

M M W R

MORBIDITY AND MORTALITY WEEKLY REPORT

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Current Trends

Cigarette Smoking in the United States — 1975

The percentage of adult smokers has decreased in the last decade, according to a 1975 survey on smoking behavior and attitudes among adults in the U.S. population. The survey of 12,000 persons over the age of 21 was conducted under the auspices of the National Clearinghouse for Smoking and Health, CDC, in cooperation with the National Cancer Institute.

Except for a few age categories, the percentage of male and female smokers was down from that indicated in previous surveys conducted in 1964/66* and 1970. The exceptions were among women 21 to 24, women 55 and over, and men 65 and over, where there was a slight increase in smoking (Table 1). Overall, 39.3% of men and 28.9% of women surveyed were current regular cigarette smokers** in 1975, compared with 42.2% and 30.5%, respectively, in 1970 and 52.4% and 32.5%, respectively, in 1964/66.

TABLE 1. Percentage of current regular smokers — United States, 1975

Age Group	1964/66			1970			1975					
	MEN						WOMEN					
21-24	64.3	49.8	41.3	45.2	32.3	34.0	59.9	46.7	43.9	42.6	40.3	35.4
25-34	59.9	48.6	47.1	39.9	38.8	36.4	59.9	48.6	47.1	39.9	36.1	32.8
35-44	53.5	43.1	41.1	39.9	36.1	32.8	53.5	43.1	41.1	39.9	36.1	32.8
45-54	49.2	37.4	33.7	20.5	24.2	25.9	49.2	37.4	33.7	20.5	24.2	25.9
55-64	28.8	22.8	24.2	7.7	10.2	10.2	28.8	22.8	24.2	7.7	10.2	10.2
65+	52.4	42.2	39.3	32.5	30.5	28.9	52.4	42.2	39.3	32.5	30.5	28.9
All age groups, 21 and over												

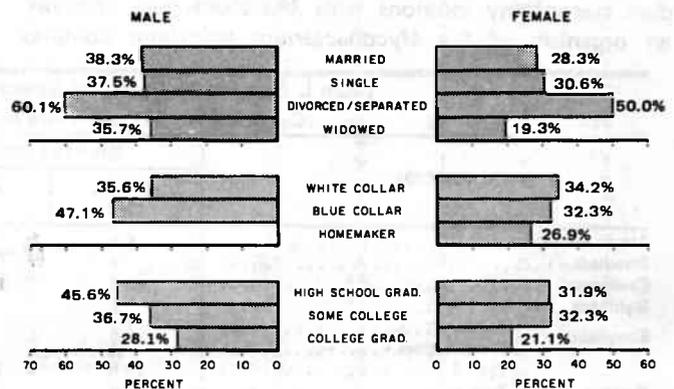
Differences in smoking behavior also were found by marital status and by occupational and educational levels (Figure 1). Married men and women smoke less than single,

*1964 and 1966 survey figures were combined.

**Current regular smoker — A person who has smoked at least 100 cigarettes during his lifetime and who now smokes cigarettes.

divorced/separated, and/or widowed persons, the survey showed. In terms of education, smoking is most common among male high school graduates, 45.6% of whom reported smoking, and lowest among female college graduates, 21.1% of whom smoke.

FIGURE 1. Percentage of adults* who smoke, by marital status, occupation, and educational level, 1975



*ADULT SMOKER WAS DEFINED AS ONE 21 YEARS OF AGE OR OLDER

Men smoke more cigarettes a day, averaging 23 (about the same as in 1970), compared to 19 for women (up from 17 in 1970). The survey also found that more than half of current smokers smoke cigarettes in ways most hazardous to health, that is, by inhaling with almost every puff (55%).

Most persons who continue to smoke are smoking lower tar, lower nicotine cigarettes than in previous years. In 1975, 20% of smokers reported using a cigarette with 20 or more milligrams of tar, down from 55% in 1970. The proportion using cigarettes with nicotine levels of 1.4 mg. and above dropped from 45% in 1970 to 18% in 1975.

Most current smokers—61%—have made at least one serious attempt to stop smoking entirely. Overall, 9 out of 10 smokers say they have either tried to stop smoking or would probably do so if there were an easy way. Although a majority of smokers apparently would like to stop, 57% say they will either definitely or probably be smoking 5 years from now.

Other attitudinal findings among survey respondents included:

- 1: 70% stated that cigarette smoking should be allowed

Cigarette Smoking — Continued

in fewer places than it is now. Among smokers alone, 51% shared this opinion.

2. 56% of all respondents believed that cigarette advertising should be stopped completely. (Cigarette commercials were banned from electronic media in 1970.)

3. 78% thought that management should have the right to prohibit smoking in places of business.

Epidemiologic Notes and Reports**Atypical Mycobacteria Wound Infections — North Carolina, Colorado**

Outbreaks of postoperative wound infections caused by the *Mycobacterium fortuitum* complex have recently been reported by hospitals in North Carolina and Colorado. Twenty-four patients who recently had had open-heart surgery developed infections—the first such outbreaks reported to CDC. The source of contamination is not yet known; the investigations are continuing.

North Carolina

Nineteen of the 80 patients who underwent open-heart surgery in the period February 13-April 29, 1976, at a North Carolina hospital developed infections of their median sternotomy incisions with *Mycobacterium chelonae*, an organism of the *Mycobacterium fortuitum* complex

4. More than 3 out of 4 persons indicated that teachers, doctors, and other health professionals should set an example by not smoking. Two of every 3 smokers agreed.

Reported by the National Clearinghouse for Smoking and Health, Bureau of Health Education, CDC.

▲ A copy of the report from which these data were derived is available from Center for Disease Control, National Clearinghouse for Smoking and Health, Bureau of Health Education, Building 14, Atlanta, GA. 30333. Information is also available from the Office of Cancer Communications, National Cancer Institute, Bethesda, MD. 20014.

(Runyon Group IV, rapid-grower). The patients ranged in age from 42 to 66 years (median 57); all had had surgery for either coronary artery by-pass grafts or prosthetic valve replacement. Six of 35 (17%) patients operated on in March and 12 of 24 (50%) patients operated on in April developed infections. No cases have occurred in patients operated on since April 29. The onset of infection occurred 6 to 40 days after surgery (median 14 days), and was characterized by sternal pain or drainage from the incision. In many cases, the patient had been discharged in good condition following surgery, but returned after a few weeks when sternal pain or drainage began. Redness over the sternum was noted

(Continued on page 243)

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

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	30th WEEK ENDING		MEDIAN 1971-1975	CUMULATIVE, FIRST 30 WEEKS		
	July 31, 1976	July 28, 1976		July 31, 1976	July 28, 1976	MEDIAN 1971-1975
Aseptic meningitis	66	78	103	1,214	1,433	1,407
Brucellosis	7	13	4	139	133	97
Chickenpox	480	890	---	144,930	114,709	---
Diphtheria	1	1	2	118	197	110
Encephalitis						
{ Primary	11	18	22	453	408	490
{ Post-infectious	4	11	7	167	197	182
Hepatitis, Viral						
{ Type B	283	291	191	8,438	6,514	5,344
{ Type A	636	625	914	20,052	20,162	29,200
{ Type unspecified	141	142	---	5,146	4,645	---
Malaria	14	9	9	241	218	218
Measles (rubeola)	365	227	268	33,537	20,466	23,429
Meningococcal infections, total	22	23	23	1,047	949	949
Civilian	22	23	23	1,038	928	928
Military	-	-	1	9	21	24
Mumps	224	554	525	31,359	44,831	52,908
Pertussis	29	47	---	522	768	---
Rubella (German measles)	49	106	164	10,324	14,380	19,821
Tetanus	2	4	4	29	48	48
Tuberculosis	745	630	---	19,465	18,956	---
Tularemia	1	4	4	77	71	84
Typhoid fever	7	9	8	204	175	179
Typhus, tick-borne (Rky. Mt. spotted fever)	54	55	27	461	451	386
Venereal Diseases:						
{ Gonorrhea						
{ Civilian	21,193	22,094	---	563,651	551,654	---
{ Military	681	680	---	16,439	17,042	---
{ Syphilis, primary and secondary						
{ Civilian	461	559	---	13,990	14,633	---
{ Military	14	8	---	207	198	---
Rabies in animals	63	81	76	1,502	1,465	2,155

Table II. Notifiable Diseases of Low Frequency: United States

	CUM.		CUM.
Anthrax	2	Poliomyelitis, total	5
Botulism	19	Paralytic:**	5
Congenital rubella syndrome*	15	Painstaking: Calif. 1	28
Leprosy: Texas 1	82	Rabies in man:	1
Leptospirosis:	24	Trichinosis: R.I. 1	61
Plague: N. Mex. 1, Ariz. 1	12	Typhus, murine: Texas 3	23

Delayed Report: *Cong. Rubella Syndrome: La. delete 1; **Polio, para: N.H. add 1

Table III
Cases of Specified Notifiable Diseases: United States
Weeks Ending July 31, 1976 and July 26, 1975 - 30th 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	66	7	480	1	118	11	18	4	283	636	141	14	241
NEW ENGLAND	2	-	80	-	-	1	2	-	3	17	16	1	12
Maine	-	-	3	-	-	-	-	-	-	2	1	-	-
New Hampshire	1	-	1	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	2	-	-	-	-	-	-	-	1	-	-
Massachusetts	-	-	58	-	-	1	1	-	-	6	13	1	6
Rhode Island	1	-	10	-	-	-	-	-	1	2	-	-	3
Connecticut*	-	-	6	-	-	-	1	-	2	7	1	-	3
MIDDLE ATLANTIC	16	1	71	-	-	1	1	-	60	58	23	7	47
Upstate New York	5	1	41	-	-	-	1	-	8	14	2	1	10
New York City	1	-	29	-	-	-	-	-	23	20	-	2	19
New Jersey	10	-	NN	-	-	1	-	-	18	16	19	4	9
Pennsylvania	-	-	1	-	-	-	-	-	11	8	2	-	9
EAST NORTH CENTRAL	6	-	177	-	-	3	2	1	29	73	11	-	16
Ohio	-	-	20	-	-	-	1	-	6	13	-	-	7
Indiana	-	-	16	-	-	-	-	-	2	1	2	-	-
Illinois	1	-	16	-	-	-	-	-	10	17	7	-	2
Michigan*	4	-	44	-	-	3	1	-	8	32	2	-	6
Wisconsin	1	-	81	-	-	-	-	1	3	10	-	-	1
WEST NORTH CENTRAL	-	1	36	-	4	-	2	-	15	31	10	-	14
Minnesota	-	1	-	-	-	-	-	-	10	11	-	-	3
Iowa	-	-	10	-	-	-	-	-	-	3	-	-	-
Missouri*	-	-	4	-	1	-	-	-	3	9	10	-	8
North Dakota	-	-	5	-	-	-	2	-	-	1	-	-	-
South Dakota*	-	-	-	-	3	-	-	-	-	7	-	-	2
Nebraska	-	-	17	-	-	-	-	-	2	-	-	-	1
Kansas	-	-	-	-	-	-	-	-	-	-	-	-	-
SOUTH ATLANTIC	8	1	43	-	-	2	1	-	52	100	27	-	38
Delaware	-	-	6	-	-	-	-	-	1	-	-	-	-
Maryland	-	-	2	-	-	-	-	-	11	6	1	-	5
District of Columbia	-	-	4	-	-	-	-	-	-	-	-	-	5
Virginia	-	1	-	-	-	-	-	-	2	1	4	-	8
West Virginia	-	-	11	-	-	-	-	-	4	3	-	-	1
North Carolina*	-	-	NN	-	-	-	-	-	10	8	2	-	4
South Carolina	-	-	1	-	-	-	-	-	-	1	3	-	1
Georgia	-	-	-	-	-	-	-	-	-	24	-	-	4
Florida	8	-	19	-	-	2	1	-	24	57	17	-	10
EAST SOUTH CENTRAL	5	1	11	-	-	1	5	2	10	37	2	-	1
Kentucky	-	-	10	-	-	-	-	-	2	7	1	-	-
Tennessee	2	1	NN	-	-	-	2	-	5	17	1	-	-
Alabama	3	-	1	-	-	1	2	1	3	5	-	-	-
Mississippi	-	-	-	-	-	-	1	1	-	8	-	-	1
WEST SOUTH CENTRAL	9	1	35	-	1	-	3	-	14	26	10	-	9
Arkansas*	-	-	-	-	-	-	-	-	-	5	2	-	-
Louisiana	6	-	NN	-	-	-	1	-	4	8	-	-	1
Oklahoma	-	-	9	-	-	-	2	-	5	13	3	-	1
Texas*	3	1	26	-	1	-	-	-	5	-	5	-	7
MOUNTAIN	1	-	8	1	4	-	-	-	11	34	10	2	10
Montana	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-
Idaho	-	-	1	-	-	-	-	-	-	-	1	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	1	-	5	-	3	1	-	-	7	9	7	2	7
New Mexico	-	-	-	1	1	-	-	-	-	5	-	-	1
Arizona	-	-	NN	-	-	-	-	-	3	14	2	-	1
Utah	-	-	2	-	-	-	-	-	1	5	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	1	-	-	1
PACIFIC	19	2	19	-	109	2	2	1	89	260	32	4	94
Washington	-	-	11	-	106	-	-	-	1	1	3	-	2
Oregon	-	-	-	-	-	-	-	-	7	13	6	-	5
California	19	2	-	-	1	2	1	1	77	119	23	4	86
Alaska	-	-	1	-	2	-	-	-	1	121	-	-	-
Hawaii	-	-	7	-	-	-	1	-	3	6	-	-	1
Guam*	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	16	-	1	-	-	-	2	10	-	-	1
Virgin Islands*	-	-	-	-	-	-	-	-	-	-	-	-	-

NA: Not available

*Delayed reports: TB: Mich. delete 2, Mo. delete 1, N.C. delete 4, Ark. delete 2, Guam add 1; RMSF: Conn. add 1, Ala. delete 1; G.C.: S.D. delete 1, La. delete 15, Guam add 11, V.I. add 3; Syphilis: Mo. delete 1, La. delete 8, V.I. add 1; An. rabies: S.D. add 39, Texas add 8

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending July 31, 1976 and July 26, 1975 - 30th Week

REPORTING AREA	MEASLES (Rubella)			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	385	33,537	20,466	22	1,047	949	224	31,359	29	49	10,324	29
NEW ENGLAND	3	373	289	-	42	55	21	1,235	-	1	269	-
Maine	-	6	11	-	-	6	-	109	-	-	3	-
New Hampshire	-	11	21	-	3	2	-	25	-	-	11	-
Vermont	2	32	49	-	3	-	-	8	-	-	1	-
Massachusetts	-	37	107	-	12	18	1	148	-	1	135	-
Rhode Island	-	14	2	-	4	3	8	436	-	-	5	-
Connecticut	1	273	99	-	20	26	12	509	-	-	114	-
MIDDLE ATLANTIC	75	6,862	1,653	4	142	97	62	2,877	2	5	2,250	3
Upstate New York	16	2,874	509	-	57	28	1	359	-	3	596	2
New York City	5	435	129	2	37	28	41	1,518	2	1	137	-
New Jersey	-	586	456	2	19	16	7	480	-	-	1,327	-
Pennsylvania	54	2,967	559	-	29	25	13	520	-	1	190	1
EAST NORTH CENTRAL ..	210	14,189	6,091	2	162	130	59	13,083	6	17	3,849	1
Ohio	-	562	104	-	84	31	9	1,876	1	-	272	1
Indiana	121	3,227	345	-	6	6	4	1,410	-	4	684	-
Illinois	42	1,498	1,687	1	16	19	8	1,731	-	9	1,153	-
Michigan	20	5,597	2,980	1	47	56	6	4,791	3	2	1,346	-
Wisconsin	27	3,305	975	-	9	18	32	3,275	2	2	394	-
WEST NORTH CENTRAL ..	-	1,095	4,939	-	62	55	6	3,227	-	1	378	4
Minnesota	-	388	180	-	12	14	-	543	-	-	26	1
Iowa	-	32	560	-	8	5	1	1,144	-	-	81	-
Missouri	-	17	258	-	22	25	4	308	-	1	30	1
North Dakota	-	3	1,046	-	3	-	-	121	-	-	2	1
South Dakota	-	4	356	-	1	1	-	6	-	-	18	-
Nebraska	-	55	394	-	3	2	1	98	-	-	3	-
Kansas	-	596	2,145	-	13	8	-	1,007	-	-	218	1
SOUTH ATLANTIC	15	2,214	275	4	193	194	21	2,375	8	5	1,259	7
Delaware	-	128	35	-	6	6	2	43	-	2	33	-
Maryland	-	829	41	-	16	21	7	639	-	-	3	2
District of Columbia ..	-	12	1	-	2	5	-	100	-	-	45	-
Virginia	8	730	23	-	23	17	-	188	1	1	233	1
West Virginia	3	183	131	1	6	5	7	734	-	-	277	-
North Carolina	-	9	2	-	36	36	1	369	1	-	17	-
South Carolina	-	4	-	-	34	31	2	39	-	-	590	-
Georgia	-	1	17	2	19	10	-	-	1	1	2	-
Florida	4	318	25	1	51	63	2	263	5	1	59	4
EAST SOUTH CENTRAL ..	10	793	267	3	90	145	17	2,649	2	-	334	4
Kentucky	3	734	83	-	14	59	2	937	1	-	150	1
Tennessee	6	43	173	1	40	47	13	1,413	-	-	172	2
Alabama	-	-	3	1	25	27	2	250	-	-	1	1
Mississippi	1	16	8	1	11	12	-	49	1	-	11	-
WEST SOUTH CENTRAL ..	6	665	272	2	160	148	19	2,190	3	4	488	7
Arkansas	-	-	-	1	10	8	-	71	1	-	189	-
Louisiana	1	185	-	1	28	25	2	22	1	-	85	2
Oklahoma	1	289	125	-	18	9	3	620	1	-	58	-
Texas	4	191	147	-	104	106	14	1,477	-	4	156	5
MOUNTAIN	8	5,053	1,330	1	37	34	4	1,074	1	-	461	1
Montana	NA	202	41	-	4	7	NA	20	NA	NA	232	-
Idaho	-	2,020	7	-	4	5	-	440	-	-	18	-
Wyoming	-	3	1	-	-	-	-	1	-	-	2	-
Colorado	6	305	1,115	-	11	9	4	213	-	-	21	-
New Mexico	-	15	13	-	3	4	-	127	1	-	31	-
Arizona	-	225	69	1	9	1	-	-	-	-	-	1
Utah	2	2,220	59	-	4	7	-	159	-	-	139	-
Nevada	-	63	25	-	2	1	-	114	-	-	18	-
PACIFIC	58	2,293	5,350	6	159	91	15	2,649	7	16	1,036	2
Washington	4	333	284	-	27	16	-	842	1	4	161	-
Oregon	7	150	195	1	14	4	4	334	4	2	130	1
California	47	1,807	4,809	4	101	70	11	1,429	2	10	727	1
Alaska	-	-	-	1	14	-	-	19	-	-	1	-
Hawaii	-	3	62	-	3	1	-	25	-	-	17	-
Guam*	-	10	31	-	1	2	-	12	-	-	5	-
Puerto Rico	5	298	493	-	3	1	4	615	-	-	8	3
Virgin Islands	-	8	8	-	-	-	-	22	-	-	8	1

NA: Not available

*Delayed Reports: Measles: Guam add 2, V.I. add 1; Men. Inf.: Mo. add 1; Mumps: Guam add 1; Pertussis: Mo. add 1

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending July 31, 1976 and July 26, 1975 - 30th Week

REPORTING AREA	TUBERCULOSIS		TULA-REMLIA	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	GONORRHEA		SYPHILIS (Pri. & Sec.)		CUM. 1976		
								1976	CUMULATIVE		1976		CUMULATIVE	
									1976	1975			1976	1975
UNITED STATES	745	19,465	77	7	204	54	461	21,193	563,651	551,654	461	13,990	14,633	1,502
NEW ENGLAND	19	694	1	-	17	1	6	712	15,477	15,155	33	430	509	26
Maine*	2	46	-	-	-	-	-	52	1,304	1,115	2	10	12	14
New Hampshire	1	27	-	-	2	-	-	16	420	427	-	7	11	-
Vermont	-	18	-	-	-	-	-	10	381	355	1	5	5	-
Massachusetts	10	426	1	-	13	-	4	376	7,489	7,007	18	306	324	11
Rhode Island	1	47	-	-	-	1	2	31	1,015	1,211	-	15	9	1
Connecticut	5	130	-	-	2	-	-	227	4,868	5,040	12	87	148	-
MIDDLE ATLANTIC	121	3,685	2	1	33	11	26	1,924	65,075	63,933	77	2,327	2,665	19
Upstate New York	9	565	2	-	5	11	15	498	10,183	11,355	1	142	252	6
New York City	69	1,550	-	1	18	-	3	738	29,727	27,568	40	1,429	1,519	-
New Jersey	29	697	-	-	7	-	7	168	9,693	8,716	20	353	417	3
Pennsylvania	14	873	-	-	3	-	1	520	15,472	16,294	16	403	477	10
EAST NORTH CENTRAL	107	2,703	1	2	18	-	7	3,229	88,977	89,851	20	1,255	1,200	87
Ohio	11	503	-	-	6	-	5	553	21,697	24,391	8	291	277	-
Indiana	8	333	-	-	-	-	-	453	8,854	8,131	4	64	79	18
Illinois	42	914	1	2	5	-	-	1,007	31,264	31,029	1	692	583	17
Michigan	39	795	-	-	6	-	2	809	18,694	17,552	5	143	204	4
Wisconsin	7	158	-	-	1	-	-	407	8,468	8,748	2	65	57	48
WEST NORTH CENTRAL	34	703	19	-	11	-	7	1,091	29,161	27,205	14	238	342	368
Minnesota	3	127	3	-	6	-	-	277	5,319	5,764	3	55	69	92
Iowa	6	59	1	-	1	-	-	173	3,684	3,786	-	23	20	79
Missouri*	16	349	14	-	3	-	7	272	11,544	9,736	6	99	180	44
North Dakota	5	20	-	-	-	-	-	34	435	419	-	-	5	78
South Dakota	-	31	-	-	-	-	-	27	817	1,030	2	4	4	16
Nebraska	1	36	-	-	-	-	-	109	2,555	2,380	2	18	8	11
Kansas	3	81	1	-	1	-	-	199	4,807	4,090	1	39	56	48
SOUTH ATLANTIC	137	4,254	5	-	24	28	243	5,364	136,754	136,813	123	4,133	4,576	234
Delaware	1	47	-	-	-	-	1	148	1,851	1,857	-	39	54	6
Maryland	29	610	1	-	-	-	12	642	18,284	15,842	2	348	341	11
District of Columbia	2	178	-	-	-	-	-	281	8,098	8,179	16	374	396	-
Virginia	18	702	1	-	3	5	63	667	14,315	13,305	20	392	343	37
West Virginia	5	175	-	-	3	-	2	57	1,763	1,673	-	18	14	10
North Carolina	30	755	3	-	1	18	108	737	19,722	19,393	25	776	573	6
South Carolina	-	316	-	-	3	5	32	176	12,907	13,070	7	227	308	2
Georgia	11	521	-	-	2	-	24	1,349	25,873	25,518	16	447	602	120
Florida	41	950	-	-	12	-	1	1,307	33,941	37,976	37	1,512	1,945	42
EAST SOUTH CENTRAL	72	1,609	13	-	7	6	74	2,061	50,000	46,556	21	567	647	78
Kentucky	1	346	1	-	4	3	13	284	6,299	6,063	5	83	101	41
Tennessee	26	485	12	-	3	2	48	942	19,629	18,571	3	204	239	26
Alabama	26	486	-	-	-	-	5	552	14,414	12,656	-	111	150	11
Mississippi	19	292	-	-	-	1	8	283	9,658	9,266	13	169	157	-
WEST SOUTH CENTRAL	106	2,217	26	-	9	7	90	2,794	73,769	68,739	70	1,665	1,262	367
Arkansas	8	287	12	-	2	2	14	415	7,039	7,246	2	53	35	93
Louisiana*	12	318	2	-	2	-	-	510	10,941	12,515	30	370	300	3
Oklahoma	9	205	7	-	-	3	69	303	6,924	6,471	-	64	47	90
Texas	77	1,407	5	-	5	2	7	1,566	48,865	42,507	38	1,178	880	181
MOUNTAIN	11	539	2	-	18	1	3	931	21,705	21,409	28	470	350	86
Montana	NA	30	2	NA	2	NA	-	NA	1,103	1,167	NA	4	4	60
Idaho*	-	16	-	-	1	-	1	62	1,164	1,020	-	23	9	-
Wyoming	-	11	-	-	-	-	-	17	433	505	-	8	9	1
Colorado	-	97	-	-	4	1	1	253	5,624	5,268	1	103	63	4
New Mexico	2	94	-	-	1	-	1	194	4,343	3,911	17	148	99	3
Arizona*	9	245	-	-	9	-	-	284	6,379	5,862	8	142	124	18
Utah	-	23	-	-	1	-	-	95	1,073	1,361	-	16	10	-
Nevada	-	23	-	-	-	-	-	26	1,586	2,315	2	26	32	-
PACIFIC	138	3,061	8	4	67	-	5	3,087	82,733	81,993	75	2,905	3,082	237
Washington*	8	297	2	-	3	-	4	299	6,963	7,404	-	62	94	2
Oregon	10	112	1	-	-	-	-	349	6,154	6,023	-	62	72	3
California*	97	2,219	5	3	62	-	1	2,359	65,732	65,020	75	2,709	2,881	192
Alaska	13	61	-	-	-	-	-	27	2,283	2,047	-	10	3	40
Hawaii	10	372	-	1	2	-	-	53	1,601	1,499	-	62	32	-
Guam*	-	26	-	-	-	-	-	-	181	260	-	1	8	-
Puerto Rico	11	202	-	1	1	-	-	59	1,593	1,441	4	340	361	28
Virgin Islands	-	5	-	-	-	-	-	-	142	98	-	41	20	-

NA: Not available NN: Not notifiable

*Delayed reports: Asep. Meng.: La. delete 1; Brucellosis: Wash. delete 1; Chickenpox: Me. add 3, Calif. add 7, Guam add 3; Enceph., post: Wisc. add 2; Hep. A: Mo. delete 1, La. delete 2, Ariz. add 2; Hep. Unsp.: Mo. delete 1, Ariz. delete 2, Idaho add 1, Guam add 1

Table IV
Deaths in 121 United States Cities*
Week Ending July 31, 1976 - 30th 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	
NEW ENGLAND	604	363	164	30	27	30	SOUTH ATLANTIC	1,118	606	332	83	34	36
Boston, Mass.	166	86	56	10	6	9	Atlanta, Ga.	144	66	50	16	8	6
Bridgeport, Conn.	32	18	13	1	-	4	Baltimore, Md.	213	110	66	18	6	2
Cambridge, Mass.	24	19	3	2	-	2	Charlotte, N. C.	76	30	27	7	3	2
Fall River, Mass.	26	19	7	-	-	-	Jacksonville, Fla.	99	53	24	7	3	3
Hartford, Conn.	54	28	12	6	8	-	Miami, Fla.	104	71	21	5	2	-
Lowell, Mass.	21	15	5	-	1	2	Norfolk, Va.	59	29	21	3	3	5
Lynn, Mass.	29	18	8	-	-	2	Richmond, Va.	83	42	28	5	2	6
New Bedford, Mass.	13	9	1	1	1	-	Savannah, Ga.	31	19	9	1	1	-
New Haven, Conn.	38	24	7	1	4	-	St. Petersburg, Fla.	69	60	8	1	-	4
Providence, R.I.	67	38	18	3	4	2	Tampa, Fla.	62	30	24	6	1	4
Somerville, Mass.	9	4	2	2	-	-	Washington, D. C.	136	71	42	11	4	4
Springfield, Mass.	45	27	14	1	2	1	Wilmington, Del.	42	25	12	3	1	-
Waterbury, Conn.	24	18	3	2	1	4							
Worcester, Mass.	56	40	15	1	-	4							
							EAST SOUTH CENTRAL	664	365	185	61	24	20
MIDDLE ATLANTIC	2,711	1,595	752	185	97	121	Birmingham, Ala.	122	67	39	10	2	-
Albany, N. Y.	47	26	13	4	3	1	Chattanooga, Tenn.	52	22	15	9	1	3
Allentown, Pa.	19	15	4	-	-	2	Knoxville, Tenn.	42	32	6	1	-	2
Buffalo, N. Y.	134	80	39	6	6	8	Louisville, Ky.	113	59	31	13	5	7
Camden, N. J.	28	17	9	2	-	8	Memphis, Tenn.	139	70	40	12	9	2
Elizabeth, N. J.	23	14	8	-	-	1	Mobile, Ala.	73	43	19	7	4	3
Erie, Pa.	30	22	4	2	1	1	Montgomery, Ala.	40	27	10	2	1	-
Jersey City, N. J.	57	35	16	3	-	2	Nashville, Tenn.	83	45	25	7	2	3
Newark, N. J.	42	17	12	5	4	4							
New York City, N. Y.	1,380	804	386	105	41	53	WEST SOUTH CENTRAL	1,127	638	282	81	59	19
Paterson, N. J.	35	19	11	2	3	2	Austin, Tex.	32	26	4	-	1	-
Philadelphia, Pa.	406	225	109	34	21	21	Baton Rouge, La.	45	25	9	4	5	1
Pittsburgh, Pa.	155	83	57	3	8	10	Corpus Christi, Tex.	36	23	7	1	4	1
Reading, Pa.	30	24	6	-	-	1	Dallas, Tex.	171	93	46	14	3	2
Rochester, N. Y.	101	66	20	10	5	4	El Paso, Tex.	50	25	12	5	-	1
Schenectady, N. Y.	25	18	6	1	-	-	Fort Worth, Tex.	79	52	13	5	4	2
Seranton, Pa.	37	28	9	-	-	-	Houston, Tex.	182	80	54	22	14	1
Syracuse, N. Y.	86	54	23	3	3	2	Little Rock, Ark.	51	29	10	4	3	4
Trenton, N. J.	40	22	14	3	-	6	New Orleans, La.	218	122	63	12	12	-
Utica, N. Y.	15	12	-	1	2	-	San Antonio, Tex.	127	78	30	9	6	1
Yonkers, N. Y.	21	14	6	1	-	4	Shreveport, La.	84	51	23	5	4	1
							Tulsa, Okla.	52	34	11	-	3	5
EAST NORTH CENTRAL	2,210	1,221	615	163	99	60	MOUNTAIN	484	275	130	33	17	21
Akron, Ohio	70	39	21	3	1	-	Albuquerque, N. Mex.	45	27	10	4	-	3
Canton, Ohio	44	26	12	2	4	-	Colorado Springs, Colo.	32	17	7	3	2	4
Chicago, Ill.	579	301	161	43	41	17	Denver, Colo.	126	72	36	5	4	4
Cincinnati, Ohio	147	96	36	11	1	2	Las Vegas, Nev.	24	9	11	2	-	1
Cleveland, Ohio	175	84	58	14	9	2	Ogden, Utah	31	19	10	1	1	3
Columbus, Ohio	141	65	53	15	4	5	Phoenix, Ariz.	106	59	29	11	4	2
Dayton, Ohio	99	47	42	7	2	2	Pueblo, Colo.	19	12	4	-	1	1
Detroit, Mich.	259	136	70	29	10	8	Salt Lake City, Utah	44	25	9	5	4	3
Evansville, Ind.	35	22	11	1	-	-	Tucson, Ariz.	57	35	14	2	1	-
Fort Wayne, Ind.	42	29	7	4	-	4							
Gary, Ind.	17	7	4	4	-	-	PACIFIC	1,532	966	353	103	59	40
Grand Rapids, Mich.	55	36	12	2	3	4	Berkeley, Calif.	13	9	1	1	2	-
Indianapolis, Ind.	148	87	35	13	3	1	Fresno, Calif.	54	39	7	3	4	1
Madison, Wis.	39	23	10	2	-	4	Glendale, Calif.	40	31	8	1	-	2
Milwaukee, Wis.	109	67	32	1	6	3	Honolulu, Hawaii	43	22	13	5	-	1
Peoria, Ill.	30	13	12	1	2	-	Long Beach, Calif.	92	55	24	7	4	1
Rockford, Ill.	43	29	7	1	5	3	Los Angeles, Calif.	512	331	109	37	19	20
South Bend, Ind.	45	31	6	2	2	4	Oakland, Calif.	62	36	10	7	4	-
Toledo, Ohio	84	53	19	6	2	4	Pasadena, Calif.	36	31	2	2	-	-
Youngstown, Ohio	49	30	7	2	4	1	Portland, Oreg.	111	67	33	6	3	3
							Sacramento, Calif.	63	39	12	6	2	-
WEST NORTH CENTRAL	799	493	195	47	35	25	San Diego, Calif.	118	66	35	5	7	3
Des Moines, Iowa	56	31	11	6	4	1	San Francisco, Calif.	139	87	36	5	5	2
Duluth, Minn.	23	15	6	2	-	1	San Jose, Calif.	53	34	14	5	-	3
Kansas City, Kans.	45	21	17	3	2	2	Seattle, Wash.	118	62	36	10	6	-
Kansas City, Mo.	116	78	24	9	1	2	Spokane, Wash.	38	31	1	1	3	4
Lincoln, Nebr.	31	21	9	1	-	1	Tacoma, Wash.	40	26	12	2	-	-
Minneapolis, Minn.	99	62	23	2	4	1							
Omaha, Nebr.	76	39	25	7	2	3	TOTAL	11,249	6,522	3,008	786	451	372
St. Louis, Mo.	238	155	55	10	13	9	Expected Number	11,576	6,883	3,036	780	378	348
St. Paul, Minn.	65	42	16	3	3	1							
Wichita, Kans.	50	29	9	4	6	4							

†Delayed Report for Week Ending 7/24/76

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.

Atypical Mycobacteria – Continued

in half the patients, and 13 patients had instability or separation of the sternum. The drainage was variably described as purulent, sero-sanguineous, soupy, necrotic, or watery. Fifteen patients had incision and drainage of their sternal area, at which time purulent material was sometimes noted to be oozing from the sternal closure and from around the steel wires used to close the sternum at operation. One patient suffered a fatal hemorrhage when infection from the sternum and mediastinum apparently eroded the aortic suture line of a prosthetic valve. Highest temperatures ranged from 100°F to 103.6°F, and the median leukocyte count was 10,300/mm³. Before the problem was recognized as being due to an acid-fast bacillus, most patients had several routine cultures of the drainage which were either sterile or grew only normal skin flora. The organism was only partially sensitive to kanamycin, rifampin, and erythromycin; it was resistant to streptomycin, isoniazid, para-aminosalicylic acid, ethionamide, viomycin, ethambutol, cycloserine, pyrazinamide, and capreomycin. The patients have been treated with erythromycin and rifampin, and most have responded favorably.

Multiple cultures of operating room equipment and materials were negative for the epidemic organism.

Colorado

Four of 9 patients undergoing open-heart surgery at a Colorado hospital between April 21 and May 5, 1976, developed infections of their median sternotomy incisions with *Mycobacterium fortuitum*. Another patient, who had had open-heart surgery in October 1975 developed a similar infection in November. No cases have occurred in patients operated on after May 5. These organisms differed from those in North Carolina in their ability to reduce nitrate and their ability to grow on 5% sodium chloride medium. Three of the strains were sensitive to viomycin, capreomycin, and high concentrations of ethambutol and of rifampin. One strain shared these sensitivities, except that it was resistant to viomycin. The isolate from the fifth patient was sensitive to viomycin, capreomycin, ethambutol, and ethionamide, and resistant to rifampin. The patients ranged in age from 30 to 70 years (median 54). Three of the patients had coronary by-pass grafts, 1 had a mitral commissurotomy, and 1 had an aortic valve replacement plus coronary artery by-pass grafts. The median time from surgery to onset of infection was 25 days. The infection was characterized by single or multiple areas of grayish, yellowish, necrotic-appearing tissue in the sternal incision accompanied by small to moderate amounts of purulent material. Only 2 of the patients required extensive debridement of the area, both of whom had developed secondary infections with *Staphylococcus aureus* after the

mycobacterial infections had become evident. The other 3 patients were recovering normally when breakdown of the incision began, and they were subsequently treated as outpatients. All patients are being treated with isoniazid, rifampin, ethambutol, and ethionamide.

Cultures of equipment and materials used in median sternotomy operations have all been negative for the epidemic organism thus far.

Reported by MP Hines, DVM, State Epidemiologist, North Carolina Division of Health Services; R. Waggoner, MS, SM(AAM), National Jewish Hospital, Denver, Colorado; TM Vernon, Jr, MD, State Epidemiologist, Colorado State Dept of Health; Mycobacteriology Br, Bacteriology Div, Bur of Laboratories, and Bacterial Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: These are the first outbreaks of postoperative wound infections due to the *M. fortuitum* complex reported to CDC. The temporal association of these 2 clusters of infections caused by distinct but related organisms suggests a common source such as equipment or surgical material. Because the investigations at the 2 hospitals occurred at least 2 months after many of the patients had had surgery, the materials in use at the time of surgery were not available; cultures of the materials in use during the investigations were negative. None of the 17 patients who had coronary by-pass procedures developed infections with these organisms in their leg incisions (saphenous vein donor sites); only the sternal incisions were affected. Further studies involving equipment and materials used in median sternotomy procedures are in progress.

This infection may be difficult to recognize. It may be low-grade and not have the usual toxic signs of a pyogenic infection of the sternum. It may present as a failure to heal in one or more areas of the incision. Routine cultures generally will be sterile or positive only for skin flora. While the organisms will grow on blood agar, they may take up to 5 days to appear, longer than the time that such plates are usually kept for routine cultures. In addition, the organisms may resemble diphtheroids on colonial morphology and Gram's stain. The organisms will usually grow in 3 to 5 days on standard media for culturing acid-fast bacilli. Acid-fast smears of drainage are frequently but not always positive. Skin test antigens under investigation at CDC have been shown to be sensitive and specific in identifying patients with these infections. These antigens may be available on a limited basis for investigation of suspect cases who no longer have drainage that can be cultured.

Hospital personnel who are aware of similar cases of infection in postoperative patients are requested to inform their local and State health departments and the Hospital Infections Branch, CDC, so that additional data about possible sources may be gathered.

Current Trends**St. Louis Encephalitis – California, Mississippi, Tennessee**

The first cases of confirmed St. Louis Encephalitis infection in 1976 have been reported to CDC from California, Tennessee, and Mississippi. Three patients, ages 34, 42, and 56, had onset of illness on June 30, July 7, and July 12, respectively. All 3 had clinical encephalitis and 4-fold or greater serologic titer rises to St. Louis Encephalitis antigen. Because the patient from Tennessee had visited Mississippi 5 days before his onset of illness, it is possible that he was infected there; the other 2 patients had not recently traveled outside their home states. Surveillance and vector

control efforts in the affected areas have been increased.

Reported by A Bridge, MD, Riverside County (Cal.) Health Dept; J Chin, MD, State Epidemiologist, RW Emmons, MD, California State Dept of Health; AB Kaiser, MD, St. Thomas Hospital, Nashville, Tenn; JM Bistowish, MD, Davidson County Health Dept; AR Hinman, MD, State Epidemiologist, RH Hutcheson, MD, RM Weeks, Tenn State Dept of Public Health; R Dill, MD, Columbus, Mississippi; DL Blakey, MD, State Epidemiologist, Mississippi State Board of Health; and Enteric and Neurotropic Viral Diseases Br, Viral Diseases Div, Bur of Epidemiology, CDC.

International Notes*Clostridium septicum* Bacteremia — United Kingdom

A 55-year-old woman was admitted to a hospital in January 1975 with a history of rectal bleeding and abdominal pain. At laparotomy a small carcinoma of the rectosigmoid junction was found. A 9 cm section of colon was excised and an end-to-end anastomosis made. The wound was closed in layers with a drain from the anastomosis site. Sixteen hours after the operation the patient went into shock. Blood cultures were taken, and she was treated with intravenous antibiotics, hydrocortisone, and fluids. She collapsed again on 2 further occasions and died 36 hours after the operation. *Clostridium septicum* was isolated in pure growth from the blood culture and from the drain site. The pathologist's postmortem report described extensive crepitant cellulitis spreading from a well-sutured lower paramedian incision, with a well-marked hemorrhagic irregular edge halfway across the right side of the abdomen. The cellulitis spread to near the xiphisternum, across the left side of the chest, and down into the flank, involving the labia and upper three-quarters of the left thigh, except on its most posterior aspect. The overall appearances were consistent with a mixed anaerobic infection, that is, of the gas gangrene type.

Clostridium septicum is less commonly found than *C. perfringens* or *C. novyi* as a human pathogen; it is responsible for only about 10-20% of cases of gas gangrene. In

1975, 5 cases of *C. septicum* bacteremia were reported by hospital laboratories. Four of the 5 infections were associated with cancer of the large bowel. The patient without cancer was an 83-year-old man, who died from gas gangrene after lacerating his arm in a fall. The organism was isolated from a blood culture and from the arm wound.

That 4 of 5 patients with *C. septicum* bacteremia had an underlying neoplasm is suggestive of an association, though clearly the figures are small. However, in the same year, of 47 patients reported to have *C. perfringens*, only 2 had neoplasms. There are occasional published reports of *C. septicum* infections in patients with malignant disease (1). Alpern and Dowell collected case reports of 27 hospital patients with proven *C. septicum* infections and found that 23 of them had malignant disease (2). Most of these patients had blood disorders, and 7 had tumors in the gastrointestinal tract.

From notes based on reports to the Public Health Laboratory Service from public health and hospital laboratories in the United Kingdom and the Republic of Ireland, published in the British Medical Journal, April 17, 1976.

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2. Alpern RJ, and Dowell VR, Jr: *Clostridium septicum* infections and malignancy. JAMA 209:385, 1969

Epidemiologic Notes and Reports

Respiratory Infection — Pennsylvania

A total of 152 persons associated with a state American Legion convention in Philadelphia July 21-24 have been hospitalized with respiratory infections. Onsets of illness were in the period July 22-August 3; the majority occurred from July 25 to July 31. Twenty-two of these patients have died. The deaths, reported over the past week, were primarily due to pneumonia.

Although information about the disease and its epidemiology is incomplete, it appears to be characterized by the acute onset of fever, chills, headache, and malaise, followed by a dry cough and myalgia. Some of the most seriously ill developed high fever and died in shock with extensive pneumonia. No etiologic agent has yet been incriminated. There is no information available concerning

other Legionnaires who may be ill with less severe symptoms.

The patients, among several thousand attending the convention, stayed in at least 3 or 4 hotels while in Philadelphia. There is no evidence of increase in respiratory disease in Philadelphia residents, nor has there been any confirmed secondary spread to family members or other contacts. There have been several reports of similar disease in non-conventioners who were in Philadelphia at the same time as the convention.

Reported by RG Sharrar, MD, City of Philadelphia Dept of Public Health; WE Parkin, DVM, Acting State Epidemiologist, Pennsylvania State Dept of Health; the Bur of Epidemiology and the Bur of Laboratories, CDC.

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