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Current Trends

Update on Influenza Activity Worldwide and World Health Organization and United States Recommendations for Influenza Vaccine Composition for the 1987-1988 Season

During February or March each year, the World Health Organization (WHO) summarizes available data on recently isolated influenza viruses around the world and issues recommendations for vaccine composition. The WHO reports (*1,2*) and the U.S. recommendations for composition of the 1987-1988 influenza vaccine are summarized below.

Influenza — Worldwide

From September 1986 through February 1987, influenza A(H1N1) viruses predominated and, in most countries, were the only type of influenza virus isolated. As in previous epidemics since 1977, influenza A(H1N1) outbreaks occurred mainly among children and young adults. Few influenza A(H3N2) or influenza B viruses have been isolated.

Influenza A(H1N1). In the Americas, localized outbreaks occurred in the United States in October and November 1986. Influenza activity increased markedly in the United States in December, and, by mid-February, the virus had been isolated from patients in 49 states and the District of Columbia. Canada also reported activity from October through January. In Jamaica, outbreaks were serologically confirmed in both October and November. Brazil reported a single case in October.

In Asia, widespread outbreak activity was reported in the Democratic People's Republic of Korea during October and November and in Japan during November and December. China reported sporadically occurring cases from November through January, and Hong Kong reported them in December. In the Middle East, influenza A(H1N1) virus was isolated during outbreaks in the Islamic Republic of Iran in November and in Israel during November and December.

In Europe, localized outbreaks occurred in the United Kingdom in September and October, with continued activity through January. In both the German Democratic Republic and the USSR, outbreak activity was widespread during November and declined during December. Czechoslovakia, Hungary, Poland, and Yugoslavia also reported widespread influenza activity in December. Elsewhere in Europe (Denmark, the Federal Republic of Germany, Finland, France, Italy, the Netherlands, Norway, Romania, Spain, Sweden, and Switzerland), there was activity between December and February.

Influenza A(H3N2). Influenza A(H3N2) virus was isolated along with influenza A(H1N1) during an outbreak in the Democratic People's Republic of Korea. The virus was also isolated during an outbreak in Ecuador in November. Otherwise, A(H3N2) was detected only in sporadically occurring cases in Canada, China, Italy, Romania, Tunisia, the United States, and the USSR.

Influenza – Continued

Influenza B. Outbreaks of influenza B were reported in Panama in September and October and in Singapore in December. Sporadically occurring cases were also detected in Canada, Chile, the Federal Republic of Germany, Hong Kong, India, Senegal, Singapore, Spain, Sweden, Taiwan, the United Kingdom, the United States, and the USSR.

Antigenic Analysis of Recent Isolates

Influenza A(H1N1) viruses collected from many parts of the world during the 1986-1987 season have been antigenically characterized. Virtually all of them were indistinguishable from the A/Taiwan/1/86-like strains isolated in Asia early in 1986 (*3*). Influenza B viruses, which were isolated infrequently during the 1986-1987 season, were antigenically heterogeneous. However, all were closely related to B/Ann Arbor/1/86 (*4*).

The influenza A(H3N2) viruses isolated from outbreaks in all parts of the world during the 1985-1986 season were antigenically heterogeneous. About two-thirds differed from A/Mississippi/1/85 (H3N2), which was included in the 1986-1987 U.S. trivalent influenza vaccine. More than 25% of the A(H3N2) isolates characterized in the United States during the 1985-1986 season were antigenically similar to the A(H3N2) variant, A/Stockholm/8/85. Sera from recipients of the 1986-1987 trivalent vaccine were tested for antibody against both A/Mississippi/1/85 and A/Stockholm/8/85 antigens by hemagglutination inhibition (Table 1). For both young adults and nursing home residents who had received the trivalent vaccine, the geometric mean titers were nearly threefold lower to the A/Stockholm/8/85 virus than to the homologous A/Mississippi/1/85 virus. Furthermore, for the nursing home residents, 38% of the post-vaccination sera had titers that were ≥40 to A/Stockholm/8/85, whereas 69% had titers ≥40 to A/Mississippi/1/85.

Very few A(H3N2) viruses have been isolated during the 1986-1987 season; however, several appear similar to the A/Stockholm/8/85 variant. The 1986-1987 variant, A/Leningrad/360/86, an egg isolate suitable for vaccine production, appears closely related to A/Stockholm/8/85 (Table 2). These reference strains are poorly inhibited by ferret serum to the A/Bangkok/1/79 strain, used in influenza vaccines during the period 1980-1985. They are also inhibited at significantly reduced titers (compared to the homologous titer) by ferret

TABLE 1. Hemagglutination-inhibition antibody response to influenza A(H3N2) viruses in recipients of trivalent 1986-1987 influenza vaccine*

Population	Test antigen	Pre-vaccine Cumulative % with titer ≥ 10	20	40	80	160	(GMT)†	Post-vaccine Cumulative % with titer ≥ 10	20	40	80	160	(GMT)†
Young adults	A/Mississippi/1/85	48	26	12	2		(9)	98	98	93	71	45	(99)
	A/Stockholm/8/85	7	2	2			(5)	83	79	57	38	19	(36)
Nursing home residents	A/Mississippi/1/85	71	62	40	20	13	(21)	89	84	69	42	24	(44)
	A/Stockholm/8/85	33	31	22	9		(10)	53	49	38	18	4	(15)

*Trivalent split vaccine containing 15 μg each of A/Mississippi/1/85, A/Chile/1/83, and B/Ann Arbor/1/86.

†Geometric mean titer.

TABLE 2. Hemagglutination-inhibition reactions of influenza A(H3N2) viruses

Reference antigen	Ferret antisera A/Bangkok/1/79	A/Mississippi/1/85	A/Stockholm/8/85	A/Leningrad/360/86
A/Bangkok/1/79	**1,280**	640	320	80
A/Mississippi/1/85	320	**1,280**	320	160
A/Stockholm/8/85	40	320	**640**	160
A/Leningrad/360/86	40	320	640	**160**

Influenza — Continued

antiserum to A/Mississippi/1/85. However, ferret antisera to both A/Stockholm/8/85 and A/Leningrad/360/86 inhibit A/Mississippi/1/85.

Recommendations for the Composition of Influenza Virus Vaccines

Because of these antigenic variations and the continued isolation of viruses resembling A/Stockholm/8/85, WHO recommends that influenza vaccines for use during the 1986-1987 season contain a representative of this variant in place of A/Mississippi/1/85.

The above findings were discussed at a WHO meeting in February. The Public Health Service Vaccine Advisory Panel (PHSVAP) met during the same period to review the data regarding antigenic variations of virus isolates. Consistent with WHO recommendations, the PHS recommends that influenza vaccines for use in the 1987-1988 season be trivalent and contain the following antigens:

A/Taiwan/1/86(H1N1)-like antigen
B/Ann Arbor/1/86-like antigen
A/Leningrad/360/86(H3N2)-like antigen

Recommendations of the Immunization Practices Advisory Committee regarding dosage and schedule of the vaccine will be published in the *MMWR* later this spring.

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2. World Health Organization. Recommended composition of influenza vaccine for use in the 1987-1988 season—a supplementary statement. Wkly Epidem Rec 1987;62:90.
3. CDC. Antigenic variation of recent influenza A(H1N1) viruses. MMWR 1986;35:510-2.
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Perspectives in Disease Prevention and Health Promotion

Sex-, Age-, and Region-Specific Prevalence of Sedentary Lifestyle in Selected States in 1985 — The Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey conducted by state health departments to routinely collect risk factor data from adults (> 18 years of age). The following analysis examines sedentary lifestyle data from the 25,221 persons interviewed by the 22 states (including the District of Columbia) participating in the BRFSS during 1985.

Participants were asked to provide details of up to two activities performed during the past month. The prevalence of sedentary lifestyle was estimated by the percentage of persons who reported either no physical activity or physical activity less than three times per week and/or less than 20 minutes per occasion. This criterion level is based on the 1990 objectives for the nation regarding physical fitness and exercise (*1*) and represents the minimum amount of physical activity likely to confer health benefits.

Table 3 presents the sex-specific prevalence of sedentary lifestyle in the 22 states. The distribution of these prevalences is summarized in the "box-plots" in Figure 1. These plots provide the maximum range, the upper and lower quartiles, and the median (50th percentile) of the distribution of state-specific prevalences for the 22 states.

Sedentary Lifestyle — Continued

Figure 1 indicates that the median prevalence of sedentary lifestyle is somewhat higher for women than for men; however, the distribution of prevalence estimates for the two genders overlap considerably. This figure also shows that the variation in prevalence estimates of sedentary lifestyle is somewhat greater for women than for men.

Table 4 presents the age-specific prevalence of sedentary lifestyle for adults in the 22 states. In most instances, the prevalence of sedentary lifestyle for adults increased with increasing age. The distribution of these prevalences is summarized in Figure 2, which also indicates that there is considerable overlap between the three age-specific prevalence distributions of adult sedentary lifestyle in the states.

Figure 3 indicates that the median prevalence of sedentary lifestyle by region is somewhat higher for the southeastern states and lowest in the southwestern and mountain states.

FIGURE 1. Box-plot summaries of the sex-specific distribution of sedentary lifestyle prevalences from 22 states participating in the 1985 Behavioral Risk Factor Surveillance System

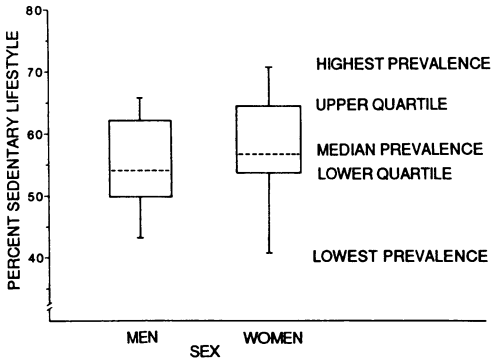

TABLE 3. Sex-specific prevalence estimates of sedentary lifestyle, by state — 1985 Behavioral Risk Factor Surveillance System

State	Men			Women		
	No.	(%)	(95% CI*)	No.	(%)	(95% CI*)
Arizona	480	(48)	(44-53)	695	(45)	(41-49)
California	597	(50)	(46-54)	775	(57)	(53-60)
Connecticut	400	(51)	(46-56)	583	(55)	(51-59)
District of Columbia	283	(51)	(45-57)	443	(59)	(54-63)
Florida	311	(52)	(46-58)	465	(52)	(47-56)
Georgia	353	(63)	(58-69)	465	(64)	(60-69)
Idaho	448	(44)	(39-48)	731	(41)	(37-45)
Illinois	503	(50)	(46-55)	645	(56)	(52-60)
Indiana	474	(62)	(58-66)	708	(66)	(63-70)
Kentucky	325	(65)	(59-70)	478	(61)	(56-65)
Minnesota	1,026	(56)	(53-59)	1,360	(57)	(54-59)
Montana	490	(49)	(44-53)	693	(43)	(39-46)
New York	484	(50)	(46-55)	690	(56)	(52-60)
North Carolina	641	(54)	(50-58)	887	(61)	(58-64)
North Dakota	262	(57)	(51-63)	366	(55)	(50-60)
Ohio	462	(60)	(55-64)	694	(61)	(57-65)
Rhode Island	542	(63)	(59-67)	735	(67)	(63-70)
South Carolina	458	(64)	(59-68)	758	(66)	(63-69)
Tennessee	415	(66)	(61-71)	792	(71)	(68-74)
Utah	451	(50)	(45-55)	711	(46)	(42-49)
West Virginia	466	(59)	(54-64)	711	(66)	(63-70)
Wisconsin	435	(55)	(50-60)	530	(55)	(50-59)

*Confidence interval.

Sedentary Lifestyle — Continued

Northeastern and central states were intermediate in their prevalence of sedentary lifestyle. Again, there is considerable overlap of the region-specific distribution of prevalence estimates for the four regions.

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FIGURE 2. Box-plot summaries of the age-specific distribution of sedentary lifestyle prevalences from 22 states participating in the 1985 Behavioral Risk Factor Surveillance System

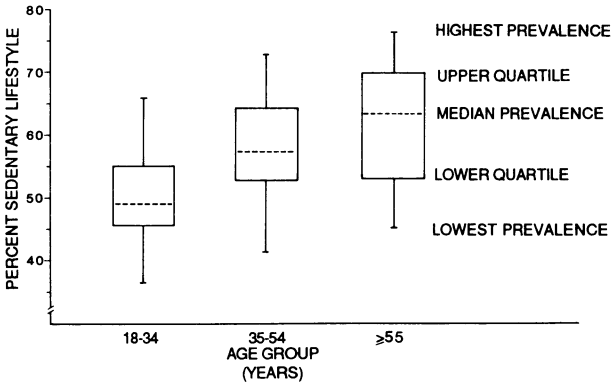

TABLE 4. Age-specific prevalence estimates of sedentary lifestyle, by state — 1985 Behavioral Risk Factor Surveillance System

State	18-34			35-54			≥55		
	No.	(%)	(95% CI*)	No.	(%)	(95% CI*)	No.	(%)	(95% CI*)
Arizona	463	(44)	(39-48)	334	(46)	(41-52)	378	(49)	(44-55)
California	515	(50)	(45-54)	457	(60)	(55-64)	400	(53)	(48-58)
Connecticut	317	(46)	(41-52)	314	(54)	(48-59)	352	(59)	(53-64)
District of Columbia	276	(47)	(41-53)	206	(56)	(49-63)	244	(66)	(59-72)
Florida	289	(52)	(46-57)	234	(52)	(46-59)	253	(52)	(46-59)
Georgia	309	(55)	(49-61)	287	(67)	(61-72)	222	(73)	(66-79)
Idaho	432	(37)	(32-41)	367	(42)	(37-47)	380	(48)	(43-53)
Illinois	449	(42)	(37-46)	351	(57)	(52-63)	348	(65)	(60-70)
Indiana	415	(57)	(52-62)	368	(65)	(60-70)	398	(72)	(68-77)
Kentucky	259	(53)	(47-60)	257	(65)	(59-71)	287	(68)	(63-74)
Minnesota	1,005	(49)	(46-52)	674	(57)	(54-61)	707	(65)	(61-69)
Montana	479	(42)	(37-46)	352	(50)	(44-55)	352	(45)	(40-51)
New York	414	(47)	(42-52)	374	(53)	(48-58)	386	(61)	(56-66)
North Carolina	535	(55)	(51-60)	507	(56)	(52-61)	485	(62)	(58-67)
North Dakota	235	(47)	(40-53)	178	(63)	(56-71)	215	(60)	(53-67)
Ohio	431	(53)	(48-58)	361	(62)	(57-67)	364	(68)	(63-73)
Rhode Island	465	(57)	(52-61)	397	(65)	(60-70)	415	(75)	(70-79)
South Carolina	433	(58)	(53-63)	409	(73)	(68-77)	374	(70)	(65-74)
Tennessee	400	(66)	(61-71)	387	(65)	(60-69)	420	(77)	(73-81)
Utah	522	(44)	(40-48)	368	(47)	(42-53)	272	(53)	(47-59)
West Virginia	356	(56)	(50-61)	332	(61)	(56-67)	488	(71)	(67-75)
Wisconsin	354	(49)	(44-55)	293	(57)	(51-63)	318	(59)	(54-65)

*Confidence interval.

Sedentary Lifestyle — Continued

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Editorial Note: Eleven of the 1990 objectives for the nation relate to physical fitness and exercise. Most of these 11 objectives emphasize "appropriate physical activity," which is defined as "exercise which involves large muscle groups in dynamic movement for periods of 20 minutes or longer, three or more days per week, and which is performed at an intensity of 60 percent or greater of an individual's cardiorespiratory capacity." This amount of physical activity is rather strenuous, and evidence indicates that less intensive, yet regular, physical activity may also confer health benefits (*2*). Therefore, the analysis reported here sought to estimate the prevalence of sedentary lifestyle, i.e., physical activity less than three times per week, less than 20 minutes per occasion, or both, regardless of the intensity of participation.

An average of 55% of the 25,221 persons interviewed by telephone in the 22 states participating in the 1985 BRFSS reported so little physical activity in the past month as to be

(Continued on page 203)

TABLE I. Summary — cases specified notifiable diseases, United States

Disease	13th Week Ending			Cumulative, 13th Week Ending		
	Mar. 29, 1987	Apr. 4, 1986	Median 1982-1986	Mar. 29, 1987	Apr. 4, 1986	Median 1982-1986
Acquired Immunodeficiency Syndrome (AIDS)	244	296	N	4,669	2,907	N
Aseptic meningitis	80	74	81	1,083	1,068	1,045
Encephalitis: Primary (arthropod-borne & unspec)	16	17	21	189	219	222
Post-infectious	1	5	3	9	25	23
Gonorrhea: Civilian	12,999	18,150	16,313	198,108	207,381	207,381
Military	254	256	503	4,209	4,031	5,615
Hepatitis: Type A	511	445	447	6,121	5,665	5,665
Type B	445	544	492	6,020	6,077	5,999
Non A, Non B	59	69	N	703	812	N
Unspecified	29	79	107	810	1,256	1,261
Legionellosis	9	21	N	154	152	N
Leprosy	4	4	7	52	65	65
Malaria	20	6	13	166	169	166
Measles: Total*	65	441	85	678	1,476	549
Indigenous	58	439	N	581	1,430	N
Imported	7	2	N	97	42	N
Meningococcal infections: Total	59	70	70	947	846	861
Civilian	59	69	69	946	844	850
Military	-	1	1	1	2	2
Mumps	316	105	103	4,412	768	1,055
Pertussis	23	61	41	456	554	445
Rubella (German measles)	7	3	13	73	118	134
Syphilis (Primary & Secondary): Civilian	511	630	630	8,283	6,454	7,209
Military	2	4	7	51	58	85
Toxic Shock syndrome	8	9	N	74	76	N
Tuberculosis	300	378	479	4,667	4,617	4,868
Tularemia	1	1	1	17	17	23
Typhoid Fever	1	2	10	55	51	81
Typhus fever, tick-borne (RMSF)	1	2	2	10	14	14
Rabies, animal	95	176	143	1,017	1,219	1,219

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1987		Cum. 1987
Anthrax	-	Leptospirosis	7
Botulism: Foodborne	1	Plague	1
Infant	15	Poliomyelitis, Paralytic	-
Other	-	Psittacosis	16
Brucellosis (W. Va. 1, Alaska 1)	18	Rabies, human	-
Cholera	-	Tetanus	7
Congenital rubella syndrome	2	Trichinosis	11
Congenital syphilis, ages < 1 year	-	Typhus fever, flea-borne (endemic, murine)	5
Diphtheria	2		

*Seven of the 65 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending April 4, 1987 and March 29, 1986 (13th Week)

Reporting Area	AIDS	Aseptic Menin-gitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel-losis	Leprosy
			Primary	Post-in-fectious			A	B	NA,NB	Unspeci-fied		
	Cum 1987	1987	Cum 1987	Cum 1987	Cum 1987	Cum 1986	1987	1987	1987	1987	1987	Cum 1987
UNITED STATES	4,669	80	189	9	198,108	207,381	511	445	59	29	9	52
NEW ENGLAND	177	2	8	1	7,229	4,532	14	32	4	3	1	2
Maine	10	-	1	-	223	223	1	2	-	-	-	-
N H	5	1	-	-	116	129	-	3	2	-	-	-
Vt	3	-	2	-	53	76	2	1	-	-	-	-
Mass	102	-	2	-	2,716	1,914	2	20	1	3	1	2
R I	16	-	2	1	562	445	6	2	1	-	-	-
Conn	41	1	1	-	3,559	1,745	3	4	-	-	-	-
MID ATLANTIC	1,437	-	23	-	32,770	33,708	10	6	1	1	-	-
Upstate N Y	161	-	13	-	4,272	3,905	10	3	1	1	-	-
N Y City	882	-	4	-	18,440	19,951	-	3	-	-	-	-
N J	288	-	1	-	3,862	3,788	-	-	-	-	-	-
Pa	106	U	5	-	6,196	6,064	U	U	U	U	U	-
E N CENTRAL	253	8	51	-	22,770	29,045	26	50	6	1	2	1
Ohio	23	2	23	-	5,840	6,995	3	13	1	-	-	1
Ind	23	-	2	-	2,536	3,143	10	19	1	1	-	-
Ill	137	-	7	-	2,992	7,147	2	5	-	-	-	-
Mich	46	6	17	-	9,269	8,591	11	13	4	-	2	-
Wis	24	-	2	-	2,133	3,169	-	-	-	-	-	-
W N CENTRAL	111	6	11	-	8,284	9,179	19	21	3	3	2	-
Minn	27	3	7	-	1,345	1,320	5	7	1	-	1	-
Iowa	5	2	-	-	822	889	1	2	1	-	-	-
Mo	59	-	-	-	4,144	4,420	3	9	1	3	-	-
N Dak	1	-	-	-	84	83	-	-	-	-	-	-
S Dak	1	-	-	-	166	187	1	-	-	-	-	-
Nebr	4	1	3	-	525	656	2	3	-	-	-	-
Kans	14	-	1	-	1,198	1,624	7	-	-	-	1	-
S ATLANTIC	730	18	28	4	53,788	53,075	36	108	12	1	1	4
Del	9	-	1	-	759	842	2	-	-	-	-	-
Md	110	-	1	-	6,434	6,210	5	23	3	-	-	2
D C	108	-	-	-	3,593	3,833	-	-	-	-	-	-
Va	55	3	11	1	4,270	4,433	6	14	4	-	-	-
W Va	3	-	5	-	401	625	1	3	-	-	-	-
N C	33	4	8	-	7,973	8,844	3	14	1	-	-	-
S C	16	-	-	-	4,814	4,680	-	15	-	-	1	1
Ga	128	3	-	-	9,083	9,359	3	12	-	1	-	-
Fla	268	8	2	3	16,461	14,249	16	27	4	-	-	1
E S CENTRAL	23	5	11	2	14,868	17,136	2	24	2	-	1	-
Ky	14	3	4	1	1,553	2,053	-	5	-	-	-	-
Tenn	-	-	3	-	5,149	6,826	1	10	1	-	1	-
Ala	3	2	4	-	4,834	4,595	1	9	1	-	-	-
Miss	6	-	-	1	3,332	3,662	-	-	-	-	-	-
W S CENTRAL	465	5	19	1	22,325	25,101	34	36	3	4	-	4
Ark	12	-	-	1	2,228	2,301	7	3	-	-	-	-
La	74	-	3	-	4,614	4,159	-	9	2	-	-	-
Okla	22	2	8	-	2,461	2,927	5	7	-	-	-	-
Tex	357	3	8	-	13,022	15,714	22	17	1	4	-	4
MOUNTAIN	116	6	7	-	5,405	6,264	89	38	9	3	1	-
Mont	1	-	-	-	135	166	-	-	1	-	-	-
Idaho	2	-	-	-	185	215	6	7	-	1	-	-
Wyo	2	-	-	-	75	138	1	-	1	-	-	-
Colo	56	1	1	-	1,094	1,711	25	-	3	1	-	-
N Mex	12	-	1	-	589	665	5	-	-	-	-	-
Ariz	16	4	5	-	1,989	1,980	43	26	4	1	1	-
Utah	8	1	-	-	205	273	7	3	-	-	-	-
Nev	19	-	-	-	1,133	1,116	2	2	-	-	-	-
PACIFIC	1,357	30	31	1	30,669	29,341	281	130	19	13	1	41
Wash	52	4	5	-	2,057	2,369	97	35	10	3	1	2
Oreg	20	-	-	-	1,107	1,130	24	17	2	1	-	-
Calif	1,257	19	26	1	26,689	24,696	157	75	7	9	-	36
Alaska	3	-	-	-	534	831	3	-	-	-	-	-
Hawaii	25	7	-	-	282	315	-	3	-	-	-	3
Guam	-	-	-	-	53	13	1	-	-	1	-	-
P R	16	1	-	1	566	543	-	-	-	1	-	-
V I	-	-	-	-	61	57	-	-	-	-	-	-
Pac Trust Terr	-	-	-	-	120	18	1	-	-	-	-	17
Amer Samoa	-	-	-	-	27	8	-	1	-	-	-	-

N Not notifiable U Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending April 4, 1987 and March 29, 1986 (13th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum. 1987	1987	Cum. 1987	1987	Cum. 1987	Cum. 1986	Cum. 1987	1987	Cum. 1987	1987	Cum. 1987	Cum. 1986	1987	Cum. 1987	Cum. 1986
UNITED STATES	166	58	581	7	97	1,476	947	316	4,412	23	456	554	7	73	118
NEW ENGLAND	13	2	3	-	7	9	87	-	11	-	11	32	-	-	1
Maine	-	-	-	-	-	-	5	-	-	-	-	2	-	-	-
N.H.	-	2	2	-	-	-	8	-	6	-	1	12	-	-	1
Vt.	-	-	1	-	5	-	6	-	2	-	3	1	-	-	-
Mass.	7	-	-	-	2	9	47	-	1	-	3	9	-	-	-
R.I.	4	-	-	-	-	-	7	-	-	-	-	1	-	-	-
Conn.	2	-	-	-	-	-	14	-	2	-	4	7	-	-	-
MID. ATLANTIC	8	37	105	1	33	470	60	2	62	6	60	67	-	3	23
Upstate N.Y.	3	-	8	-	8	3	38	1	22	6	45	41	-	1	15
N.Y. City	2	37	94	1 †	8	53	6	-	-	-	-	3	-	1	5
N.J.	1	-	3	-	2	414	-	1	22	-	4	5	-	1	3
Pa.	2	U	-	U	15	-	16	U	18	U	11	18	U	-	-
E.N. CENTRAL	4	2	56	6	10	278	123	112	2,649	2	57	138	3	15	5
Ohio	3	-	-	-	4	-	43	-	32	-	19	58	-	-	-
Ind.	-	-	-	-	-	-	14	5	308	-	-	14	-	-	-
Ill.	1	2	33	6 †	6	152	21	95	1,465	-	3	19	3	14	2
Mich.	-	-	23	-	-	-	39	12	380	2	18	12	-	1	2
Wis.	-	-	-	-	-	122	6	-	464	-	17	35	-	-	1
W.N. CENTRAL	4	5	8	-	1	65	48	113	434	2	27	31	-	-	4
Minn.	3	-	-	-	-	-	14	85	259	-	3	15	-	-	-
Iowa	-	-	-	-	-	-	3	23	134	-	3	4	-	-	-
Mo.	1	5	8	-	1	-	13	-	6	1	11	3	-	-	1
N. Dak.	-	-	-	-	-	-	1	-	-	-	1	2	-	-	-
S. Dak.	-	-	-	-	-	-	1	1	13	1	2	-	-	-	-
Nebr.	-	-	-	-	-	-	1	1	1	-	-	1	-	-	-
Kans.	-	-	-	-	-	65	15	3	21	-	7	6	-	-	3
S. ATLANTIC	27	6	22	-	-	191	168	7	47	3	113	138	1	7	1
Del.	1	-	-	-	-	-	4	-	-	-	-	38	-	-	-
Md.	6	-	-	-	-	5	14	1	8	-	-	27	-	1	-
D.C.	3	-	-	-	-	-	3	-	-	-	-	-	-	-	-
Va.	5	-	-	-	-	-	30	1	4	1	30	9	1	1	-
W. Va.	-	-	-	-	-	-	-	-	12	-	23	1	-	-	-
N.C.	3	-	-	-	-	-	21	-	2	2	47	12	-	-	-
S.C.	1	-	-	-	-	173	16	1	3	-	-	2	-	-	-
Ga.	2	-	-	-	-	1	32	-	1	-	10	37	-	-	-
Fla.	6	6	22	-	-	12	48	4	17	-	3	12	-	5	1
E.S. CENTRAL	1	-	-	-	-	-	55	60	654	-	6	14	-	2	1
Ky.	-	-	-	-	-	-	9	-	110	-	1	1	-	2	1
Tenn.	-	-	-	-	-	-	20	58	535	-	-	4	-	-	-
Ala.	-	-	-	-	-	-	22	2	9	-	3	9	-	-	-
Miss.	1	-	-	-	-	-	4	-	-	-	2	-	-	-	-
W.S. CENTRAL	9	-	5	-	1	293	69	9	348	-	34	21	-	-	23
Ark.	1	-	-	-	-	265	4	1	199	-	2	1	-	-	-
La.	-	-	-	-	-	-	9	5	66	-	5	3	-	-	-
Okla.	3	-	-	-	1	2	11	N	N	-	27	17	-	-	-
Tex.	5	-	5	-	-	26	45	3	83	-	-	-	-	-	23
MOUNTAIN	5	2	90	-	11	41	31	8	93	3	39	65	2	5	-
Mont.	-	-	-	-	1	1	-	-	-	-	1	-	-	-	-
Idaho	1	-	-	-	-	-	2	1	2	-	11	15	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-
Colo.	1	-	-	-	-	2	10	-	8	3	15	14	-	-	-
N. Mex.	-	1	89	-	9	13	3	N	N	-	1	8	-	-	-
Ariz.	1	1	1	-	1	25	14	6	77	-	8	20	-	-	-
Utah	-	-	-	-	-	-	-	1	5	-	1	8	2	4	-
Nev.	2	-	-	-	-	-	2	-	1	-	-	-	-	-	-
PACIFIC	95	4	292	-	34	129	306	5	114	7	109	48	1	41	60
Wash.	5	-	-	-	-	28	43	-	18	3	20	23	-	-	-
Oreg.	1	-	1	-	26	2	14	N	N	-	12	2	-	1	-
Calif.	87	4	291	-	6	83	245	4	85	1	49	21	1	38	60
Alaska	2	-	-	-	-	-	2	-	3	-	2	1	-	-	-
Hawaii	-	-	-	-	2	16	2	1	8	3	26	1	-	2	-
Guam	-	1	2	-	-	1	2	-	4	-	-	-	-	-	2
P.R.	-	103	242	-	-	4	1	-	1	1	9	2	-	1	-
V.I.	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-
Pac. Trust Terr.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending April 4, 1987 and March 29, 1986 (13th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum 1987	Cum 1986	1987	Cum 1987	Cum 1986	Cum 1987	Cum 1987	Cum 1987	Cum 1987
UNITED STATES	8,283	6,454	8	4,667	4,617	17	55	10	1,017
NEW ENGLAND	122	131	-	105	149	-	3	-	-
Maine	1	8	-	10	14	-	-	-	-
N H	1	6	-	5	8	-	-	-	-
Vt	1	5	-	3	7	-	-	-	-
Mass	69	67	-	30	74	-	3	-	-
R I	2	8	-	15	5	-	-	-	-
Conn	48	37	-	42	41	-	-	-	-
MID ATLANTIC	1,420	883	-	877	903	-	5	-	94
Upstate N Y	54	40	-	149	139	-	2	-	9
N Y City	1,005	495	-	435	435	-	-	-	-
N J	164	180	-	142	161	-	3	-	1
Pa	197	168	U	151	168	-	-	-	84
E N CENTRAL	151	246	2	567	600	1	8	-	24
Ohio	29	31	1	110	87	1	3	-	-
Ind	15	27	-	50	75	-	1	-	3
Ill	52	132	-	236	271	-	1	-	12
Mich	42	42	1	156	133	-	2	-	-
Wis	13	14	-	15	34	-	1	-	9
W N CENTRAL	36	65	2	132	122	5	3	-	216
Minn	4	8	-	33	25	-	1	-	50
Iowa	6	5	-	8	11	2	-	-	65
Mo	19	37	-	66	66	3	2	-	12
N Dak	-	2	-	1	2	-	-	-	23
S Dak	3	-	-	5	2	-	-	-	47
Nebr	3	8	-	11	4	-	-	-	6
Kans	1	5	2	8	12	-	-	-	13
S ATLANTIC	2,792	1,933	1	944	913	2	5	2	271
Del	23	10	-	11	11	1	-	-	-
Md	161	117	-	86	62	-	-	-	65
D C	89	93	-	29	38	-	-	-	17
Va	67	127	-	89	81	1	-	-	104
W Va	4	3	-	30	35	-	1	-	15
N C	165	146	-	92	119	-	1	-	-
S C	189	177	1	97	124	-	-	2	7
Ga	422	383	-	124	107	-	-	-	51
Fla	1,672	877	-	386	336	-	3	-	12
E S CENTRAL	503	448	-	418	418	2	1	3	93
Ky	3	25	-	108	110	1	-	-	47
Tenn	243	181	-	113	120	-	1	2	30
Ala	143	146	-	138	138	-	-	-	16
Miss	114	96	-	59	50	1	-	1	-
W S CENTRAL	1,121	1,357	-	491	569	6	3	4	141
Ark	53	72	-	43	59	1	-	-	41
La	183	206	-	80	125	-	-	-	3
Okla	41	45	-	56	46	5	1	4	3
Tex	844	1,034	-	312	339	-	2	-	94
MOUNTAIN	207	177	2	122	90	1	1	-	75
Mont	7	2	-	8	5	-	-	-	43
Idaho	1	1	-	13	4	-	-	-	-
Wyo	22	-	-	-	-	-	-	-	21
Colo	25	53	-	-	4	-	-	-	-
N Mex	15	22	-	24	23	-	1	-	-
Ariz	97	76	-	68	40	1	-	-	11
Utah	2	3	2	1	4	-	-	-	-
Nev	38	20	-	8	10	-	-	-	-
PACIFIC	1,931	1,214	1	1,011	853	-	26	1	103
Wash	12	27	1	48	49	-	-	-	-
Oreg	55	26	-	22	34	-	-	-	-
Calif	1,859	1,148	-	871	715	-	25	1	102
Alaska	2	-	-	18	12	-	-	-	1
Hawaii	3	13	-	52	43	-	1	-	-
Guam	1	1	-	4	-	-	-	-	-
P R	246	206	-	56	71	-	-	-	15
V I	3	-	-	1	-	-	-	-	-
Pac Trust Terr	75	8	-	33	5	-	8	-	-
Amer Samoa	2	-	-	-	-	-	-	-	-

U Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending April 4, 1987 (13th Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	671	478	124	33	18	18	52
Boston, Mass.	188	108	46	15	9	10	23
Bridgeport, Conn.	40	32	5	1	1	1	4
Cambridge, Mass.	22	15	7	-	-	-	-
Fall River, Mass.	37	32	2	2	1	-	-
Hartford, Conn.	51	39	5	4	3	-	3
Lowell, Mass.	28	20	5	2	1	-	2
Lynn, Mass.	24	21	3	-	-	-	-
New Bedford, Mass.	21	17	2	2	-	-	-
New Haven, Conn.	37	28	5	1	1	2	3
Providence, R.I.	59	42	12	1	-	4	2
Somerville, Mass.	11	9	2	-	-	-	3
Springfield, Mass.	49	37	9	2	1	-	5
Waterbury, Conn.	39	28	9	2	-	-	2
Worcester, Mass.	65	50	12	1	1	1	5
MID ATLANTIC	2,692	1,739	548	247	76	81	168
Albany, N.Y.	52	36	9	5	1	1	2
Allentown, Pa.	14	13	1	-	-	-	-
Buffalo, N.Y.	115	81	21	10	1	2	7
Camden, N.J.	34	21	6	4	-	3	-
Elizabeth, N.J.	30	17	7	3	3	-	2
Erie, Pa.†	37	31	4	-	2	-	3
Jersey City, N.J.	46	25	8	9	1	3	2
N.Y. City, N.Y.	1,361	843	298	151	36	33	87
Newark, N.J.	68	33	14	8	2	10	3
Paterson, N.J.	29	20	3	3	3	-	2
Philadelphia, Pa.	441	281	87	39	19	15	28
Pittsburgh, Pa.†	60	39	18	1	1	1	3
Reading, Pa.	43	38	5	-	-	-	6
Rochester, N.Y.	121	85	24	6	4	2	10
Schenectady, N.Y.	30	25	4	1	-	-	2
Scranton, Pa.†	26	18	7	1	-	-	-
Syracuse, N.Y.	97	61	21	4	2	9	6
Trenton, N.J.	32	25	4	-	1	2	-
Utica, N.Y.	23	18	5	-	-	-	3
Yonkers, N.Y.	33	29	2	2	-	-	2
E.N. CENTRAL	2,300	1,568	454	150	58	70	93
Akron, Ohio	65	48	9	2	1	5	-
Canton, Ohio	46	29	7	6	2	2	6
Chicago, Ill.§	564	362	125	45	10	22	16
Cincinnati, Ohio	133	92	25	9	4	3	13
Cleveland, Ohio	169	118	28	14	3	6	1
Columbus, Ohio	130	83	28	9	3	7	6
Dayton, Ohio	126	90	29	4	2	1	-
Detroit, Mich.	256	169	42	28	12	5	6
Evansville, Ind.	44	37	7	-	-	-	3
Fort Wayne, Ind.	53	36	11	4	-	2	3
Gary, Ind.§	21	15	4	1	1	-	-
Grand Rapids, Mich.	61	42	7	2	6	4	7
Indianapolis, Ind.	173	110	47	10	3	3	3
Madison, Wis.	39	28	8	1	1	1	2
Milwaukee, Wis.	124	93	25	3	2	1	3
Peoria, Ill.	49	36	9	1	1	2	7
Rockford, Ill.	41	25	10	2	3	1	6
South Bend, Ind.	29	26	2	1	-	-	2
Toledo, Ohio	107	78	17	7	1	4	8
Youngstown, Ohio	70	51	14	1	3	1	1
W.N. CENTRAL	740	517	129	45	17	32	40
Des Moines, Iowa	63	46	10	5	-	2	3
Duluth, Minn.	21	16	5	-	-	-	1
Kansas City, Kans.	39	25	7	4	2	1	1
Kansas City, Mo.	97	64	17	4	5	7	3
Lincoln, Nebr.	37	28	6	2	1	-	3
Minneapolis, Minn.	190	139	29	11	1	10	10
Omaha, Nebr.	61	41	15	2	1	2	1
St. Louis, Mo.	116	71	26	8	5	6	9
St. Paul, Minn.	48	34	7	4	1	2	4
Wichita, Kans.	68	53	7	5	1	2	5

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,902	1,158	415	182	55	90	113
Atlanta, Ga.	196	107	41	24	-	24	9
Baltimore, Md.	463	290	105	38	12	18	29
Charlotte, N.C.	59	32	18	3	2	4	6
Jacksonville, Fla.	122	81	24	10	2	5	14
Miami, Fla.	155	90	32	25	5	3	-
Norfolk, Va.	50	29	14	1	4	2	6
Richmond, Va.	96	66	24	-	4	2	7
Savannah, Ga.	70	48	19	2	-	1	11
St. Petersburg, Fla.	90	78	6	4	-	2	5
Tampa, Fla.	61	37	12	4	4	2	6
Washington, D.C.	514	282	117	71	17	27	18
Wilmington, Del.	26	18	3	-	5	-	2
E.S. CENTRAL	817	516	205	37	24	35	49
Birmingham, Ala.	146	88	37	8	4	9	5
Chattanooga, Tenn.	55	42	11	2	-	-	3
Knoxville, Tenn.	55	41	12	-	1	1	1
Louisville, Ky.	118	70	32	7	3	6	7
Memphis, Tenn.	203	128	52	10	7	6	24
Mobile, Ala.	94	62	18	4	6	4	5
Montgomery, Ala.	35	25	7	-	1	2	-
Nashville, Tenn.	111	60	36	6	2	7	4
W.S. CENTRAL	1,346	852	273	127	45	49	51
Austin, Tex.	55	30	14	8	2	1	3
Baton Rouge, La.	36	23	6	5	-	2	2
Corpus Christi, Tex.	71	42	16	5	5	3	4
Dallas, Tex.	213	124	46	23	11	9	5
El Paso, Tex.	57	38	13	2	-	4	2
Fort Worth, Tex.	93	64	15	10	3	1	6
Houston, Tex.§	308	176	74	34	13	11	7
Little Rock, Ark.	70	49	11	5	3	2	4
New Orleans, La.	128	84	25	12	2	5	1
San Antonio, Tex.	174	117	26	19	5	7	6
Shreveport, La.	52	41	8	3	-	-	1
Tulsa, Okla.	89	64	19	1	1	4	10
MOUNTAIN	741	499	133	42	27	37	25
Albuquerque, N.Mex.	110	67	29	8	3	3	3
Colo. Springs, Colo.	42	24	9	3	3	3	6
Denver, Colo.	102	59	22	8	3	10	5
Las Vegas, Nev.	112	76	21	8	1	3	4
Ogden, Utah	26	20	2	-	1	3	1
Phoenix, Ariz.	172	119	28	8	12	5	2
Pueblo, Colo.	31	22	6	1	-	2	1
Salt Lake City, Utah	42	28	5	1	2	6	-
Tucson, Ariz.	104	84	11	5	2	2	3
PACIFIC	2,078	1,391	408	161	69	45	162
Berkeley, Calif.	16	13	1	-	1	1	1
Fresno, Calif.	76	57	13	1	4	1	10
Glendale, Calif.	27	20	4	-	1	2	4
Honolulu, Hawaii	68	34	14	12	5	3	9
Long Beach, Calif.	138	100	22	7	3	6	22
Los Angeles, Calif.	605	384	133	52	28	4	24
Oakland, Calif.	74	52	12	6	1	3	10
Pasadena, Calif.	27	15	6	1	-	5	3
Portland, Oreg.	142	99	27	12	2	2	4
Sacramento, Calif.	153	101	37	9	5	1	15
San Diego, Calif.	148	100	23	15	4	6	15
San Francisco, Calif.	174	108	35	25	3	3	9
San Jose, Calif.	171	114	35	11	6	5	18
Seattle, Wash.	156	113	28	8	4	3	5
Spokane, Wash.	50	37	10	1	2	-	7
Tacoma, Wash.	53	44	8	1	-	-	6
TOTAL	13,287††	8,718	2,689	1,024	389	457	753

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza.

† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

†† Total includes unknown ages.

§ Data not available. Figures are estimates based on average of past 4 weeks.

Sedentary Lifestyle — Continued

considered sedentary. Rates increased with age and were slightly higher for women than for men. The National Health Interview Survey (*3*), a representative survey conducted by the National Center for Health Statistics using household-interviews, provided very similar estimates of the prevalence of sedentary lifestyle for 1985. The trends for age, gender, and region have been noted previously in other national surveys (*4*).

The 1990 physical fitness and exercise objectives are also concerned with the regular monitoring of national trends, the use of community recreation programs and facilities, public and professional awareness of the benefits of regular physical activity, worksite fitness programs, and the evaluation of the short- and long-term effects of physical activity (*5*). Recent reports have summarized progress in these areas (*5,6*).

Specific health reasons for promoting physical activity stem from a wide variety of research findings. Increased levels of physical activity have been associated with reduced risk of coronary heart disease (*7*), enhanced weight control (*8*), reduced symptoms of anxiety and mild to moderate depression, and an enhanced sense of well-being derived from feeling and looking better (*9*). Further, there is emerging evidence that physical activity may have important beneficial effects on non-insulin-dependent diabetes mellitus, hypertension, and osteoporosis (*6*). In addition, physical activity is helpful in managing and treating many chronic diseases (*10*).

In spite of the fact that physical activity is a complex behavior (*11*) and difficult to assess (*12*), progress has been made in the ability to characterize national levels of physical activity. Unfortunately, these results indicate that less than half of the American population is physically active at a level likely to confer health benefits. Because of the multiple health benefits of physical activity and because of the high prevalence of sedentary lifestyle documented among the U.S. population, the promotion of prudent physical activity should be a national priority for the Public Health Service.

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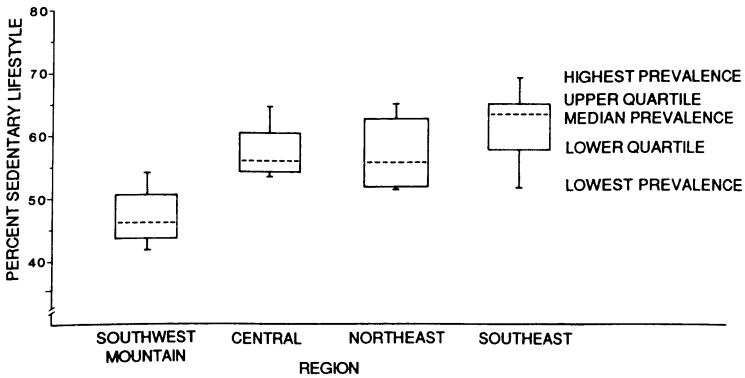
FIGURE 3. Box-plot summaries of the region-specific distribution of sedentary lifestyle prevalences from 22 states participating in the 1985 Behavioral Risk Factor Surveillance System



Sedentary Lifestyle — Continued

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Epidemiologic Notes and Reports

Update: *Salmonella enteritidis* Infections in the Northeastern United States

New England and the Middle Atlantic region* experienced a fivefold increase in the reported isolation rate of *Salmonella enteritidis* between 1976 and 1985 (*1*). Consequently, a regional *S. enteritidis* Working Group was established in 1986 to coordinate investigations of *S. enteritidis* outbreaks. Investigations of recent outbreaks and related studies suggest that many *S. enteritidis* infections in the Northeast are associated with eggs.

Fourteen *S. enteritidis* outbreaks have been reported to CDC from the Northeast since October 1, 1986. The vehicles of transmission have been identified for 10 of the outbreaks. At least six of these vehicles were either eggs or foods which contained raw or undercooked eggs (homemade eggnog prepared with store-bought eggs, Monte Cristo sandwiches made of sliced cooked meat and cheese on bread dipped in raw egg and grilled, and Caesar salad dressing made with raw eggs). The outbreak-associated eggs were all USDA grade A shell eggs, and, in each instance, the food preparation history suggested the eggs were eaten raw or undercooked. The outbreak-associated eggs were not available for culture. However, in an outbreak associated with riceballs (made with eggs) in September 1986, *S. enteritidis* was cultured from an egg-breaking machine in the restaurant involved.

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*Defined by the U.S. Bureau of the Census as New Jersey, New York, and Pennsylvania.

Salmonella — *Continued*

Editorial Note: Salmonellosis associated with eggs is not a new problem. Large outbreaks of salmonellosis associated with bulk egg products and cracked shell eggs (*2,3*) led to the passage of the Egg Products Inspection Act in 1970. This law required pasteurization of all bulk egg products and federally-supervised inspection of shell eggs for "checks" or cracks. Since enactment of this legislation, there have been fewer egg-associated outbreaks of salmonellosis, and CDC has not received any reports of outbreaks associated with bulk egg products (*4*).

These recent outbreaks suggest that egg-associated *S. enteritidis* is an emerging public health problem and show the importance of routine serotype-specific surveillance. Eggs can become contaminated with *Salmonella* in several ways. Fecal soiling may contaminate egg shells, and the internal contents of the egg may occasionally be contaminated by organisms entering through hairline cracks in the shell (*5*). In addition, if there is an ovarian infection in the hen, an egg yolk may become infected by certain serotypes of *Salmonella* before the shell is formed (*6*). It is not known whether *S. enteritidis* is one such serotype.

As is true for meat, poultry, raw milk, and other raw foods of animal origin, proper handling and cooking of eggs can minimize the risk of salmonellosis. Thorough cooking kills *Salmonella*. Consumers concerned about the proper handling of egg-containing foods should contact their county extension home economist or call the USDA Meat and Poultry Hotline (800-535-4555). Further research is needed to understand the ecology of *Salmonella* colonization in poultry and other food-animal species and to determine ways to further reduce the contamination of eggs and other foods derived from animals.

Clinicians are encouraged to report cases of salmonellosis to their state health department. Isolates of *Salmonella* can be submitted to state laboratories for serotyping to support epidemiologic investigations.

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Progress in Chronic Disease Prevention

The Prevalence of Cancer — Connecticut, January 1, 1982

Incidence and follow-up data from the Connecticut Tumor Registry were analyzed in order to estimate the prevalence of cancer (*1*). A case was included in this analysis if the patient was alive on January 1, 1982, and had been diagnosed with cancer at any time during the study period, 1935 through 1981. Cases of basal- and squamous-cell cancer of the skin were not included. During the study period, 288,221 residents of Connecticut were diagnosed with invasive cancer. Of these, 53,628 (18.6%) were known to be living on January 1, 1982; 19,881 (6.9%) were lost to follow-up (i.e., reported alive with a date of last contact prior to January 1, 1982). The life-table method was used to estimate the number of patients among those lost to follow-up who were alive on January 1, 1982 (*2*).

Cancer – Continued

On January 1, 1982, the age-adjusted* prevalence rate among males for all sites of cancer combined was 1,789/100,000 compared with 2,222/100,000 among females. In contrast, the age-adjusted cancer incidence rate for all sites among males diagnosed during the period 1978-1981 was almost one-third higher than among females (463/100,000 compared with 342/100,000). The mortality rate among males was about 50% higher than among females (246/100,000 compared with 154/100,000) (*3*). The relatively favorable survival rate for women with cancer affecting many of the common sites (e.g., breast and gynecological malignancies) and the poor survival rate for patients with lung cancer (the most common cancer in males) resulted in an age-adjusted prevalence rate among females that was about 25% higher than that among males.

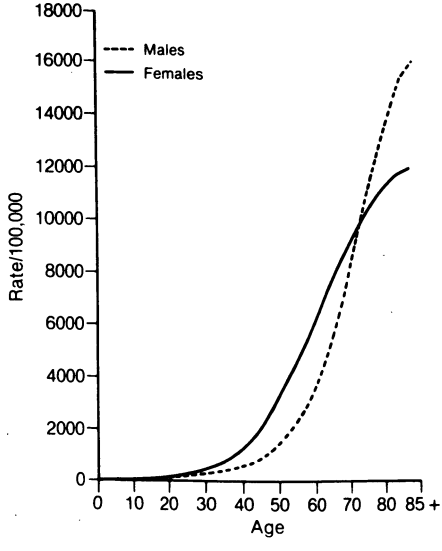
The five most prevalent malignant diseases among males were prostate cancer (372/100,000), colon cancer (249/100,000), bladder cancer (233/100,000), rectal cancer (145/100,000), and lung cancer (135/100,000). The most prevalent cancer site in females was the breast (848/100,000), followed by corpus uteri (273/100,000), colon (224/100,000), cervix (138/100,000), and rectum (98/100,000).

The age-specific prevalence rates for all sites of cancer combined among females 20 to 59 years of age were about twice the rates for males (Figure 4). The rates for all sites combined for males >70 years of age were higher than those for females, partly because of the high prevalence of prostate cancer in elderly males. For females, prevalence rates for all sites combined ranged from 1,170/100,000 for those 30 to 49 years of age to 10,635/100,000 for those >70. For males, the rates for all sites combined increased from 598/100,000 for those 30 to 49 years old to 11,810/100,000 for those >70.

Editorial Note: The magnitude of the cancer problem has been measured traditionally by incidence and mortality statistics. The knowledge of cancer prevalence rates adds a new dimen-

*Adjusted to the 1980 U.S. population, U.S. Bureau of the Census.

FIGURE 4. Age-specific prevalence rates of cancer for all sites combined among males and females — Connecticut, January 1, 1982



Cancer — Continued

sion to the assessment of this problem. While incidence reflects only the rate of occurrence of newly diagnosed cancer cases in one particular year, prevalence estimates include patients diagnosed during previous years who survived to the point in time of interest. Because most patients with cancer survive more than one year, prevalence is a useful indicator of the cancer burden on the health care system.

"Cured" and "uncured" cases were included in this study because, in many cases, the determination of cure is ambiguous. It has been suggested that even for so-called cancer survivors, the experience of cancer leaves a long-lasting impression (*4*). Problems of employment, insurance, second malignancies, and reproduction linger long after the patient's treatment is completed and probably justify including all patients with a history of cancer in the prevalence calculations.

Approximately 2% of the population of the state of Connecticut had a history of cancer on January 1, 1982. Perhaps even more surprising is the fact that 11% of females and 12% of males ≥70 years of age had a history of cancer. Applying the age-specific prevalence rates to the estimated 1986 U.S. population (*5*) results in an estimate of approximately 5 million persons with a history of cancer in the United States. With the anticipated aging of the U.S. population, the number of individuals with a history of cancer can be expected to increase. Calculations using projected populations (*5*) and assuming constant prevalence rates yield prevalence estimates of 6.2 million for the year 2000 and 9.6 million for 2030. These projections should be viewed cautiously since the racial and ethnic composition of Connecticut is different from that of the United States as a whole and since incidence and survival patterns among blacks, whites, and other races are known to differ.

Advances in cancer treatment that improve patient survival will almost certainly increase the prevalence rates of cancer over time. With more and more patients living with a history of cancer, an increase in resources will be required to help patients with their medical problems, physical limitations, and social adjustments. However, the successful application of cancer prevention strategies, including smoking cessation and diet modification programs, should decrease the incidence of cancer and thereby lower cancer prevalence.

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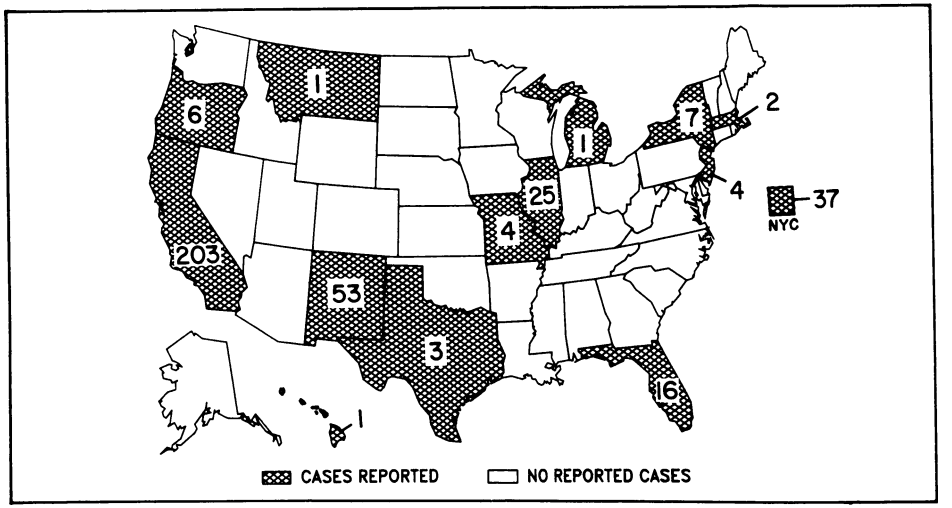
FIGURE I. Reported measles cases — United States, weeks 09-12, 1987



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The data in this report are provisional, based on weekly reports 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. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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