indiana*	-	-	150	-	-	-	-	-	3	11	-	-	-
Illinois	-	-	585	-	-	-	1	-	22	23	2	-	-
Michigan	2	-	1,009	-	-	2	2	-	20	44	4	-	-
Wisconsin*	-	-	731	-	-	-	-	-	5	4	-	-	-
WEST NORTH CENTRAL	1	-	1,658	1	3	-	1	-	5	19	3	-	-
Minnesota	-	-	13	-	-	-	-	-	3	2	-	-	-
Iowa	-	-	385	-	-	-	1	-	-	3	1	-	-
Missouri*	1	-	17	1	1	-	-	-	1	9	2	-	-
North Dakota	-	-	2	-	-	-	-	-	-	4	-	-	-
South Dakota	-	-	2	-	2	-	-	-	1	-	-	-	-
Nebraska	-	-	24	-	-	-	-	-	-	-	-	-	-
Kansas	-	-	1,215	-	-	-	-	-	-	1	-	-	-
SOUTH ATLANTIC	4	2	737	-	-	-	1	2	37	100	32	1	8
Delaware	-	-	8	-	-	-	-	-	1	4	2	-	-
Maryland	-	-	23	-	-	-	-	1	12	8	5	-	-
District of Columbia	-	-	4	-	-	-	-	-	2	1	-	-	2
Virginia	-	2	25	-	-	-	-	1	7	8	-	1	3
West Virginia	-	-	414	-	-	-	-	-	1	10	-	-	-
North Carolina	2	-	NN	-	-	-	-	-	5	12	9	-	1
South Carolina	-	-	56	-	-	-	-	-	2	5	8	-	-
Georgia	-	-	-	-	-	-	-	-	-	33	-	-	-
Florida	2	-	207	-	-	-	1	-	7	19	8	-	2
EAST SOUTH CENTRAL	1	-	314	-	-	3	1	2	29	88	4	-	1
Kentucky	-	-	260	-	-	-	-	-	9	27	1	-	-
Tennessee	1	-	NN	-	-	1	1	1	13	47	1	-	-
Alabama	-	-	28	-	-	1	-	-	6	7	2	-	-
Mississippi	-	-	6	-	-	1	-	1	1	7	-	-	1
WEST SOUTH CENTRAL	3	2	547	-	-	1	2	1	17	94	35	-	2
Arkansas	-	2	-	-	-	-	-	1	6	4	-	-	-
Louisiana	-	-	NN	-	-	1	-	-	4	11	3	-	-
Oklahoma	-	-	85	-	-	-	2	-	3	20	8	-	-
Texas	-	-	462	-	-	-	-	-	4	59	24	-	2
MOUNTAIN	-	-	104	-	3	-	-	-	10	58	24	-	1
Montana	-	-	27	-	-	-	-	-	-	2	2	-	-
Idaho*	-	-	7	-	-	-	-	-	-	4	1	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	-	-	61	-	3	-	-	-	4	7	10	-	-
New Mexico	-	-	7	-	-	-	-	-	4	11	-	-	-
Arizona	-	-	-	-	-	-	-	-	2	9	1	-	-
Utah	-	-	2	-	-	-	-	-	-	24	10	-	-
Nevada*	-	-	-	-	-	-	-	-	-	1	-	-	1
PACIFIC	14	-	252	7	70	1	-	1	94	159	31	2	25
Washington	1	-	259	6	69	1	-	-	8	14	6	-	1
Oregon	-	-	-	-	-	-	-	-	13	18	5	-	2
California*	11	-	-	-	-	-	-	1	72	124	20	2	22
Alaska	-	-	4	1	1	-	-	-	-	-	-	-	-
Hawaii	2	-	29	-	-	-	-	-	1	3	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	7	-	-	-	-	-	-	6	-	-	1
Virgin Islands	-	-	-	-	-	-	-	-	-	-	-	-	-

NN: Not Notifiable

*Delayed Reports: Asept. Meng: Pa. 1 (1975), Wisc. delete 1, Mo. Delete 2; Chickenpox: Me. 5, Idaho 25, Calif. 8; Enceph: Pa. 2 (1975); Hep. B: Pa. 5 (1975); Hep. A: Pa. 4 (1975); Ind. delete 1, Idaho delete 9, Nev. 2; Hep. Unsp.: Pa. 2 (1975)

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending March 13, 1976 and March 8, 1975 - 10th Week

REPORTING AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1976	CUMULATIVE		1976	CUMULATIVE		1976	CUM. 1976	1976	1976	CUM. 1976	CUM. 1976
		1976	1975		1976	1975						
UNITED STATES	1,124	6,667	3,846	47	370	350	1,709	12,548	15	455	2,576	6
NEW ENGLAND	26	102	34	3	20	21	71	540	-	6	48	-
Maine	-	3	2	-	-	3	11	38	-	1	1	-
New Hampshire	-	-	14	-	2	1	-	20	-	-	3	-
Vermont	-	-	-	-	-	-	2	2	-	-	-	-
Massachusetts	-	2	10	1	5	6	11	89	-	3	19	-
Rhode Island	-	12	1	-	3	2	18	204	-	-	3	-
Connecticut	26	85	7	2	10	9	29	187	-	2	22	-
MIDDLE ATLANTIC	193	1,102	242	9	35	30	128	882	1	51	448	-
Upstate New York	52	487	58	2	9	11	12	147	1	5	40	-
New York City	5	50	28	1	10	5	43	356	-	5	24	-
New Jersey	24	78	109	3	6	5	49	218	-	37	352	-
Pennsylvania*	112	487	47	3	10	9	24	161	-	4	32	-
EAST NORTH CENTRAL ...	514	2,641	1,545	5	45	48	705	5,096	5	170	905	-
Ohio	-	4	28	1	22	8	133	745	-	9	63	-
Indiana	136	564	101	1	3	1	-	454	-	18	144	-
Illinois	12	167	335	1	4	9	70	598	3	31	188	-
Michigan	186	871	716	2	15	24	340	2,073	2	95	378	-
Wisconsin*	180	1,035	365	-	1	6	162	1,226	-	17	132	-
WEST NORTH CENTRAL ...	61	151	1,000	4	37	26	204	1,452	3	24	123	1
Minnesota	8	29	-	3	5	3	11	335	-	-	6	-
Iowa*	-	12	105	-	6	4	55	495	1	4	5	-
Missouri*	-	4	38	1	6	15	2	112	-	-	14	-
North Dakota	-	1	194	-	-	-	9	77	-	-	1	1
South Dakota	-	-	204	-	1	-	-	1	-	-	1	-
Nebraska	1	35	161	-	2	1	5	43	-	-	1	-
Kansas	52	70	298	-	17	3	122	389	2	20	95	-
SOUTH ATLANTIC	73	572	49	4	80	61	101	1,066	2	83	459	2
Delaware*	24	58	-	-	-	1	2	12	-	-	5	-
Maryland	24	259	-	-	6	4	33	289	-	-	-	1
District of Columbia	-	1	-	-	-	3	1	36	-	45	45	-
Virginia	1	7	6	3	7	8	2	117	1	7	45	-
West Virginia	17	71	35	-	3	-	42	269	-	27	155	-
North Carolina	-	-	-	-	16	10	10	210	-	1	9	-
South Carolina	-	-	-	1	10	8	7	15	1	-	185	-
Georgia	-	-	-	-	5	7	-	-	-	-	-	-
Florida	7	176	8	-	33	20	4	118	-	3	15	1
EAST SOUTH CENTRAL ...	34	170	39	3	24	52	148	923	-	8	57	1
Kentucky	33	160	29	2	2	19	64	387	-	4	15	1
Tennessee	-	5	7	2	12	18	72	457	-	4	42	-
Alabama	-	-	-	-	7	10	8	62	-	-	-	-
Mississippi	1	5	3	1	3	5	4	17	-	-	-	-
WEST SOUTH CENTRAL ...	13	277	62	11	62	65	137	773	2	17	117	1
Arkansas*	-	-	-	-	2	4	2	12	-	-	-	-
Louisiana	-	5	-	3	7	14	-	6	1	1	31	1
Oklahoma	2	185	11	-	11	6	62	240	-	4	28	-
Texas*	11	87	51	8	42	41	73	515	1	12	58	-
MOUNTAIN	156	1,275	229	2	19	10	42	471	1	43	102	-
Montana	7	46	-	1	2	2	-	7	-	36	38	-
Idaho*	83	516	3	1	1	-	7	237	1	2	9	-
Wyoming	-	-	-	-	-	-	-	-	-	2	2	-
Colorado	12	31	224	-	8	5	34	83	-	-	4	-
New Mexico	-	3	-	-	1	2	-	68	-	2	5	-
Arizona	1	18	1	-	3	1	-	-	-	-	-	-
Utah	53	656	-	-	4	-	1	68	-	1	42	-
Nevada	-	5	1	-	-	-	-	8	-	-	2	-
PACIFIC	54	377	646	6	48	37	173	1,345	1	53	317	1
Washington	9	34	29	2	13	4	57	567	-	3	59	-
Oregon	3	5	47	3	5	-	16	133	1	4	27	1
California	42	336	570	1	28	33	97	628	-	46	226	-
Alaska	-	-	-	-	1	-	2	11	-	-	-	-
Hawaii	-	2	-	-	1	-	1	6	-	-	5	-
Guam	-	4	4	-	1	-	-	2	-	-	-	-
Puerto Rico	12	33	113	-	1	1	45	215	-	-	4	1
Virgin Islands	-	-	2	-	-	-	-	18	-	-	1	-

*Delayed Reports: Malaria: Mich. 1; Measles: Iowa delete 4, Del. 1, Texas delete 3, Idaho 21; Men. Inf.: Pa. 1 (1975), Wisc. 3, Mo. 1; Mumps: Idaho 14; Pertussis: Idaho 2; Rubella: N. Ham. 4, Iowa 4, Del. delete 1, Ark. 36, Idaho 5

Table III-Continued
 Cases of Specified Notifiable Diseases: United States
 Weeks Ending March 13, 1976 and March 8, 1975 - 10th Week

REPORTING AREA	TUBERCULOSIS		TULA-REMI	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (RMSF)		VENEREAL DISEASES (Civilian Cases Only)					RABIES IN ANIMALS	
	1976	CUM. 1976	CUM. 1976	1976	CUM. 1976	1976	CUM. 1976	1976	GONORRHEA		SYPHILIS (Pri. & Sec.)		CUM. 1976	
									CUMULATIVE		1976	CUMULATIVE		
		1976	1975					1976	1975					
UNITED STATES	625	5,892	24	5	66	-	5	17,558	187,495	175,783	494	5,156	4,917	343
NEW ENGLAND	26	231	-	-	10	-	-	558	5,223	4,802	14	136	170	7
Maine	1	14	-	-	-	-	-	24	457	282	-	6	3	7
New Hampshire	1	10	-	-	2	-	-	14	113	149	-	-	6	-
Vermont	2	9	-	-	-	-	-	11	108	82	-	2	2	-
Massachusetts	20	141	-	-	7	-	-	324	2,518	2,395	8	91	111	-
Rhode Island	1	17	-	-	-	-	-	18	333	371	2	8	2	-
Connecticut	1	40	-	-	1	-	-	167	1,694	1,523	4	29	46	-
MIDDLE ATLANTIC	100	959	-	1	13	-	-	1,643	19,026	21,394	81	874	940	1
Upstate New York	9	143	-	-	2	-	-	198	2,658	4,130	8	50	103	-
New York City	22	338	-	-	8	-	-	747	8,127	9,243	52	588	556	-
New Jersey	32	197	-	1	2	-	-	145	3,233	2,816	11	122	134	1
Pennsylvania*	37	281	-	-	1	-	-	553	5,008	5,205	10	114	147	-
EAST NORTH CENTRAL	60	699	-	-	1	-	-	3,262	31,277	29,872	26	444	392	14
Ohio	3	136	-	-	1	-	-	1,302	8,207	8,257	5	106	85	-
Indiana	13	122	-	-	-	-	-	214	2,875	2,614	2	25	28	1
Illinois	16	181	-	-	-	-	-	1,070	11,246	9,975	11	234	193	3
Michigan	20	233	-	-	-	-	-	516	6,186	6,111	6	62	62	-
Wisconsin	8	27	-	-	-	-	-	160	2,763	2,915	2	17	24	10
WEST NORTH CENTRAL	34	256	9	-	2	-	-	987	9,449	8,460	16	163	115	62
Minnesota	5	43	3	-	1	-	-	116	1,791	1,745	2	24	12	19
Iowa	2	23	-	-	-	-	-	178	1,253	940	10	79	5	12
Missouri	21	125	5	-	1	-	-	439	3,759	3,149	2	43	69	9
North Dakota	1	9	-	-	-	-	-	13	132	145	-	-	3	16
South Dakota	1	17	-	-	-	-	-	12	280	372	1	2	2	1
Nebraska	2	11	-	-	-	-	-	78	759	733	-	5	3	-
Kansas*	2	28	1	-	-	-	-	151	1,475	1,376	1	10	21	5
SOUTH ATLANTIC	123	1,303	3	1	9	-	2	3,956	44,417	43,938	124	1,528	1,556	65
Delaware	4	12	-	-	-	-	-	71	671	610	-	14	13	-
Maryland	19	189	1	-	-	-	-	517	6,114	4,940	17	127	119	-
District of Columbia	8	51	-	-	-	-	-	327	2,735	2,999	19	141	128	-
Virginia	29	236	-	-	1	-	-	473	5,071	4,616	12	136	125	12
West Virginia*	9	68	-	-	-	-	-	65	587	537	1	10	4	4
North Carolina	18	239	2	-	-	-	1	750	6,783	6,422	18	275	205	-
South Carolina	17	76	-	-	-	-	-	442	4,150	4,088	7	81	123	1
Georgia	-	162	-	1	2	-	1	611	8,248	7,916	20	196	218	35
Florida	19	270	-	-	6	-	-	700	10,058	11,810	30	548	621	9
EAST SOUTH CENTRAL	51	538	5	1	3	-	1	1,576	16,694	14,022	23	226	217	25
Kentucky	-	112	1	-	2	-	-	173	2,184	1,760	4	37	30	18
Tennessee	15	153	4	1	1	-	-	519	6,502	5,746	2	90	85	4
Alabama	16	169	-	-	-	-	1	498	4,583	3,638	7	41	60	3
Mississippi	20	104	-	-	-	-	-	386	3,425	2,878	10	58	42	-
WEST SOUTH CENTRAL	85	707	2	1	2	-	2	1,948	26,810	22,236	69	571	465	61
Arkansas	6	116	1	-	-	-	1	195	2,285	2,167	1	21	7	14
Louisiana*	6	109	-	-	-	-	-	257	3,833	3,927	15	125	109	-
Oklahoma*	9	64	-	-	-	-	1	235	2,461	1,933	6	31	24	19
Texas*	64	418	1	1	2	-	-	1,261	18,231	14,209	47	394	325	28
MOUNTAIN	19	152	1	-	5	-	-	739	7,413	6,661	6	130	121	26
Montana	-	10	1	-	2	-	-	44	391	401	-	2	3	20
Idaho*	-	4	-	-	-	-	-	21	361	333	-	6	2	-
Wyoming	-	3	-	-	-	-	-	6	168	162	-	4	1	1
Colorado	6	24	-	-	-	-	-	283	1,927	1,861	1	40	28	-
New Mexico*	6	27	-	-	1	-	-	156	1,533	1,093	2	39	30	-
Arizona	4	73	-	-	2	-	-	167	2,068	1,738	3	30	44	5
Utah	2	4	-	-	-	-	-	41	439	383	-	1	1	-
Nevada*	1	7	-	-	-	-	-	21	526	690	-	8	12	-
PACIFIC	127	1,047	4	1	21	-	-	2,889	27,186	24,398	135	1,084	941	82
Washington*	8	115	1	-	1	-	-	292	2,288	2,255	-	54	56	-
Oregon	8	37	1	-	-	-	-	128	2,028	2,085	3	33	23	-
California	108	770	2	1	20	-	-	2,376	21,486	18,963	129	977	851	62
Alaska	-	15	-	-	-	-	-	41	807	642	-	1	-	20
Hawaii	3	110	-	-	-	-	-	52	577	453	3	19	11	-
Guam	-	8	-	-	-	-	-	-	66	90	-	-	1	-
Puerto Rico	4	70	-	-	-	-	-	37	510	609	15	106	137	7
Virgin Islands	-	-	-	-	-	-	-	3	54	35	1	24	9	-

*Delayed Reports: TB: Kans. delete 1, Okla. delete 1; GC: Pa. 100, La. delete 16, Tex. delete 2 (mil), Idaho 8, Nev. 4; Syphilis: W. Va. delete 1, La. delete 1, Texas 2, Idaho 2, N. Mex. delete 1, Nev. 2, Wash. delete 27

Table IV
Deaths in 121 United States Cities*
Week Ending March 13, 1976

REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES	REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES
	ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year			ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year	
NEW ENGLAND	775	528	173	30	26	90	SOUTH ATLANTIC ...	1,261	743	361	68	48	87
Boston, Mass.	218	136	52	10	10	15	Atlanta, Ga.	169	88	56	9	8	8
Bridgeport, Conn.	46	29	11	3	1	8	Baltimore, Md.	244	149	66	13	11	18
Cambridge, Mass.	30	20	10	-	-	6	Charlotte, N. C.	49	23	19	3	2	3
Fall River, Mass.	29	26	3	-	-	2	Jacksonville, Fla.	88	50	31	2	2	1
Hartford, Conn.	44	30	7	2	2	5	Miami, Fla.	110	67	30	7	1	9
Lowell, Mass.	21	16	3	1	-	6	Norfolk, Va.	83	51	24	4	3	12
Lynn, Mass.	29	24	5	-	-	2	Richmond, Va.	100	56	24	7	9	5
New Bedford, Mass.	37	32	5	-	-	7	Savannah, Ga.	49	24	22	1	-	6
New Haven, Conn.	60	33	22	4	-	3	St. Petersburg, Fla.	76	64	11	-	1	5
Providence, R.I.	88	53	22	6	6	18	Tampa, Fla.	79	57	11	7	1	12
Somerville, Mass.	14	11	3	-	-	3	Washington, D. C.	149	73	52	11	8	7
Springfield, Mass.	62	49	8	1	4	8	Wilmington, Del.	65	41	15	4	2	1
Waterbury, Conn.	39	26	10	1	2	2	EAST SOUTH CENTRAL	778	468	191	47	46	55
Worcester, Mass.	58	43	12	2	1	5	Birmingham, Ala.	96	61	22	5	7	1
MIDDLE ATLANTIC ...	3,425	2,313	750	179	114	276	Chattanooga, Tenn.	53	41	9	2	-	4
Albany, N. Y.	65	48	10	4	3	4	Knoxville, Tenn.	60	37	16	6	-	2
Allentown, Pa.	29	23	6	-	-	2	Louisville, Ky.	138	77	41	12	5	11
Buffalo, N. Y.	188	128	49	2	9	19	Memphis, Tenn.	222	135	49	12	20	26
Camden, N. J.	42	24	14	2	1	-	Mobile, Ala.	69	41	15	5	4	1
Elizabeth, N. J.	28	20	6	1	-	2	Montgomery, Ala.	27	14	9	1	2	3
Erie, Pa.	54	33	12	5	2	5	Nashville, Tenn.	113	62	30	4	8	7
Jersey City, N. J.	49	35	9	3	1	2	WEST SOUTH CENTRAL	1,557	917	399	106	60	113
Newark, N. J.	69	47	15	5	2	7	Austin, Tex.	58	37	12	5	1	5
New York City, N. Y.†	1,706	1,157	351	99	54	136	Baton Rouge, La.	67	45	12	7	1	5
Paterson, N. J.	34	24	5	2	3	4	Corpus Christi, Tex.	47	32	7	1	3	2
Philadelphia, Pa.	403	253	105	22	18	14	Dallas, Tex.	234	134	60	19	12	11
Pittsburgh, Pa.	202	118	55	11	12	18	El Paso, Tex.	70	40	17	8	-	13
Reading, Pa.	45	36	9	-	-	1	Fort Worth, Tex.	109	63	33	7	3	13
Rochester, N. Y.	160	118	30	7	1	29	Houston, Tex.	330	168	98	27	16	25
Schenectady, N. Y.	37	28	5	1	1	4	Little Rock, Ark.	73	41	19	5	2	7
Scranton, Pa.	61	46	14	1	-	6	New Orleans, La.	234	141	67	8	15	7
Syracuse, N. Y.	129	82	29	11	5	10	San Antonio, Tex.	174	110	38	11	3	17
Trenton, N. J.	41	30	8	2	1	4	Shreveport, La.	78	45	23	6	2	2
Utica, N. Y.	36	28	7	-	1	7	Tulsa, Okla.	83	61	13	2	2	6
Yonkers, N. Y.	47	35	11	1	-	2	MOUNTAIN	698	463	149	32	30	97
EAST NORTH CENTRAL	2,737	1,722	666	165	99	167	Albuquerque, N. Mex. ...	73	45	19	4	1	15
Akron, Ohio	91	59	21	7	3	4	Colorado Springs, Colo.	50	35	10	2	2	19
Canton, Ohio	52	32	14	3	2	8	Denver, Colo.	165	111	33	6	8	12
Chicago, Ill.	678	401	170	51	30	37	Las Vegas, Nev.	25	13	8	3	1	2
Cincinnati, Ohio	147	93	37	9	4	5	Ogden, Utah	26	14	7	-	3	6
Cleveland, Ohio	253	155	62	22	10	14	Phoenix, Ariz.	142	96	29	9	5	5
Columbus, Ohio	134	77	41	10	4	3	Pueblo, Colo.	37	28	8	1	-	30
Dayton, Ohio	96	63	22	7	2	6	Salt Lake City, Utah ..	73	48	13	3	8	7
Detroit, Mich.	416	263	106	21	10	26	Tucson, Ariz.	107	73	22	4	2	1
Evansville, Ind.	50	36	10	1	2	4	PACIFIC	1,959	1,257	461	115	57	120
Fort Wayne, Ind.	46	29	14	-	3	5	Berkeley, Calif.	22	14	7	-	-	2
Gary, Ind.	51	26	16	6	2	5	Fresno, Calif.	78	39	20	7	5	3
Grand Rapids, Mich. ...	63	40	19	1	1	6	Glendale, Calif.	33	23	6	1	2	1
Indianapolis, Ind.	159	88	43	9	10	5	Honolulu, Hawaii	44	24	14	4	2	2
Madison, Wis.	45	30	8	3	1	12	Long Beach, Calif.	114	74	32	3	-	5
Milwaukee, Wis.	136	107	21	2	2	11	Los Angeles, Calif.	611	388	132	47	18	15
Peoria, Ill.	64	37	16	3	4	2	Oakland, Calif.	74	46	21	3	1	2
Rockford, Ill.	47	28	11	2	5	8	Pasadena, Calif.	32	21	8	1	2	1
South Bend, Ind.	53	35	11	4	2	2	Portland, Oreg.	162	106	41	7	6	20
Toledo, Ohio	77	62	12	1	-	2	Sacramento, Calif.	83	44	19	7	8	3
Youngstown, Ohio	79	61	12	3	2	2	San Diego, Calif.	145	90	39	8	2	9
WEST NORTH CENTRAL	846	568	172	41	35	73	San Francisco, Calif. ...	184	122	45	10	3	9
Des Moines, Iowa	73	53	12	5	3	9	San Jose, Calif.	66	47	13	5	-	5
Duluth, Minn.	26	21	2	-	2	5	Seattle, Wash.	197	134	43	8	7	23
Kansas City, Kans.	35	23	10	1	1	3	Spokane, Wash.	70	55	12	1	1	16
Kansas City, Mo.	113	69	26	7	6	6	Tacoma, Wash.	44	30	9	3	-	-
Lincoln, Neb.	50	36	8	1	2	7	TOTAL	14,036	8,979	3,322	783	515	1,078
Minneapolis, Minn.	136	103	22	3	4	14	Expected Number	12,814	7,850	3,335	790	392	526
Omaha, Neb.	98	63	23	7	2	8							
St. Louis, Mo.	172	105	40	10	9	8							
St. Paul, Minn.	74	48	17	5	1	4							
Wichita, Kans.	69	47	12	2	5	9							

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

†Delayed Report for Week Ending 3/6/76 (for NYC)

The Morbidity and Mortality Weekly Report, circulation 52,000, is published by the Center for Disease Control, Atlanta, Georgia. 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.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Send reports to: Center for Disease Control, Attn.: Editor, Morbidity and Mortality Weekly Report, Atlanta, Georgia 30333.

Send mailing list additions, deletions, and address changes to: Center for Disease Control, Attn.: Distribution Services, GSO, 1-SB-36, Atlanta, Georgia 30333. When requesting changes be sure to give your former address, including zip code and mailing list code number, or send an old address label.

Epidemiologic Notes and Reports

Follow-up on Lassa Fever — Washington, D.C.

Lassa fever virus has been isolated from the patient hospitalized in Washington, D.C., on March 1 (MMWR 25 [8,9]). Clinically, the patient continues to improve.

Throat washings and blood specimens were negative for virus on March 2, 3, and 4; urine specimens were negative on March 2 and 4 but positive on March 3. This pattern of intermittent virus isolation from the urine of infected patients is not uncommon with arenaviruses, the

class to which Lassa fever belongs. More recent specimens are being tested.

Surveillance has been extended to include 376 persons who had contact with the patient; this will continue until March 22. No secondary cases have been identified.

Reported by M Wolfe, MD, Washington, D. C.; VO Oner, MD, JR Pate, MD, Acting State Epidemiologist, District of Columbia Community Health and Hospital Admin; Virology Div, Bur of Laboratories, and Viral Diseases Div, Bur of Epidemiology, CDC.

Current Trends

Primary and Secondary Syphilis — United States, December 1975

Primary and secondary syphilis cases numbered 2,064 in December 1975, representing an increase of 0.8% compared to the 2,047 cases reported in December 1974. During calendar year 1975, some 25,713 cases were reported, up 1.1% over the 25,436 cases reported in 1974. During the

6-month period July-December 1975 (the first half of fiscal year 1976), however, reported cases declined by 1.0%.

Reported by Venereal Disease Control Div, Bur of State Services, CDC.

Summary of Reported Primary and Secondary Syphilis Cases by Reporting Area:
December 1975 and December 1974 — Provisional Data

Reporting Area by HEW Regions	December		Calendar Year Cumulative January-December		Reporting Area by HEW Regions	December		Calendar Year Cumulative January-December	
	1975	1974	1975	1974		1975	1974	1975	1974
Connecticut	13	16	204	179	Arkansas	5	5	68	96
Maine	2	7	42	44	Louisiana	41	18	530	570
Massachusetts	31	60	545	638	New Mexico	11	9	154	96
New Hampshire	1	0	16	13	Oklahoma	8	20	90	143
Rhode Island	2	0	25	16	Texas	164	97	1,579	1,405
Vermont	0	1	8	3	REGION VI TOTAL	229	149	2,421	2,310
REGION I TOTAL	49	84	840	893	Iowa	2	3	32	40
New Jersey	45	51	759	839	Kansas	5	4	135	87
New York (Excluding NYC)	27	49	400	528	Missouri	23	34	277	417
New York City	249	314	2,964	3,117	Nebraska	1	0	21	10
REGION II TOTAL	321	414	4,123	4,484	REGION VII TOTAL	31	41	465	554
Delaware	6	2	88	83	Colorado	10	18	112	151
District of Columbia	43	52	669	662	Montana	1	0	8	4
Maryland (Excluding Baltimore)	16	16	223	254	North Dakota	0	0	5	7
Baltimore	23	32	365	483	South Dakota	0	1	4	3
Pennsylvania (Excluding Philadelphia)	24	36	370	248	Utah	3	3	18	13
Philadelphia	24	52	386	671	Wyoming	0	0	6	2
Virginia	40	33	574	705	REGION VIII TOTAL	14	22	153	180
West Virginia	2	2	39	22	Arizona	18	26	250	258
REGION III TOTAL	178	225	2,714	3,128	California (Excluding LA and SF)	209	162	1,985	1,318
Alabama	27	15	270	254	Los Angeles*	168	142	1,933	1,867
Florida	248	233	3,228	2,924	San Francisco*	70	93	949	938
Georgia (Excluding Atlanta)	50	47	666	649	Hawaii	7	6	56	33
Atlanta*	44	36	462	499	Nevada	6	1	53	57
Kentucky	7	11	169	267	DHEW REGION IX TOTAL	478	430	5,226	4,471
Mississippi	14	11	289	269	Alaska	1	2	7	10
North Carolina	82	41	1,102	901	Idaho	1	2	19	14
South Carolina	33	48	539	691	Oregon	19	17	145	119
Tennessee	22	25	421	460	Washington	21	17	215	138
REGION IV TOTAL	527	467	7,146	6,914	REGION X TOTAL	42	38	386	281
Illinois (Excluding Chicago)	27	23	267	271	UNITED STATES TOTAL	2,064	2,047	25,713	25,436
Chicago	66	63	773	836	Puerto Rico	47	75	740	942
Indiana (Excluding Indianapolis)	8	7	109	122	Virgin Islands	4	4	35	31
Indianapolis*	6	3	50	53	United States, including Outlying Areas	2,115	2,126	26,488	26,409
Michigan	26	26	335	425					
Minnesota	9	11	110	85					
Ohio	46	36	516	327					
Wisconsin	7	8	79	102					
REGION V TOTAL	195	177	2,239	2,221					

Note: Cumulative totals include revised and delayed reports through previous months. Source: CDC 9.98, CDC, VD Control Division, Atlanta, Georgia 30333.

*County Data

Epidemiologic Notes and Reports

Leptospirosis — Tennessee

The first reported common-source outbreak of *Leptospira interrogans* serotype *grippityphosa* in the United States occurred in Tennessee in August 1975.

Seven children, 4 males and 3 females ranging in age from 11-16 years, had onset of illness in the period August 1-10, characterized by fever (7), headache (7), nausea and/or vomiting (6), chills (5), myalgias (4) and abdominal pain (1). Five of the 7 were hospitalized; diagnoses included acute viral gastroenteritis (2), shigellosis (1), aseptic meningitis (1); and fever of unknown origin (1). The patient with the latter diagnosis underwent laparotomy because of suspected appendicitis. Another patient was treated as an out-patient for gastroenteritis, and 1 did not consult a physician. The median duration of illness was 14 days and the mean hospital stay of the hospitalized patients was 6.6 days.

Laboratory findings on the 5 hospitalized patients included either minimal pyuria (6-8 white blood cells per high power field) or proteinuria (trace to 1+) in 4 individuals and mildly elevated SGOT levels (range 93-131 IU/ml) in 3.

A specimen of cerebrospinal fluid which was obtained on admission from the patient with aseptic meningitis had a protein of 48mg%, glucose of 60mg%, and 180 white blood cells (WBC)/mm³ (predominantly lymphocytes). The total peripheral blood WBC counts were in the normal range for all 5 patients (4,800-10,400/mm³), but there was a definite shift to the left in 3.

All 7 patients had serologic evidence of recent infection with *Leptospira interrogans* serotype *grippityphosa*. Urine for culture was obtained from 6 patients 16 to 25 days after onset of illness; all were negative for leptospirae.

All 7 patients had swum in a local creek in the month preceding their illness. No other common source could be identified. A case-control study showed a definite association between acquiring leptospirosis and swimming in the creek. A questionnaire and serologic survey of 91 other people who had swum in the creek during the summer of 1975 failed to detect any additional cases.

Samples of the creek water taken for culture and for animal inoculation 4 weeks after the outbreak did not yield the organism. Serum specimens were obtained from 50 cattle in 5 of 7 herds pastured along the creek, but serologic testing did not implicate any herd. Wildlife was also

considered as a possible source of contamination. Limited trapping was unsuccessful; no wild animals were obtained for testing.

Reported by WW Prine, Jr, MD, Clarksville; PF Wright, MD, Vanderbilt University; EP Cutter, MD, Montgomery County Health Dept; J Holt, RN, Stewart County Health Dept; RH Hutcheson, Jr, MD, State Epidemiologist, Tennessee Dept of Public Health; Field Services Div, and Bacterial Zoonoses Branch, Bacterial Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: Because of the prominent gastrointestinal illness and because of failure to incriminate a bacterial pathogen, the outbreak was initially believed to have a viral etiology. Leptospirosis was considered only after the initial epidemiologic investigation incriminated swimming in the stream as the only common factor shared by all 7 patients.

Common-source leptospirosis outbreaks due to *grippityphosa* have been frequently reported in Europe (1). Although prominent gastrointestinal illness can occur with infection by other serotypes, abdominal forms of the disease are considered to be particularly common with *grippityphosa* infections (1).

Reference

1. Alston JM, Broom JC: Leptospirosis in Man and Animals. Edinburgh and London, E&S Livingstone Ltd., 1958, pp 150-155

With this issue the *Morbidity and Mortality Weekly Report (MMWR)* adopts a new format. In addition to the graphic changes, issues are now dated according to the release date; week-ending dates are still given on the tables, however. In addition, Table I, formerly entitled "Cases of Specified Notifiable Diseases: United States," has been moved permanently to the inside front page and renamed "Summary—Cases of Specified Notifiable Diseases: United States." Table II, "Notifiable Diseases of Low Frequency," appears on the same page. Circulation and editorial information, formerly displayed on the back page, now appears below Table IV.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE / CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

Director, Center for Disease Control, David J. Sencer, M.D.
Director, Bureau of Epidemiology, Phillip S. Brachman, M.D.
Editor, Michael B. Gregg, M.D.
Managing Editor, Anne D. Mather, M.A.

OFFICIAL BUSINESS FIRST CLASS

9A1906
Mrs Mary Alice Mills
Director, Library
1-408



POSTAGE AND FEES PAID
U.S. DEPARTMENT OF HEW
HEW 399