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## MORBIDITY AND MORTALITY WEEKLY REPORT

### Epidemiologic Notes and Reports

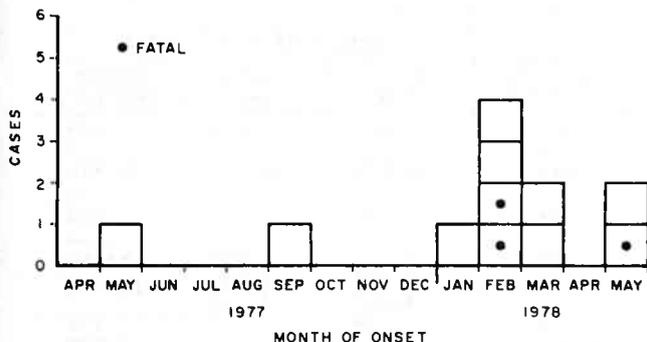
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### Epidemiologic Notes and Reports

#### Legionnaires' Disease — Bloomington, Indiana

Eleven Legionnaires' disease cases with onset in the period from May 1, 1977, through May 31, 1978, in persons who visited Bloomington, Indiana, less than 2 weeks before becoming ill have been confirmed (Figure 1). All cases had pneumonia; 3 were fatal. The patients ranged in age from 34 to 71 years, and 9 were men. Eight cases were confirmed by 4-fold or greater rises in serum indirect fluorescent antibody titer and 3 by examination of lung tissue by direct fluorescence.

**FIGURE 1.** Cases of confirmed Legionnaires' disease, by month of onset, in travelers to Bloomington, Indiana, April 1977-May 1978



Ten of the 11 patients had stayed overnight in the Indiana Memorial Union (IMU), a hotel and convention complex owned by and located on the campus of Indiana University. The other patient had not been in the IMU on his visit to Bloomington.

A telephone survey of a random sample of 118 guests registered at the IMU in the first week of May 1978 identified 2 in whom pneumonia developed in the 2 weeks after departure. Both illnesses were confirmed Legionnaires' disease cases and are included in Figure 1.

Two studies are being conducted to determine whether exposure to the IMU poses an unusual risk of infection with the Legionnaires' disease bacterium and to identify additional cases. Approximately 1,000 guests registered at the IMU and other Bloomington hotels in the first week of May are being queried by mail about illness following their visits, underlying medical problems, and activities in Bloomington. Employees of the IMU and other Bloomington hotels are being asked about previous illness and activities within the hotels. Serum specimens are being taken from employees for measurement by indirect fluorescence of antibodies to the agent of Legionnaires' disease.

*Reported by J Mohatt, T Bonus, Indiana University; R Telle, MD, State Epidemiologist, Indiana State Board of Health; and Bacterial Diseases Div, Bur of Epidemiology, CDC.*

**Editorial Note:** Discovery of a common history of travel in 11 cases, 9 of which had previously been categorized as sporadic cases, suggests a common source of exposure, but the broad distribution of these cases over 13 months rules against a source discrete in time. The surveys in progress may indicate whether or not the source is likely to be in or around the IMU or to be more widely distributed.

#### Lead Paint Poisoning in an Adult — Massachusetts

A 22-year-old male presented to the emergency room of a Boston hospital on February 23, 1978, complaining of several weeks of colicky, abdominal pain without nausea or vomiting. Examination revealed lead lines at the gum margins, diffuse abdominal tenderness with decreased bowel sounds, and no gross evidence of peripheral neuropathy. The hematocrit was 28.6% with approximately 5% basophilic stippled cells. X rays of the chest, kidneys, ureters, and bladder were normal. The patient was admitted to the hospital with a presumptive diagnosis of lead poisoning. A lead level on admission was 118  $\mu\text{g}/\text{dl}$ , and the free erythrocyte protoporphyrin (FEP) level was 139  $\mu\text{g}/\text{dl}$ . Treatment

consisted of intravenous CaEDTA (25  $\mu\text{g}/\text{kg}/\text{day}$  in 3 divided doses) for a total of 6 days. All symptoms resolved within 3 days, and by the sixth day after admission the lead level was 70  $\mu\text{g}/\text{dl}$ .

The patient had been employed by a small company for the past 4 months as a lead-paint stripper doing home deleading jobs. This was done by power sanding and by manual scraping, and while on the job, the patient had not used the paper mask with which he had been provided.

His 6 co-workers were asked to come to the hospital for lead tests. All were found to have elevated lead levels (72-108  $\mu\text{g}/\text{dl}$ ), although none were symptomatic. After the

*Lead Paint Poisoning — Continued*

initial evaluation all were eventually admitted to one of several area hospitals and treated with intravenous CaEDTA (25 µg/kg) on either a 1-day or a 3-day protocol.

Of the 1.8 million dwelling units in Massachusetts, roughly two-thirds (1.2 million) were built before 1950, when the lead content of paint often exceeded 1%; the lead content of most interior paints has been markedly lower since 1950. Because of legislation passed in 1973 ordering the removal of existing lead paint in dwellings where children under 6 years of age reside, there has been an increase in the number of people engaged in deleading homes. Much of this is undertaken by small private firms that operate without state licensure and are not obliged to monitor employee

lead levels or to enforce the wearing of protective equipment. Consequently, many of these workers are at risk of developing elevated lead levels (7).

**Editorial Note:** It is well-recognized (and is demonstrated by this report) that elevated blood lead levels may not be accompanied by symptoms, and practitioners must be aware of the possibility of lead paint poisoning in adults in this occupational group.

*Reported by D Rosenfeld, MD, Boston City Hospital and the Boston University School of Medicine, Boston; E Alpert, MD, R Cecil, BA, J Diggs, MD, B Powers, MD, Boston City Hospital.*

**Reference**

1. Feldman RG: Urban lead mining: Lead intoxication among deleaders. *N Engl J Med* 298:1143-1145, 1978

**Injuries Due to Falls — Washington**

Excluding motor vehicle deaths, falls are the greatest cause of injury-related deaths in the United States. Each year approximately 16,000 persons die from injuries due to falls, and in Washington State the annual number of deaths from falls is approximately 300. In an attempt to examine fatalities due to falls and to determine patterns among nonfatal injuries caused by falls, a retrospective epidemiologic study of the nature and causes of injuries attributed to falls

was conducted by the Washington State Department of Social and Health Services for CDC.

Findings from that study were made from several data bases covering approximately 12,000 injuries associated with falls. Because all data bases were not standardized, the data cannot be presented as 1 study nor can comparisons be made between the studies that make up the report. The following summaries state the results of separate studies

*Continued on page 197*

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

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

DISEASE	22nd WEEK ENDING		MEDIAN 1973-1977††	CUMULATIVE, FIRST 22 WEEKS		
	June 3, 1978	June 4, 1977†		June 3, 1978	June 4, 1977†	MEDIAN 1973-1977††
Aseptic meningitis	58	43	47	853	344	820
Brucellosis	2	9	4	57	84	78
Chickenpox	5,412	4,486	4,486	98,601	136,963	124,870
Diphtheria	3	1	2	36	45	102
Encephalitis	19	12	14	237	257	317
Primary	—	9	8	70	83	119
Post-Infectious	241	339	192	6,112	6,895	4,661
Hepatitis, Viral	534	553	699	11,773	13,505	15,262
Type B	145	150	—	3,609	3,763	—
Type A	17	8	5	198	167	112
Type unspecified	1,206	2,610	1,073	16,499	42,377	19,739
Malaria	52	27	26	1,211	938	747
Measles (rubeola)	51	27	26	1,196	933	729
Meningococcal infections, total	1	—	—	15	5	17
Civilian	416	395	1,166	9,918	12,820	35,712
Military	16	11	—	757	337	—
Mumps	656	680	680	10,466	15,243	12,130
Pertussis	7	4	3	28	22	27
Rubella (German measles)	436	508	553	12,095	12,598	13,453
Tetanus	—	4	4	31	49	40
Tuberculosis	8	12	6	173	146	138
Tularemia	20	41	26	137	221	135
Typhoid fever	—	—	—	—	—	—
Typhus, tick-borne (Rky. Mt. spotted fever)	—	—	—	—	—	—
Venereal Diseases:	—	—	—	—	—	—
Gonorrhea	14,654	15,526	16,577	385,168	392,087	394,959
Civilian	421	471	471	10,044	11,216	12,549
Military	349	268	358	8,639	8,668	10,570
Syphilis, primary and secondary	3	5	5	130	129	146
Civilian	—	—	—	—	—	—
Military	67	59	59	1,239	1,226	1,226
Rabies in animals	—	—	—	—	—	—

**Table II. Notifiable Diseases of Low Frequency: United States**

	CUM.		CUM.
Anthrax:	3	Poliomyelitis, total:	—
Botulism:	49	Paralytic:	—
Congenital rubella syndrome:	12	Psittacosis: * N.H. 2, Minn. 1	47
Leprosy: * Pa. 1	42	Rabies in man:	—
Leptospirosis: Wash. 1	18	Trichinosis:*	18
Plague:	1	Typhus, murine: Tex. 1	15

† Delayed reports received for calendar year 1977 are used to update last year's weekly and cumulative totals.

†† Medians for Gonorrhea and Syphilis are based on data for 1975-1977.

\* Delayed reports: Botulism: Calif. 1; Leprosy: Calif. 9; Psittacosis: Tex. 1, Trichinosis: Calif. 1

**Table III**  
**Cases of Specified Notifiable Diseases: United States**  
*Weeks Ending June 3, 1978 and June 4, 1977 - 22nd 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		
						1978	1977†	1978	1978	1978	1978		
UNITED STATES .....	58	2	5,412	3	36	19	12	-	241	534	145	17	198
NEW ENGLAND .....	5	-	554	-	-	-	-	-	4	18	15	-	7
Maine .....	1	-	172	-	-	-	-	-	1	2	1	-	1
New Hampshire .....	-	-	22	-	-	-	-	-	-	3	-	-	1
Vermont .....	-	-	14	-	-	-	-	-	-	3	-	-	-
Massachusetts .....	2	-	211	-	-	-	-	-	-	2	9	-	1
Rhode Island .....	-	-	56	-	-	-	-	-	-	3	-	-	-
Connecticut .....	2	-	79	-	-	-	-	-	3	5	5	-	4
MIDDLE ATLANTIC .....	12	-	653	-	1	3	1	-	31	39	17	4	44
Upstate New York .....	4	-	536	-	-	1	-	-	2	15	2	1	7
New York City* .....	-	-	79	-	1	-	-	-	11	10	5	2	19
New Jersey* .....	6	-	NN	-	-	2	-	-	18	14	10	-	6
Pennsylvania* .....	2	-	38	-	-	-	1	-	-	-	-	1	12
EAST NORTH CENTRAL ..	4	-	2,355	-	-	2	-	-	52	83	15	1	12
Ohio .....	-	-	571	-	-	2	-	-	9	31	-	-	-
Indiana* .....	-	-	325	-	-	-	-	-	6	6	2	-	3
Illinois .....	-	-	249	-	-	-	-	-	23	31	4	1	3
Michigan .....	4	-	658	-	-	-	-	-	11	13	8	-	5
Wisconsin* .....	-	-	552	-	-	-	-	-	3	2	1	-	1
WEST NORTH CENTRAL ..	1	-	694	-	1	2	-	-	9	34	-	-	11
Minnesota .....	-	-	-	-	-	-	-	-	6	16	-	-	3
Iowa .....	-	-	489	-	-	-	-	-	-	4	-	-	-
Missouri* .....	1	-	10	-	1	1	-	-	1	3	-	-	4
North Dakota .....	-	-	14	-	-	-	-	-	-	2	-	-	-
South Dakota .....	-	-	10	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	16	-	-	-	-	-	1	1	-	-	3
Kansas .....	-	-	155	-	-	1	-	-	1	8	-	-	1
SOUTH ATLANTIC .....	7	-	489	-	-	3	2	-	33	49	24	4	40
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-	1
Maryland .....	1	-	128	-	-	2	1	-	-	-	-	-	9
District of Columbia ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	3	-	56	-	-	-	1	-	1	3	11	2	10
West Virginia* .....	-	-	184	-	-	-	-	-	4	1	-	-	1
North Carolina .....	-	-	NN	-	-	-	-	-	8	3	6	-	1
South Carolina .....	-	-	3	-	-	1	-	-	1	1	-	-	2
Georgia .....	-	-	-	-	-	-	-	-	5	9	-	1	4
Florida .....	3	-	118	-	-	-	-	-	14	32	7	1	12
EAST SOUTH CENTRAL ..	4	-	208	-	-	1	1	-	14	29	-	-	3
Kentucky .....	-	-	181	-	-	-	-	-	3	10	-	-	1
Tennessee .....	2	-	NN	-	-	1	1	-	7	10	-	-	1
Alabama .....	2	-	4	-	-	-	-	-	2	-	-	-	1
Mississippi .....	-	-	23	-	-	-	-	-	2	9	-	-	-
WEST SOUTH CENTRAL ..	6	2	170	-	1	3	4	-	17	77	34	2	11
Arkansas .....	1	-	5	-	1	-	-	-	-	7	6	-	-
Louisiana .....	1	-	NN	-	-	-	-	-	4	12	1	-	3
Oklahoma* .....	2	-	-	-	-	2	1	-	2	6	4	-	-
Texas .....	2	2	165	-	-	1	3	-	11	52	23	2	8
MOUNTAIN .....	1	-	135	-	3	-	-	-	11	52	14	-	3
Montana .....	-	-	56	-	-	-	-	-	1	3	1	-	-
Idaho .....	-	-	10	-	-	-	-	-	-	21	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	-	-	58	-	2	-	-	-	4	4	3	-	1
New Mexico .....	1	-	5	-	-	-	-	-	3	12	3	-	-
Arizona* .....	-	-	NN	-	-	-	-	-	1	-	1	-	1
Utah .....	-	-	1	-	-	-	-	-	1	11	6	-	-
Nevada .....	-	-	5	-	1	-	-	-	1	1	-	-	1
PACIFIC .....	18	-	154	3	30	5	4	-	70	153	26	6	67
Washington .....	-	-	129	-	27	-	-	-	8	22	1	-	3
Oregon .....	-	-	-	-	-	-	2	-	8	27	4	-	3
California* .....	15	-	-	-	-	5	2	-	51	99	20	5	49
Alaska .....	1	-	7	3	3	-	-	-	1	2	-	-	1
Hawaii* .....	2	-	18	-	-	-	-	-	2	3	1	1	11
Guam* .....	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-
Puerto Rico .....	-	-	3	-	-	-	-	-	-	3	1	-	4
Virgin Islands .....	-	-	-	-	-	-	-	-	-	-	-	-	1

NN: Not notifiable

NA: Not available

†Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

\*The following delayed reports will be reflected in next week's cumulative totals: Asep. meng.: NYC +1, Ind. +1, Calif. +4; Chickenpox: NYC +124, Ind. +357, W. Va. +280, Calif. +141, Guam +30; Enceph.: NYC +1, Ind. +1, Mo. +1, Calif. +2; Enceph. post.: Wis. +1, Calif. +1; Hep. B: NYC +9, N.J. -7, Pa. +12, Ind. +1, Wis. -1, W. Va. +2, Ariz. +5, Calif. +53; Hep. A: NYC +17, N.J. -5, Pa. +16, Ind. +6, Wis. -1, W. Va. +13, Ariz. +32, Calif. +88, Guam +7; Hep. unsp.: NYC +8, N.J. -12, Pa. +2, Ind. +1, Okla. -1, Ariz. +9, Calif. +36, Guam +5; Malaria: NYC +2, Calif. +12, Hawaii +1

Table III-Continued  
 Cases of Specified Notifiable Diseases: United States  
 Weeks Ending June 3, 1978 and June 4, 1977 - 22nd Week

REPORTING AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1978	CUMULATIVE		1978	CUMULATIVE		1978	CUM. 1978	1978	1978	CUM. 1978	CUM. 1978
		1976	1977 †		1978	1977 †						
UNITED STATES .....	1,206	16,499	42,377	52	1,211	938	416	9,918	16	696	10,466	28
NEW ENGLAND .....	71	1,782	1,942	1	58	41	12	628	-	35	574	-
Maine .....	55	1,231	34	-	5	3	6	458	-	1	139	-
New Hampshire* .....	1	25	474	-	6	3	-	9	-	10	94	-
Vermont .....	-	24	263	-	2	4	-	5	-	2	27	-
Massachusetts* .....	15	183	518	1	15	13	3	61	-	12	138	-
Rhode Island .....	-	4	38	-	13	-	2	22	-	1	29	-
Connecticut .....	-	311	613	-	17	18	1	73	-	9	147	-
MIDDLE ATLANTIC .....	158	1,427	5,990	21	201	120	17	388	1	140	1,992	1
Upstate New York .....	131	965	2,376	6	67	29	9	136	1	57	372	-
New York City* .....	5	150	312	6	46	27	2	94	-	5	48	-
New Jersey .....	14	52	125	4	42	27	5	83	-	56	1,244	-
Pennsylvania* .....	8	260	3,177	5	46	37	1	75	-	22	328	1
EAST NORTH CENTRAL ..	600	6,783	8,726	5	99	105	206	3,646	2	315	4,537	1
Ohio .....	23	317	819	1	22	35	46	464	-	-	718	-
Indiana* .....	5	109	3,976	1	20	7	27	179	-	67	402	1
Illinois .....	29	455	1,123	-	6	27	29	1,219	2	6	276	-
Michigan .....	469	4,686	770	1	41	24	58	1,083	-	181	1,902	-
Wisconsin* .....	70	1,216	2,038	2	10	12	46	701	-	61	1,239	-
WEST NORTH CENTRAL ..	33	327	8,466	-	42	50	16	1,807	2	49	475	3
Minnesota .....	1	28	2,033	-	8	19	1	13	2	7	48	-
Iowa .....	1	48	4,068	-	5	7	3	109	-	11	40	-
Missouri .....	-	7	897	-	19	14	1	1,099	-	-	81	-
North Dakota* .....	5	177	16	-	3	1	-	9	-	5	70	-
South Dakota .....	-	-	65	-	2	4	-	6	-	-	80	-
Nebraska* .....	-	3	180	-	-	1	-	15	-	-	34	-
Kansas .....	22	64	1,207	-	5	4	11	556	-	26	122	3
SOUTH ATLANTIC .....	211	3,577	3,191	9	319	212	15	533	2	55	817	3
Delaware .....	-	5	22	-	10	17	-	33	-	-	32	-
Maryland .....	-	3	286	2	15	13	-	51	-	1	3	1
District of Columbia ..	-	-	11	-	-	-	-	1	-	-	1	-
Virginia* .....	61	2,195	1,762	1	41	16	4	90	-	5	210	-
West Virginia* .....	58	767	169	-	5	8	2	133	-	10	247	-
North Carolina .....	5	88	47	1	61	51	1	46	-	5	164	-
South Carolina .....	11	178	129	1	21	20	1	14	-	3	22	-
Georgia .....	-	12	646	1	39	33	-	56	2	-	1	-
Florida .....	76	325	119	3	126	54	7	109	-	31	137	2
EAST SOUTH CENTRAL ..	74	1,029	1,602	2	102	107	91	840	2	13	301	1
Kentucky .....	4	85	929	-	16	19	68	166	-	7	50	1
Tennessee .....	50	755	577	-	26	24	4	369	2	3	116	-
Alabama .....	3	52	72	2	32	43	14	260	-	2	11	-
Mississippi .....	17	137	24	-	28	21	5	45	-	1	124	-
WEST SOUTH CENTRAL ..	28	877	1,873	9	185	167	31	1,340	3	19	756	12
Arkansas .....	-	10	26	-	14	9	2	557	2	-	57	1
Louisiana .....	12	352	71	4	70	60	-	48	-	12	428	1
Oklahoma .....	-	12	51	-	16	6	-	4	-	1	10	2
Texas .....	16	503	1,725	5	85	92	29	731	1	6	261	8
MOUNTAIN .....	6	180	2,193	1	26	23	3	179	-	35	148	-
Montana* .....	2	97	1,044	-	1	2	2	11	-	1	12	-
Idaho .....	-	1	105	-	2	3	-	20	-	-	3	-
Wyoming .....	-	-	4	-	-	1	-	-	-	-	-	-
Colorado .....	3	29	463	-	2	1	-	55	-	2	33	-
New Mexico* .....	-	-	246	1	5	6	-	15	-	-	3	-
Arizona* .....	-	15	245	-	9	9	-	5	-	25	65	-
Utah .....	-	31	5	-	4	1	-	69	-	1	23	-
Nevada .....	1	13	81	-	3	1	1	4	-	6	9	-
PACIFIC .....	25	517	8,394	4	179	113	25	557	4	35	866	7
Washington .....	4	50	435	-	31	12	3	155	2	1	89	-
Oregon .....	6	134	290	-	9	16	5	66	-	4	70	-
California* .....	15	329	7,592	3	131	62	16	307	2	30	705	7
Alaska .....	-	1	55	-	5	21	1	6	-	-	1	-
Hawaii .....	-	3	22	1	3	2	-	23	-	-	1	-
Guam* .....	NA	1	4	-	-	-	NA	15	NA	NA	-	-
Puerto Rico .....	13	131	665	-	2	-	23	803	1	1	12	3
Virgin Islands .....	-	6	10	-	-	-	-	1	-	-	1	-

NA: Not available

† Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

\* The following delayed reports will be reflected in next week's cumulative totals: Measles: N.H. +4, Mass. -2, NYC +9, Pa. +6, Ind. +19, Wis. -1, N.Dak. -1, Nebr. +1, Va. -1, W. Va. +96, Mont. -2, Ariz. +2, Calif. +24, Guam +16; Men. inf.: NYC +3, Ind. +1, Wis. +1, Ariz. +1, Calif. +4; Mumps: NYC +3, Ind. +23, W. Va. +3, Calif. +18, Guam +3; Pertussis: NYC +1, N. Mex. +2, Calif. +8; Rubella: Mass. -2, NYC +5, Ind. +40, N. Dak. -1, W. Va. +32, Ariz. +6, Calif. +30

Table III-Continued  
Cases of Specified Notifiable Diseases: United States  
Weeks Ending June 3, 1978 and June 4, 1977 - 22nd Week

REPORTING AREA	TUBERCULOSIS		TULA-REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (RMSF)		VENEREAL DISEASES (Civilian Cases Only)						RABIES IN ANIMALS
	1978	CUM. 1978	CUM. 1978	1978	CUM. 1978	1978	CUM. 1978	GONORRHEA		SYPHILIS (Pri. & Sec.)		CUM. 1978		
								1978	CUMULATIVE		1978		CUMULATIVE	
									1978	1977 †			1978	1977 †
UNITED STATES	436	12,095	31	8	173	20	137	14,654	385,168	392,087	349	8,639	8,668	1,239
NEW ENGLAND	17	402	-	-	34	-	2	430	10,018	10,231	8	271	347	52
Maine	1	24	-	-	-	-	-	39	772	745	1	7	8	49
New Hampshire*	-	8	-	-	5	-	-	24	455	400	-	4	2	-
Vermont	1	17	-	-	1	-	-	9	254	271	-	1	4	-
Massachusetts	11	234	-	-	19	-	-	180	4,376	4,434	5	175	258	1
Rhode Island	2	27	-	-	4	-	-	38	723	824	-	10	4	-
Connecticut	2	92	-	-	5	-	2	140	3,438	3,557	2	74	71	2
MIDDLE ATLANTIC	65	2,062	1	1	19	-	5	1,428	41,564	40,664	36	1,131	1,231	24
Upstate New York*	7	302	1	1	7	-	3	284	6,870	6,380	7	87	114	19
New York City*	26	723	-	-	8	-	-	624	16,006	17,032	24	794	773	-
New Jersey	19	538	-	-	2	-	-	81	7,424	6,491	4	127	157	3
Pennsylvania	13	499	-	-	2	-	2	439	11,264	10,761	1	123	187	2
EAST NORTH CENTRAL	58	1,846	-	-	7	1	1	3,195	57,432	59,874	63	967	954	47
Ohio	12	334	-	-	2	-	-	1,008	15,191	15,234	4	192	237	3
Indiana*	16	225	-	-	-	-	-	192	5,591	5,738	4	52	68	4
Illinois	9	668	-	-	1	1	1	1,221	18,119	19,677	49	604	501	11
Michigan*	13	532	-	-	4	-	-	571	13,233	13,557	4	89	104	1
Wisconsin	8	87	-	-	-	-	-	203	5,298	5,668	2	30	44	28
WEST NORTH CENTRAL	18	428	8	-	10	-	4	909	19,407	20,311	8	214	209	284
Minnesota	4	50	-	-	4	-	-	174	3,487	3,622	6	96	65	99
Iowa	-	46	-	-	2	-	-	109	2,247	2,427	-	23	18	59
Missouri*	12	183	7	-	2	-	3	352	7,931	8,555	-	55	73	31
North Dakota	-	19	-	-	-	-	-	12	374	378	-	2	2	43
South Dakota	2	38	-	-	-	-	-	25	709	535	-	1	1	37
Nebraska	-	5	-	-	-	-	-	95	1,483	1,758	2	7	21	1
Kansas	-	47	1	-	2	-	1	142	3,176	3,036	-	30	29	14
SOUTH ATLANTIC	105	2,616	3	3	22	12	75	2,886	93,078	95,490	89	2,323	2,484	146
Delaware	1	20	-	-	-	2	2	36	1,334	1,317	-	4	16	1
Maryland	14	417	3	-	1	-	7	477	12,149	12,135	3	179	166	-
District of Columbia	7	142	-	-	1	-	-	188	6,328	6,266	14	186	263	-
Virginia*	17	289	-	1	5	3	23	322	3,618	4,851	8	204	246	2
West Virginia*	1	90	-	-	1	-	4	41	1,350	1,402	-	8	1	-
North Carolina*	14	411	-	1	2	4	22	364	13,030	14,281	6	205	362	3
South Carolina	9	218	-	-	1	-	8	518	8,964	8,877	7	106	108	21
Georgia	21	359	-	-	2	3	9	NA	17,113	18,418	20	567	466	109
Florida	21	670	-	1	9	-	-	940	24,192	22,943	31	864	856	10
EAST SOUTH CENTRAL	43	1,173	4	-	1	2	21	1,034	33,666	35,102	17	426	500	68
Kentucky*	12	244	1	-	1	2	3	173	3,972	4,702	-	49	33	38
Tennessee	16	375	3	-	-	-	18	463	12,338	14,398	8	164	93	15
Alabama	15	298	-	-	-	-	-	190	9,933	9,533	6	62	51	15
Mississippi	-	256	-	-	-	-	-	208	7,423	6,469	3	151	123	-
WEST SOUTH CENTRAL	49	1,385	12	1	17	5	28	1,677	54,123	50,623	44	1,315	1,132	431
Arkansas	8	153	11	-	-	1	10	264	4,110	3,931	2	37	29	69
Louisiana	-	254	1	-	1	-	-	213	8,961	7,550	2	259	257	7
Oklahoma	-	142	-	-	1	3	11	99	4,936	4,684	1	39	33	99
Texas*	41	836	-	1	15	1	7	1,101	36,216	34,458	39	980	813	256
MOUNTAIN	17	341	2	-	10	-	-	539	14,038	15,909	21	184	178	15
Montana	4	28	-	-	-	-	-	31	858	781	-	7	1	2
Idaho	1	11	2	-	5	-	-	23	517	773	-	2	4	-
Wyoming	-	7	-	-	-	-	-	16	331	395	-	4	2	-
Colorado	3	25	-	-	2	-	-	250	4,064	4,099	14	65	54	-
New Mexico	4	63	-	-	-	-	-	53	1,991	2,285	-	48	34	5
Arizona*	5	160	-	-	1	-	-	93	3,331	4,608	6	34	73	8
Utah	-	19	-	-	1	-	-	36	832	911	1	7	4	-
Nevada	-	28	-	-	1	-	-	37	2,114	2,057	-	17	6	-
PACIFIC	64	1,842	1	3	53	-	1	2,556	61,842	63,883	63	1,808	1,833	172
Washington*	6	62	-	-	3	-	-	271	4,961	4,909	NA	59	82	-
Oregon	7	81	-	-	-	-	-	219	4,488	4,552	4	66	56	1
California*	42	1,412	1	3	48	-	1	1,971	49,070	50,952	59	1,661	1,662	169
Alaska	-	25	-	-	-	-	-	70	2,374	2,390	-	5	13	2
Hawaii	9	262	-	-	2	-	-	26	1,249	1,380	-	17	20	-
Guam*	NA	30	-	NA	-	NA	-	NA	71	104	NA	-	1	-
Puerto Rico	5	190	-	-	1	-	-	61	1,066	1,325	4	188	243	10
Virgin Islands*	-	2	-	-	2	-	-	3	84	84	-	6	3	-

NA: Not available

† Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

\* The following delayed reports will be reflected in next week's cumulative totals: TB: NYC +1, Ind. +12, Mich. -1, Mo. -1, W. Va. +3, N.C. -1, Ariz. +11, Wash. +20, Calif. +84, Guam +2; T. fever: Calif. +1, RMSF: Va. -1, Tex. -1; GC: N.H. +1 mil., Ups. N.Y. +100 civ., NYC +665 civ., Ind. +351 civ., Nebr. +10 civ., W. Va. +65 civ., Ariz. +121 civ. +1 mil., Calif. +2758 civ. +34 mil., Guam +11 civ., V.I. +4 civ.; Syphilis: NYC +37, Calif. +65; An. rabies: Ups. N.Y. +3, Ky. +2, Ariz. +3, Calif. +8

Table IV  
Deaths in 121 United States Cities\*  
Week Ending June 3, 1978 - 22nd Week

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	
<b>NEW ENGLAND</b> .....	572	374	144	25	18	29	<b>SOUTH ATLANTIC</b> .....	998	578	264	93	32	35
Boston, Mass. ....	178	104	51	9	11	8	Atlanta, Ga. ....	107	54	33	14	1	1
Bridgeport, Conn. ....	31	22	8	-	1	1	Baltimore, Md. ....	199	113	49	27	6	3
Cambridge, Mass. ....	27	19	5	3	-	3	Charlotte, N. C. ....	49	29	11	7	1	2
Fall River, Mass. ....	19	14	5	-	-	-	Jacksonville, Fla. ....	76	52	17	3	-	5
Hartford, Conn. ....	49	29	15	2	2	-	Miami, Fla. ....	93	52	28	7	2	3
Lowell, Mass. ....	23	14	8	1	-	3	Norfolk, Va. ....	38	18	11	3	4	1
Lynn, Mass. ....	15	12	3	-	-	2	Richmond, Va. ....	67	37	19	6	3	5
New Bedford, Mass. ....	21	18	2	1	-	1	Savannah, Ga. ....	40	27	8	1	1	2
New Haven, Conn. ....	53	35	12	3	-	4	St. Petersburg, Fla. ....	65	53	8	2	2	4
Providence, R.I. ....	55	33	19	2	1	3	Tampa, Fla. ....	78	46	24	5	2	4
Somerville, Mass. ....	7	5	1	1	-	3	Washington, D. C. ....	146	72	47	13	10	5
Springfield, Mass. ....	29	22	4	1	1	1	Wilmington, Del. ....	40	25	9	5	-	-
Waterbury, Conn. ....	26	21	4	1	-	3							
Worcester, Mass. ....	39	26	7	1	2	-							
<b>MIDDLE ATLANTIC</b> .....	2,509	1,606	621	162	54	107	<b>EAST SOUTH CENTRAL</b> .....	529	302	150	28	17	34
Albany, N. Y. ....	58	40	12	2	3	1	Birmingham, Ala. ....	99	63	25	5	2	3
Allentown, Pa. ....	20	10	6	4	-	-	Chattanooga, Tenn. ....	59	36	18	1	2	7
Buffalo, N. Y. ....	103	66	24	7	4	8	Knoxville, Tenn. ....	36	22	12	1	-	-
Camden, N. J. ....	20	11	9	-	-	-	Louisville, Ky. ....	75	40	15	6	5	3
Elizabeth, N. J. ....	19	13	6	-	-	-	Memphis, Tenn. ....	93	57	25	5	1	11
Erie, Pa. ....	37	23	10	2	2	3	Mobile, Ala. ....	56	32	17	-	2	5
Jersey City, N. J. ....	41	29	4	5	2	2	Montgomery, Ala. ....	34	20	10	2	2	1
Newark, N. J. ....	58	28	23	4	3	5	Nashville, Tenn. ....	77	32	28	8	3	4
New York City, N. Y. ....	1,298	855	284	95	22	53							
Paterson, N. J. ....	29	15	7	2	3	3	<b>WEST SOUTH CENTRAL</b> .....	1,122	602	319	84	52	28
Philadelphia, Pa. ....	400	237	126	20	11	14	Austin, Tex. ....	44	27	8	4	-	2
Pittsburgh, Pa. ....	65	42	18	3	-	3	Baton Rouge, La. ....	29	11	12	3	2	-
Reading, Pa. ....	33	20	11	-	-	-	Corpus Christi, Tex. ....	31	16	11	1	1	1
Rochester, N. Y. ....	115	80	26	6	1	8	Dallas, Tex. ....	159	88	44	8	10	6
Schenectady, N. Y. ....	29	21	5	1	1	1	El Paso, Tex. ....	39	26	9	1	2	2
Scranton, Pa. ....	25	17	7	1	-	3	Fort Worth, Tex. ....	70	39	21	4	1	1
Syracuse, N. Y. ....	83	50	23	4	2	2	Houston, Tex. ....	245	122	68	29	8	2
Trenton, N. J. ....	29	18	10	1	-	1	Little Rock, Ark. ....	43	24	11	3	4	2
Utica, N. Y. ....	24	16	4	3	-	-	New Orleans, La. ....	161	94	46	6	7	-
Yonkers, N. Y. ....	23	15	6	2	-	-	San Antonio, Tex. ....	163	83	51	15	8	4
							Shreveport, La. ....	59	32	17	1	5	1
							Tulsa, Okla. ....	79	40	21	9	4	7
<b>EAST NORTH CENTRAL</b> .....	2,108	1,251	563	139	59	46	<b>MOUNTAIN</b> .....	482	297	109	36	15	7
Akron, Ohio ....	63	37	16	2	1	-	Albuquerque, N. Mex. ....	65	31	21	7	3	1
Canton, Ohio ....	43	27	12	3	1	2	Colorado Springs, Colo. ....	38	30	3	1	1	4
Chicago, Ill. ....	537	307	148	42	15	11	Denver, Colo. ....	104	71	21	7	2	1
Cincinnati, Ohio ....	129	80	31	7	5	3	Las Vegas, Nev. ....	62	32	20	5	-	1
Cleveland, Ohio ....	153	81	51	11	7	2	Ogden, Utah ....	11	6	3	1	-	-
Columbus, Ohio ....	136	74	45	5	6	4	Phoenix, Ariz. ....	87	57	18	5	2	-
Dayton, Ohio ....	81	47	20	8	2	-	Pueblo, Colo. ....	8	7	-	1	-	-
Detroit, Mich. ....	239	137	65	15	5	8	Salt Lake City, Utah ....	55	33	8	5	6	-
Evansville, Ind. ....	21	16	5	-	-	2	Tucson, Ariz. ....	52	30	15	4	1	-
Fort Wayne, Ind. ....	54	37	15	-	-	1							
Gary, Ind. ....	18	7	8	2	-	1	<b>PACIFIC</b> .....	1,425	920	333	77	51	36
Grand Rapids, Mich. ....	60	42	8	6	2	2	Berkeley, Calif. ....	20	12	6	2	-	1
Indianapolis, Ind. ....	151	81	48	12	3	1	Fresno, Calif. ....	58	35	9	9	5	5
Madison, Wis. ....	31	20	3	4	2	1	Glendale, Calif. ....	16	13	2	1	-	1
Milwaukee, Wis. ....	99	69	24	3	1	2	Honolulu, Hawaii ....	53	25	17	3	4	-
Peoria, Ill. ....	32	20	7	2	2	1	Long Beach, Calif. ....	76	50	23	2	-	2
Rockford, Ill. ....	48	32	6	3	3	1	Los Angeles, Calif. ....	381	257	89	11	13	10
South Bend, Ind. ....	52	37	10	2	2	5	Oakland, Calif. ....	78	52	12	8	3	2
Toledo, Ohio ....	57	60	23	10	-	-	Pasadena, Calif. ....	24	20	4	-	-	-
Youngstown, Ohio ....	64	40	18	2	2	-	Portland, Oreg. ....	100	63	24	8	1	2
							Sacramento, Calif. ....	62	38	13	3	2	1
<b>WEST NORTH CENTRAL</b> .....	628	395	154	26	28	14	San Diego, Calif. ....	103	65	24	8	4	2
Des Moines, Iowa ....	50	33	11	2	1	-	San Francisco, Calif. ....	182	113	49	10	6	3
Duluth, Minn. ....	15	10	3	2	-	1	San Jose, Calif. ....	60	46	9	3	-	1
Kansas City, Kans. ....	34	21	9	-	2	1	Seattle, Wash. ....	126	75	35	7	5	1
Kansas City, Mo. ....	110	74	21	5	4	-	Spokane, Wash. ....	53	34	13	1	5	3
Lincoln, Nebr. ....	25	17	3	1	1	1	Tacoma, Wash. ....	33	22	4	2	3	2
Minneapolis, Minn. ....	77	49	20	3	3	2							
Omaha, Nebr. ....	64	32	24	5	2	1							
St. Louis, Mo. ....	156	90	41	6	13	5							
St. Paul, Minn. ....	53	37	11	2	2	1							
Wichita, Kans. ....	44	32	11	-	-	2							
<b>TOTAL</b> .....	10,373	6,325	2,657	670	326	336	<b>Expected Number</b> .....	10,863	6,544	2,812	687	414	359

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

The Morbidity and Mortality Weekly Report, circulation 78,000, 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.

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*Injuries Due to Falls — Continued*

that included information such as age of patients hurt in falls, analysis of the injuries, time and places most associated with falls, and costs of injuries.

**Study A (A General Hospital):** In Study A, 28,596 emergency-room visits were made to 1 general hospital in Washington during 1975. Of these, 1,740 were concerning injuries due to falls. Lacerations, fractures, and musculoskeletal injuries represented 1,331 (76%) of these injuries. Lacerations were the largest category (29%), occurring most frequently to the neck, face, or scalp region. Fifty-one percent of the fractures treated occurred to individuals over age 50; 64% of the intracranial injuries treated occurred to persons 14 and under.

Alcohol has been stated to be related to many injuries due to falls (7); in this study, 10% of falls were alcohol-associated. However, when the records of individuals who had more than 1 fall were examined, alcohol was involved in 22.3% of the cases. Also, 42% of persons injured in falls had at least 1 pre-existing health problem (e.g., obesity, cardiovascular disease, rheumatoid disease, hypertension) known to predispose people to injury (7).

The 1,740 injuries due to falls generated 1,866 days of hospitalization, which, at an average expenditure of \$163.46 per day, cost \$305,016. When combined with the cost of other treatments and out-patient follow-up, an estimated \$500,000 was spent for the 1,740 injuries due to falls treated in this hospital in 1975.

**Study B (A Children's Hospital):** A study of 4,963 injury-related, emergency-room visits at a children's hospital in Washington in 1975 showed that 2,079 injuries (42%) were due to falls. Sixty percent of these occurred in April through September, and, as in other injury studies (2), more males (58%) than females were treated. Saturday and Sunday were the days with the highest frequency of injuries treated, and the evening (3-11 PM) was the peak period for treatment of injuries due to falls. The most common types of injury related to falls were lacerations (42%), contusions (18%), and fractures (14%). Of the 2,079 persons seen in the emergency room with injuries due to falls, 1,470 (71%) were treated and released, and 153 were admitted.

In this study, the home was the location of over 40% of the injuries treated. The most frequent activities were "unknown" (30.8% of the injuries), followed by playing (16.8%), bicycling (9.5%), and walking (9.1%) (Table 1). Seventy-six (3.7%) children were injured in falls during their sleep. Forty-three (2.1%) children were hurt during roller-skating—more than were hurt while skate-boarding (<1%).

Of all the 2,079 injury-related, emergency-room visits, 223 involved repeat visits: 101 children had 2 injuries due to falls, and 7 children were treated for 3 falls. More repeaters were treated in August (18%) than any other month. Sunday and Monday accounted for 43% of repeat injuries, but the time of day did not appear to be a factor when compared for all children studied.

**Study C (Regional Communications Industry):** The records of 11,816 persons employed in 2 states during 1976 by a large communications industry were analyzed. Employees reported 376 off-duty injuries during 1976; 96 (25.5%) were due to falls. Sixty percent of these falls occurred at

TABLE 1. Children's activities that produced injuries, a children's hospital, Washington, 1975 (Study B)

Activity	Absolute frequency	Percent frequency
Unknown	642	30.8
Playing	349	16.8
Bicycle-tricycle	197	9.5
Walking	189	9.1
Negotiating stairs	118	5.7
Running	79	3.8
Sleep-related	76	3.7
Gymnastics	64	3.1
Sitting	59	2.8
Climbing	51	2.5
Roller-skating	43	2.1
Jumping	30	1.4
Bathing	29	1.4
Tree-climbing	25	1.2
Horseback-riding	23	1.1
Being carried	23	1.1
Sports	21	1.0
Skiing	20	1.0
Other, specified (including skate-boarding)	41	1.9
<b>Total</b>	<b>2,079</b>	<b>100.0</b>

home, 40% in a public place. Female employees, who made up 55% of the work force, reported more off-duty injuries and generated more lost workdays than did male employees. However, the average number of days lost per injury was higher for males; on the average, women lost 8.4 workdays per injury, and men, 10.5 days. A total of 877 workdays were lost due to injuries from falls at an estimated cost of \$43,850.

**Study D (An Emergency Medical Service):** Emergency calls received by an emergency medical service in a metropolitan area in 1974 concerning 1,551 nonindustrial injuries due to falls were recorded and analyzed. Of the total, 869 falls (56%) occurred in the home, and 682 (44%) occurred in other locations. As in Study A the very young (<4 years) and the very old (≥80) appeared most vulnerable. When all categories of falls were considered, persons over 60 accounted for 44% of the total emergency calls due to nonindustrial falls. On weekends most injuries from falls that required emergency medical assistance occurred in the home; on weekdays most such injuries occurred outside the home. Examination of time patterns revealed the greatest number of emergency calls for injuries due to falls at home occurred in the late afternoon and evening; 47% occurred between 3 PM and midnight.

Three socioeconomic strata (high, medium, and low) were identified from census-tract information; distribution by age and sex was tabulated for these strata for occurrences of emergency calls for injuries due to falls in the home. The highest rates of usage of the emergency medical service were found among those over 60 years of age in high, middle, and low socioeconomic levels, followed by those 40-59 in the low socioeconomic group, and infants through children 9 years of age in the low socioeconomic group. The lowest rate was seen in the 20- to 39-year age group of the high socioeconomic level. The highest socioeconomic group generally had the lowest rates for each age group (Table 2). This may reflect differences in the epidemiology of falls at home and/or in the source of medical services.

*Injuries Due to Falls — Continued*

TABLE 2. Home falls attended to by an emergency medical service, by age, population distribution\*, and socioeconomic distribution, 1974 (Study D)

Age Group	High Socio-economic (Rate/100,000)	% Total Population	Medium Socio-economic (Rate/100,000)	% Total Population	Low Socio-economic (Rate/100,000)	% Total Population
0-9	87.95	3.8	199.88	6.4	260.24	2.9
10-19	35.94	4.8	87.43	6.7	104.81	2.9
20-39	29.69	8.2	60.77	14.9	104.76	9.1
40-59	60.66	6.8	168.42	9.7	288.89	5.1
60 +	444.05	3.4	355.18	9.3	420.66	5.9
Total	—	27.05	—	46.91	—	26.04

\*Population for the high socioeconomic group was 143,798, for the medium 249,381, and for the low 138,413.

The estimated cost of providing emergency medical service for this metropolitan area is \$200 per emergency

call. Thus, the estimated cost of providing emergency medical assistance for nonindustrial falls for the study year was \$310,200.

Reported by GC Hongladarom, RN, PhD, Seattle; J Allard, PhD, State Epidemiologist, WF Miller, MPH, Health Services Div, Washington State Dept of Social and Health Services; Environmental Health Services Div, Bur of State Services, CDC.

**Editorial Note:** These studies illustrate the need for a comprehensive injury-control program to assess the magnitude of problems associated with falls, burns, and other injuries; to evaluate the impact on the health-care delivery system; and to establish effective measures to prevent injuries.

*References*

1. Waller JA: Nonhighway injury fatalities: I. Roles of alcohol and problem drinking, drugs and medical impairment. *J Chronic Dis* 25:33-45, 1972
2. Parrish HM, Weil TP: Fighting accidents with facts: The epidemiological approach. *Hospitals* 31:32-34, 1957

Correction**Parainfluenza Initially Diagnosed and Reported As Russian Flu — Oregon**

The Oregon Department of Human Resources reported in the MMWR (1) that a virus resembling influenza A/USSR/77(H1N1) was isolated from an 81-year-old man. Serologic evidence of infection with parainfluenza type 1 virus, and not influenza A virus, was demonstrated in this patient. Subsequently, the isolate was identified as parainfluenza type 1 virus.

Reported by J Googins, MD, State Epidemiologist, Oregon Dept of Human Resources; WHO Collaborating Center for Influenza, CDC.

*Reference*

1. MMWR 27:91, 1978

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