CENTERS FOR DISEASE CONTROL

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Progress in Chronic Disease Prevention

Cigarette Smoking – Behavioral Risk Factor Surveillance System, 1988

Cigarette smoking prevalence during 1988 was examined in relation to generation cohort and level of education using data from the Behavioral Risk Factor Surveillance System (BRFSS). In 1988, health departments from 36 states and the District of Columbia participated in the BRFSS monthly random-digit-dialed telephone interviews of adults aged ≥18 years (*1*). Respondents were asked if they had ever smoked at least 100 cigarettes, if they had ever quit smoking, and if they currently smoked. Current smokers are defined as persons who have smoked at least 100 cigarettes and who continue to smoke; former smokers, as persons who have smoked 100 cigarettes but who no longer smoke; and ever smokers, as current and former smokers combined (*2*).

Smoking rates among persons aged 18–34 years varied widely by state (Table 1). The proportion of persons who ever smoked ranged from 27.1% in Utah to 53.1% in Maine (median: 41.1%). The proportion of former smokers ranged from 9.1% in Utah to 20.3% in Maine (median: 15.1%). The proportion of persons who currently smoked ranged from 18.1% in Utah to 37.9% in Kentucky (median: 26.2%).

Smoking rates also varied by generation and level of education (Figure 1). Three generations were defined: persons 18–34 years of age, persons 35–54 years of age, and persons ≥55 years of age. From the older to middle generation, the likelihood of being a current smoker increased substantially with each decrease in level of education. From the middle to younger generation, the likelihood of being a current smoker decreased substantially only for persons with more than a high school education.

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Cigarette Smoking — Continued

TABLE 1. Prevalence of cigarette smoking among persons 18–34 years of age, by area — Behavioral Risk Factor Surveillance System, 1988

Area	Sample size	Ever smokers		Former smokers		Current smokers	
		%	(95% CI*)	%	(95% CI)	%	(95% CI)
Alabama	497	37.1	(±4.7)	9.1	(±2.8)	28.0	(±4.4)
Arizona	429	43.4	(±5.3)	19.7	(±4.2)	23.7	(±4.5)
California	950	37.8	(±3.6)	15.2	(±2.5)	22.6	(±3.2)
Connecticut	400	48.0	(±5.6)	18.5	(±4.2)	29.5	(±4.9)
District of Columbia	455	30.1	(±4.5)	11.2	(±3.0)	18.9	(±4.1)
Florida	428	43.3	(±5.1)	18.9	(±3.8)	24.4	(±4.4)
Georgia	880	39.8	(±3.7)	15.7	(±2.6)	24.1	(±3.2)
Hawaii	669	39.3	(±4.6)	13.2	(±3.2)	26.1	(±4.1)
Idaho	573	33.4	(±4.3)	14.2	(±2.9)	19.2	(±3.5)
Illinois	656	42.1	(±4.5)	14.8	(±3.1)	27.3	(±4.2)
Indiana	702	45.7	(±4.3)	15.1	(±2.9)	30.6	(±3.7)
Iowa	266	37.4	(±5.7)	11.2	(±3.9)	26.2	(±5.2)
Kentucky	589	49.0	(±4.6)	11.1	(±3.0)	37.9	(±4.3)
Maine	426	53.1	(±5.5)	20.3	(±4.3)	32.8	(±5.2)
Maryland	389	40.6	(±6.0)	16.7	(±4.3)	23.9	(±5.2)
Massachusetts	547	44.5	(±4.7)	15.7	(±3.3)	28.8	(±4.3)
Michigan	489	46.5	(±5.1)	17.4	(±3.8)	29.1	(±4.4)
Minnesota	1247	43.1	(±2.9)	17.7	(±2.2)	25.4	(±2.6)
Missouri	488	46.2	(±5.1)	16.5	(±3.8)	29.7	(±4.6)
Montana	362	31.7	(±7.2)	12.6	(±4.7)	19.1	(±6.3)
Nebraska	461	40.5	(±5.0)	16.0	(±3.5)	24.5	(±4.4)
New Hampshire	398	49.4	(±5.4)	17.4	(±3.8)	32.0	(±5.1)
New Mexico	381	40.6	(±5.8)	15.6	(±4.0)	25.0	(±5.2)
New York	373	41.1	(±5.7)	12.2	(±3.4)	28.9	(±5.2)
North Carolina	558	40.8	(±4.8)	15.1	(±3.4)	25.7	(±3.9)
North Dakota	560	37.4	(±4.2)	14.5	(±3.2)	22.9	(±3.6)
Ohio	526	43.8	(±4.8)	13.4	(±3.2)	30.4	(±4.4)
Oklahoma	342	37.0	(±5.9)	13.7	(±4.0)	23.3	(±5.0)
Rhode Island	575	40.6	(±4.5)	14.1	(±3.0)	26.5	(±4.0)
South Carolina	636	41.3	(±4.4)	11.9	(±2.6)	29.4	(±4.1)
South Dakota	373	33.2	(±5.2)	12.4	(±3.6)	20.8	(±4.5)
Tennessee	827	48.1	(±3.8)	13.9	(±2.5)	34.2	(±3.6)
Texas	446	37.8	(±5.3)	14.7	(±3.9)	23.1	(±4.5)
Utah	589	27.1	(±3.9)	9.1	(±2.4)	18.1	(±3.3)
Washington	430	46.6	(±5.1)	17.6	(±3.9)	29.0	(±4.7)
West Virginia	466	42.8	(±5.2)	16.5	(±3.6)	26.3	(±4.4)
Wisconsin	439	45.4	(±5.0)	15.9	(±3.5)	29.5	(±4.6)

*Confidence interval.

Cigarette Smoking — Continued

Editorial Note: Based on findings from the 1988 BRFSS, young adults with low educational attainment (a correlate of low socioeconomic status) were more likely to be current smokers than were other persons. These results indicate that limited progress has been made in reducing the prevalence of cigarette smoking among young adults of low educational attainment levels—a finding consistent with data from other surveys (*3*).

Differences in socioeconomic levels by state may account for some of the variation in observed prevalences. Cultural factors, such as emphasis among the largely Mormon population of Utah to limit or abstain from tobacco use, may also affect smoking rates by state (*4*). Other determinants that may vary by state include: the extent of smoking prevention activities (including school programs emphasizing smoking prevention [*5*]); state cigarette excise tax rates (*2*); and the intensity of tobacco advertising or promotional events sponsored by the tobacco industry (*6*).

Recent smoking prevention strategies have been directed toward young persons through the school, home, workplace, and community (*2*). Life-skills instruction on resisting smoking has been effective in reducing smoking initiation (*7*). Data from the BRFSS and National Health Interview Surveys (*3*) show that educational attainment levels are becoming an increasingly important factor in determining whether young persons smoke; therefore, effective smoking prevention strategies need to be targeted toward children and adolescents in groups with generally low educational attainment.

References

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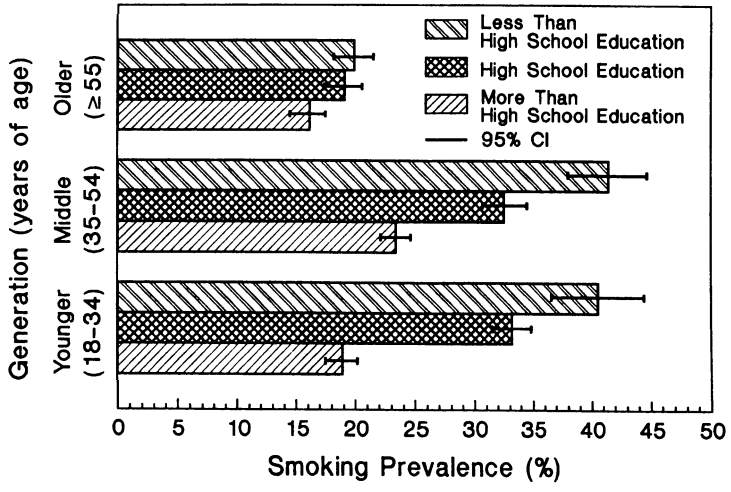
FIGURE 1. Prevalence of current cigarette smoking, by generation and educational attainment — Behavioral Risk Factor Surveillance System, 1988



Cigarette Smoking — Continued

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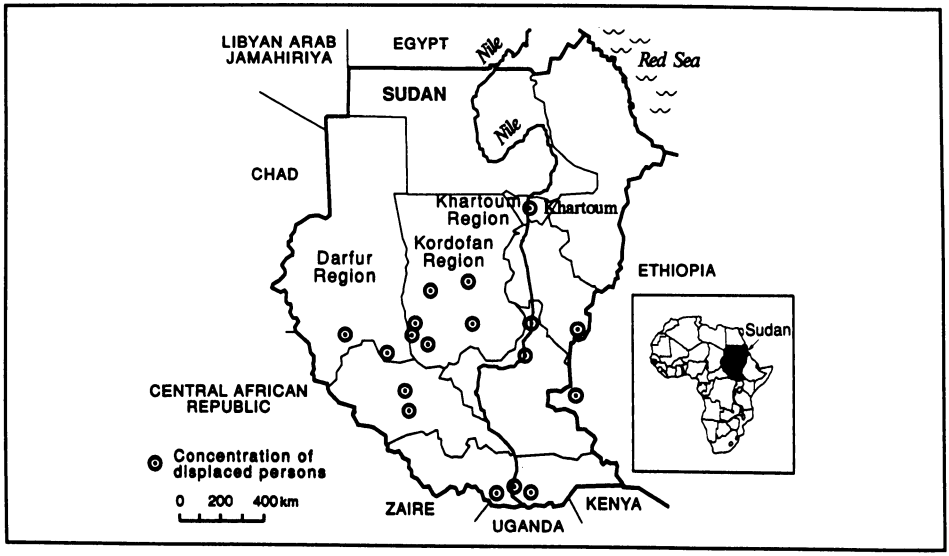
International Notes

Nutritional and Health Status of Displaced Persons — Sudan, 1988–1989

Since 1987, more than 1.3 million persons have fled civil strife in southern Sudan and settled in urban areas (e.g., the capital city of Khartoum) or in camps in the northern regions of the country (Figure 1). In August 1988, after extensive flooding destroyed the dwellings of 750,000 displaced persons (DP) living in outlying areas around Khartoum, 23% of children <5 years of age were moderately or severely undernourished (*1*). In response to recommendations for continued health-status monitoring, from September 1988 through February 1989, 71 surveys (each with 30 randomly chosen clusters of 10 children) were conducted in 27 different sites in Khartoum. A total of 17,639 children <5 years of age (or <110 cm in height if age was unknown) were weighed and measured. Children <80% of the median weight-for-height (Wt/Ht) for children <5 years of age (*2*) were classified as acutely undernourished (children 70%–79% of the median Wt/Ht were classified as moderately undernourished and children <70% of the median Wt/Ht as severely undernourished).

FIGURE 1. Location of displaced persons — Sudan, 1988–1989



Displaced Persons – Continued

In September and October 1988, the mean prevalence of acute undernutrition among displaced children in surveyed communities in Khartoum was 19.9%. By February 1989, the mean prevalence in those communities resurveyed at least once had declined to 10.9%.

In southern Darfur, approximately 500 km southwest of Khartoum, >80,000 additional DP live in temporary camps. Cluster surveys were conducted in seven camps where food rations were distributed biweekly. The surveys showed a decline in the prevalence of acute undernutrition in children <5 years of age from May 1988 (mean: 35.9%; range: 25.0%–43.0%) through February–March 1989 (mean: 6.4%; range: 4.6%–9.4%). The mean monthly crude mortality rate (CMR) for all ages in these camps also declined from April 1988 (11.8 deaths per 1000 population; range: 4.9–18.3) to January 1989 (0.4 per 1000; range 0–0.7) (Figure 2). In April 1988, the mean monthly CMR for children <5 years of age was 19.0 deaths per 1000 children; diarrhea and meningitis were the leading reported causes of childhood death. By January 1989, this rate had declined to 6.0 deaths per 1000 children, and the leading causes of death were diarrhea and acute respiratory infections.

To reduce the risk of measles, mass immunization campaigns were conducted in the seven camps targeting all children 6 months to 5 years of age. By March–April 1989, measles vaccination coverage levels were 80%–95% in children aged 12–23 months in these camps.

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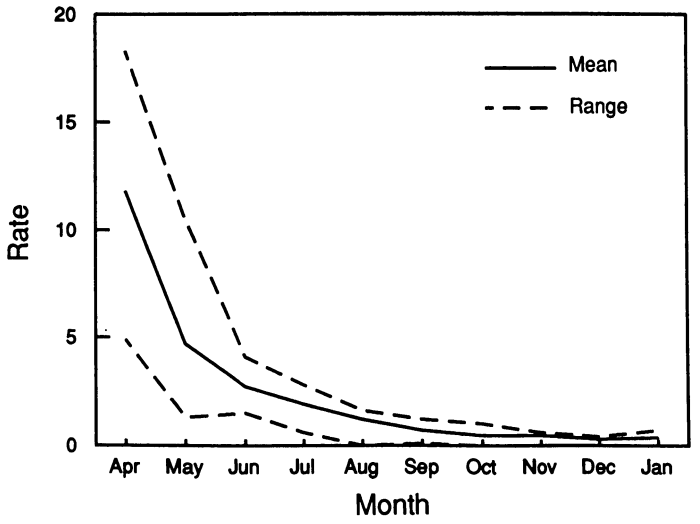
Editorial Note: In refugee and displaced populations, mortality rates in children <5 years of age increase in relation to the prevalence of acute undernutrition (*3,4*).

FIGURE 2. Range and mean of crude mortality rates per 1000 population in seven camps for displaced persons, by month – southern Darfur, Sudan, April 1988–January 1989



Displaced Persons — Continued

For the southern Darfur camps, the monthly CMR in April 1988 (11.8 per 1000) is more than five times that expected in the poorest developing nations in Africa (<2 deaths per 1000 per month) (*5*). In a DP camp located in southern Kordofan (Figure 1), the monthly CMR in July 1988 (120 per 1000) was among the highest reported for any famine-affected population since 1969 (CDC, unpublished data). Mortality data collected under adverse conditions such as those in southern Darfur must be interpreted with caution. However, the observed decline in mortality is consistent with the reported decline in undernutrition prevalence.

Most undernutrition-related childhood deaths can be prevented by provision of food of adequate caloric content (minimum of 1900 kilocalories per person per day [all ages]) and quality (appropriate amounts of carbohydrates, proteins, fats, and essential micronutrients [e.g., vitamins A, B complex, and C]) (*6,7*). The prevalence of undernutrition has declined in most areas surveyed while the number of children in the camps in southern Darfur has reportedly increased; however, the deaths of the most severely undernourished children could account, at least in part, for the lower prevalence of undernutrition reported (*8*).

(Continued on page 855)

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

Disease	49th Week Ending			Cumulative, 49th Week Ending		
	Dec. 9, 1989	Dec. 10, 1988	Median 1984-1988	Dec. 9, 1989	Dec. 10, 1988	Median 1984-1988
Acquired Immunodeficiency Syndrome (AIDS)	603	U*	215	32,694	28,871	12,246
Aseptic meningitis	200	144	144	9,471	6,653	9,820
Encephalitis: Primary (arthropod-borne & unspec)	11	12	19	843	772	1,161
Post-infectious	1	-	1	78	113	106
Gonorrhea: Civilian	13,196	14,814	17,146	651,302	656,854	795,583
Military	85	284	248	10,208	10,996	15,811
Hepatitis: Type A	744	744	531	33,087	25,191	21,629
Type B	451	505	542	21,433	21,385	24,279
Non A, Non B	39	57	74	2,179	2,414	3,329
Unspecified	46	64	91	2,153	2,236	4,122
Legionellosis	30	18	12	1,049	938	779
Leprosy	3	6	6	158	171	223
Malaria	27	12	14	1,187	957	957
Measles: Total†	59	84	19	14,574	2,837	2,837
Indigenous	58	83	16	13,915	2,509	2,509
Imported	1	1	1	659	328	328
Meningococcal infections	45	54	54	2,467	2,629	2,517
Mumps	133	119	119	5,210	4,447	4,447
Pertussis	72	114	59	3,488	2,984	2,984
Rubella (German measles)	-	15	3	348	208	508
Syphilis (Primary & Secondary): Civilian	620	743	565	39,448	36,351	26,274
Military	6	25	1	246	168	153
Toxic Shock syndrome	7	8	8	355	338	342
Tuberculosis	395	473	508	20,045	20,034	20,112
Tularemia	4	-	1	140	178	178
Typhoid Fever	7	10	10	462	383	357
Typhus fever, tick-borne (RMSF)	2	3	3	600	591	683
Rabies, animal	53	86	82	4,324	4,102	5,091

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1989		Cum. 1989
Anthrax	-	Leptospirosis (Hawaii 1)	95
Botulism: Foodborne	24	Plague	4
Infant (N.J. 1, Utah 1)	23	Poliomyelitis, Paralytic	-
Other (Calif. 1)	5	Psittacosis (Iowa 1, Oregon 1)	95
Brucellosis (Texas 1)	83	Rabies, human	1
Cholera	-	Tetanus (Md. 1, Ark. 1, Calif. 2)	45
Congenital rubella syndrome	3	Trichinosis	22
Congenital syphilis, ages < 1 year	243		
Diphtheria	3		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.
†One of the 59 reported cases for this week was 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 December 9, 1989 and December 10, 1988 (49th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	32,694	9,471	843	78	651,302	656,854	33,087	21,433	2,179	2,153	1,049	158
NEW ENGLAND	1,299	525	24	2	19,238	20,557	693	1,036	68	80	66	9
Maine	66	30	5	-	243	371	24	58	6	1	6	-
N.H.	38	54	1	-	167	258	58	55	9	4	2	-
Vt.	13	41	4	-	64	110	36	77	8	-	3	-
Mass.	699	168	8	2	7,669	6,949	220	568	25	58	41	7
R.I.	79	118	-	-	1,368	1,919	52	76	5	10	14	1
Conn.	404	114	6	-	9,727	10,950	303	202	15	7	-	1
MID. ATLANTIC	9,546	1,326	39	6	89,963	104,228	3,955	3,342	200	225	274	22
Upstate N.Y.	1,442	543	31	5	16,357	14,712	937	664	74	15	95	4
N.Y. City	4,859	174	5	1	33,223	44,460	426	1,325	32	173	44	16
N.J.	2,214	-	3	-	13,899	14,667	457	581	32	7	43	1
Pa.	1,031	609	-	-	26,484	30,389	2,135	772	62	30	92	1
E.N. CENTRAL	2,604	1,898	313	9	124,942	112,165	1,981	2,495	251	101	287	4
Ohio	481	642	125	4	33,470	25,279	393	453	40	22	117	-
Ind.	358	250	43	3	9,318	8,598	203	372	29	40	59	1
Ill.	1,158	376	71	2	40,915	33,243	860	634	104	23	20	3
Mich.	477	512	47	-	31,954	35,390	290	640	47	16	48	-
Wis.	130	118	27	-	9,285	9,655	235	396	31	-	43	-
W.N. CENTRAL	802	482	38	4	31,461	28,124	1,405	964	112	31	41	1
Minn.	164	65	4	1	3,566	3,700	159	111	21	7	3	-
Iowa	57	82	15	-	2,630	2,163	174	46	15	5	6	-
Mo.	417	213	3	-	19,228	16,332	732	662	48	13	17	-
N. Dak.	8	12	4	-	131	185	5	23	4	2	1	-
S. Dak.	4	13	4	-	263	453	21	10	9	-	2	-
Nebr.	32	22	5	-	1,537	1,416	91	29	3	2	6	1
Kans.	120	75	3	3	4,106	3,875	223	83	12	2	6	-
S. ATLANTIC	6,588	1,883	163	25	176,989	184,385	3,479	4,163	325	353	134	2
Del.	77	82	1	-	3,099	2,920	86	139	5	8	12	-
Md.	639	227	19	2	20,702	19,343	1,065	706	29	28	29	-
D.C.	444	26	-	-	10,078	13,824	11	34	2	-	1	-
Va.	393	403	42	3	15,287	13,569	320	295	67	216	11	-
W. Va.	73	97	85	-	1,400	1,261	27	98	13	10	-	-
N.C.	492	213	8	2	26,954	26,401	431	1,001	85	-	35	1
S.C.	330	40	1	-	16,045	14,653	84	598	4	11	8	-
Ga.	1,012	133	3	1	35,065	34,909	360	406	14	9	25	-
Fla.	3,128	662	4	17	48,359	57,505	1,095	886	106	71	13	1
E.S. CENTRAL	731	679	48	3	53,664	51,927	401	1,562	153	13	64	-
Ky.	116	215	20	1	5,210	5,289	122	386	50	6	9	-
Tenn.	266	123	5	-	18,228	18,193	157	796	35	-	40	-
Ala.	207	239	20	1	17,133	15,492	77	246	56	3	13	-
Miss.	142	102	3	1	13,093	12,953	45	134	12	4	2	-
W.S. CENTRAL	2,725	928	79	7	67,963	70,079	3,747	2,186	142	503	53	25
Ark.	78	47	8	-	7,819	6,973	261	70	15	10	3	-
La.	489	79	22	1	14,306	13,983	252	357	16	2	10	-
Okla.	169	81	12	4	5,998	6,667	464	200	37	37	26	-
Tex.	1,989	721	37	2	39,840	42,456	2,770	1,559	74	454	14	25
MOUNTAIN	1,015	311	16	5	13,841	14,058	4,820	1,417	205	149	60	3
Mont.	17	6	-	-	181	388	89	44	7	3	3	1
Idaho	21	2	-	1	167	312	165	126	13	4	3	-
Wyo.	16	9	-	-	104	188	56	9	4	-	-	-
Colo.	358	150	3	1	2,962	3,126	493	162	58	62	5	-
N. Mex.	86	12	2	1	1,192	1,382	658	202	33	3	8	1
Ariz.	288	98	5	-	5,597	5,150	2,550	539	50	61	25	1
Utah	65	22	1	2	423	509	477	109	25	5	8	-
Nev.	164	12	5	-	3,215	3,003	332	226	15	11	8	-
PACIFIC	7,384	1,439	123	17	73,241	71,331	12,606	4,268	723	698	70	92
Wash.	486	-	6	1	6,198	6,765	2,938	919	193	67	25	8
Oreg.	220	-	-	-	2,957	3,034	2,193	502	78	15	2	1
Calif.	6,490	1,311	102	16	62,603	59,993	6,671	2,704	437	599	40	68
Alaska	17	36	12	-	993	976	639	60	7	5	1	-
Hawaii	171	92	3	-	490	563	165	83	8	12	2	15
Guam	1	5	1	-	124	143	6	-	-	7	-	1
P.R.	1,426	116	2	1	1,028	1,252	188	234	18	19	-	8
V.I.	27	-	-	-	568	422	-	8	-	-	-	-
Amer. Samoa	-	-	-	-	44	77	36	-	2	-	-	5
C.N.M.I.	-	-	-	-	73	52	3	10	-	2	-	1

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending December 9, 1989 and December 10, 1988 (49th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	1989	Cum. 1989	Cum. 1988
UNITED STATES	1,187	58	13,915	1	659	2,837	2,467	133	5,210	72	3,488	2,984	-	348	208
NEW ENGLAND	85	3	344	-	38	115	182	5	86	2	375	317	-	6	9
Maine	1	-	-	-	1	7	17	-	-	-	25	24	-	-	-
N.H.	2	-	9	-	7	88	17	-	15	-	16	47	-	4	5
Vt.	4	-	1	-	2	-	8	1	3	-	6	5	-	1	-
Mass.	45	3	85	-	21	4	100	2	57	1	295	201	-	1	3
R.I.	21	-	38	-	3	-	1	-	-	-	11	17	-	-	1
Conn.	12	-	211	-	4	16	39	2	11	1	22	23	-	-	-
MID. ATLANTIC	221	12	793	1	189	986	362	3	444	5	301	301	-	30	14
Upstate N.Y.	34	-	57	-	98	37	130	1	170	4	131	206	-	14	2
N.Y. City	91	-	105	1†	17	52	43	1	20	-	17	9	-	16	7
N.J.	60	-	412	-	16	354	73	-	180	-	32	18	-	-	3
Pa.	36	12	219	-	58	543	116	1	74	1	121	68	-	-	2
E.N. CENTRAL	82	8	4,725	-	102	249	323	6	594	33	516	291	-	27	32
Ohio	11	-	1,516	-	35	85	117	-	153	32	139	49	-	3	1
Ind.	11	-	112	-	-	57	30	-	50	-	46	71	-	-	-
Ill.	36	-	2,501	-	1	72	85	-	189	-	148	56	-	21	27
Mich.	16	8	320	-	23	31	67	6	154	1	46	37	-	1	4
Wis.	8	-	276	-	43	4	24	-	48	-	137	78	-	2	-
W.N. CENTRAL	35	31	802	-	11	18	74	16	437	2	175	142	-	6	2
Minn.	10	-	17	-	-	11	16	-	2	-	46	62	-	-	-
Iowa	5	-	12	-	1	2	2	1	51	-	15	34	-	1	-
Mo.	12	31	533	-	-	5	21	3	79	-	92	23	-	4	-
N. Dak.	2	-	-	-	-	-	-	-	-	-	3	11	-	-	-
S. Dak.	1	-	-	-	-	-	8	-	-	-	4	5	-	-	-
Nebr.	2	-	108	-	2	-	18	-	5	-	7	-	-	-	-
Kans.	3	-	132	-	8	-	9	12	300	2	8	7	-	1	2
S. ATLANTIC	205	1	648	-	76	437	445	38	1,006	7	347	253	-	10	18
Del.	7	-	42	-	1	-	2	-	1	-	1	7	-	-	-
Md.	38	1	69	-	36	17	72	20	504	-	77	46	-	2	1
D.C.	10	-	37	-	5	-	15	2	138	-	3	1	-	-	-
Va.	45	-	20	-	3	239	60	2	131	2	36	24	-	-	11
W. Va.	2	-	53	-	-	6	13	1	16	-	33	10	-	-	-
N.C.	21	-	187	-	3	5	66	2	43	4	76	66	-	1	1
S.C.	10	-	15	-	-	-	32	10	49	-	-	1	-	-	-
Ga.	14	-	2	-	16	-	73	-	78	1	51	37	-	-	2
Fla.	58	-	223	-	12	170	112	1	46	-	70	61	-	7	3
E.S. CENTRAL	19	2	249	-	4	69	88	3	236	3	198	103	-	5	2
Ky.	1	-	40	-	4	35	45	-	9	-	1	12	-	-	-
Tenn.	5	-	150	-	-	-	12	2	84	1	112	29	-	4	2
Ala.	7	2	58	-	-	-	26	1	29	2	78	57	-	1	-
Miss.	6	-	1	-	-	34	5	N	N	-	7	5	-	-	-
W.S. CENTRAL	75	1	3,255	-	75	24	178	52	1,608	5	374	236	-	50	23
Ark.	-	-	3	-	19	1	13	3	187	-	30	35	-	-	3
La.	3	1	110	-	-	-	44	34	715	5	31	20	-	5	-
Okla.	8	-	126	-	-	8	24	1	198	-	63	62	-	1	1
Tex.	64	-	3,016	-	56	15	97	14	508	-	250	119	-	44	19
MOUNTAIN	26	-	364	-	54	182	71	9	250	6	674	823	-	37	6
Mont.	1	-	12	-	1	66	2	-	4	1	40	2	-	1	-
Idaho	2	-	-	-	7	1	2	1	27	2	76	343	-	32	-
Wyo.	1	-	-	-	-	-	1	-	8	-	-	2	-	2	-
Colo.	6	-	80	-	19	115	22	5	61	-	98	32	-	1	2
N. Mex.	4	-	16	-	15	-	2	N	N	-	35	50	-	-	-
Ariz.	9	-	141	-	4	-	28	2	124	1	399	364	-	-	-
Utah	-	-	114	-	-	-	6	1	19	2	25	29	-	-	3
Nev.	3	-	1	-	8	-	8	-	7	-	1	1	-	1	1
PACIFIC	439	-	2,735	-	110	757	744	1	549	9	528	518	-	177	102
Wash.	35	-	31	-	22	7	80	1	52	3	189	122	-	-	-
Oreg.	20	-	12	-	48	8	53	N	N	-	14	50	-	3	-
Calif.	373	-	2,671	-	28	728	595	-	476	6	299	278	-	152	71
Alaska	3	-	1	-	-	2	13	-	2	-	1	8	-	-	-
Hawaii	8	-	20	-	12	12	3	-	19	-	25	60	-	22	31
Guam	3	U	-	U	-	1	1	U	6	U	1	-	U	-	1
P.R.	1	-	562	-	-	231	7	-	8	-	6	15	-	8	3
V.I.	-	U	4	U	-	-	-	U	18	U	-	-	U	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	3	U	-	-	U	-	-
C.N.M.I.	1	U	-	U	-	-	-	U	6	U	-	-	U	-	-

*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 December 9, 1989 and December 10, 1988 (49th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	39,448	36,351	355	20,045	20,034	140	462	600	4,324
NEW ENGLAND	1,569	1,150	22	611	509	2	40	7	9
Maine	13	12	6	25	20	-	-	-	2
N.H.	13	7	2	25	11	-	1	-	2
Vt.	1	3	1	8	5	-	-	-	-
Mass.	473	417	7	340	300	2	26	4	2
R.I.	29	33	2	64	39	-	6	1	-
Conn.	1,040	678	4	149	134	-	7	2	3
MID. ATLANTIC	8,015	7,289	61	4,178	4,131	4	133	62	747
Upstate N.Y.	882	576	13	343	517	1	39	14	55
N.Y. City	3,575	4,440	4	2,362	2,264	2	58	3	-
N.J.	1,360	956	13	820	692	-	28	24	40
Pa.	2,198	1,317	31	653	658	1	8	21	652
E.N. CENTRAL	1,845	1,162	58	2,074	2,211	3	49	55	119
Ohio	168	108	18	343	417	-	10	26	10
Ind.	58	51	8	186	232	1	4	19	2
Ill.	812	520	12	986	976	-	24	7	29
Mich.	655	425	20	438	487	1	6	3	29
Wis.	152	58	-	121	99	1	5	-	49
W.N. CENTRAL	311	226	44	518	491	54	7	76	561
Minn.	54	18	14	99	85	-	2	-	137
Iowa	35	23	6	50	52	-	2	4	110
Mo.	166	150	10	245	239	42	2	54	58
N. Dak.	3	2	-	14	15	-	-	1	58
S. Dak.	1	-	4	28	33	5	-	5	103
Nebr.	24	27	7	21	16	3	-	1	44
Kans.	28	6	3	61	51	4	1	11	51
S. ATLANTIC	13,295	13,654	25	4,244	4,265	6	44	218	1,295
Del.	206	99	2	42	42	-	2	1	36
Md.	799	678	1	353	399	2	9	18	366
D.C.	781	680	1	154	174	-	2	-	2
Va.	567	414	4	349	384	4	7	16	257
W. Va.	15	37	-	71	68	-	-	2	48
N.C.	1,081	791	6	558	504	-	2	114	7
S.C.	826	707	4	478	461	-	2	40	190
Ga.	2,299	2,446	3	731	695	-	6	23	226
Fla.	6,721	7,802	4	1,508	1,538	-	14	4	163
E.S. CENTRAL	2,944	1,901	10	1,588	1,673	7	3	65	339
Ky.	52	63	3	355	350	1	1	14	134
Tenn.	1,320	796	4	522	513	5	1	35	87
Ala.	876	552	2	436	487	-	1	6	114
Miss.	696	490	1	275	323	1	-	10	4
W.S. CENTRAL	5,905	4,149	26	2,456	2,537	42	17	89	592
Ark.	365	247	2	278	294	31	-	19	86
La.	1,486	827	-	333	311	-	1	1	13
Okla.	117	137	15	212	233	11	1	54	94
Tex.	3,937	2,938	9	1,633	1,699	-	15	15	399
MOUNTAIN	819	794	44	482	570	15	13	24	257
Mont.	2	3	-	16	30	1	-	14	72
Idaho	1	3	4	23	19	-	-	4	11
Wyo.	6	1	2	-	5	2	-	2	74
Colo.	61	105	9	46	97	3	2	3	31
N. Mex.	26	47	5	83	98	2	2	1	21
Ariz.	344	158	11	236	232	-	8	-	27
Utah	16	16	9	37	29	6	1	-	9
Nev.	363	461	4	41	60	1	-	-	12
PACIFIC	4,745	6,026	65	3,894	3,647	7	156	4	405
Wash.	415	238	5	229	218	1	10	-	-
Oreg.	233	296	-	131	142	4	6	1	-
Calif.	4,072	5,449	59	3,311	3,079	2	130	3	338
Alaska	10	15	-	50	49	-	-	-	67
Hawaii	15	28	1	173	159	-	10	-	-
Guam	4	3	-	68	31	-	3	-	-
P.R.	512	641	-	281	219	-	10	-	69
V.I.	8	2	-	4	6	-	1	-	-
Amer. Samoa	-	-	-	5	5	-	8	-	-
C.N.M.I.	8	1	-	21	25	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending December 9, 1989 (49th Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	641	450	127	37	10	17	42
Boston, Mass.	173	105	42	16	3	7	15
Bridgeport, Conn.	46	33	8	1	2	2	3
Cambridge, Mass.	20	18	1	1	-	-	3
Fall River, Mass.	31	22	7	1	-	1	-
Hartford, Conn.	67	41	15	7	3	1	1
Lowell, Mass.	27	20	7	-	-	-	2
Lynn, Mass.	18	10	3	4	1	-	-
New Bedford, Mass.	17	12	5	-	-	-	2
New Haven, Conn.	29	23	4	1	-	1	3
Providence, R.I.	51	40	7	3	-	1	3
Somerville, Mass.	9	6	3	-	-	-	-
Springfield, Mass.	50	35	11	1	1	2	4
Waterbury, Conn.	30	25	3	2	-	-	1
Worcester, Mass.	73	60	11	-	-	2	5
MID. ATLANTIC	2,701	1,758	512	285	68	78	157
Albany, N.Y.	45	32	6	1	1	5	1
Allentown, Pa.	15	12	-	3	-	-	1
Buffalo, N.Y.	104	74	22	5	-	3	7
Camden, N.J.	46	24	9	8	3	2	-
Elizabeth, N.J.	20	11	7	1	1	-	1
Erie, Pa.†	49	35	12	-	2	-	4
Jersey City, N.J.	65	33	15	10	3	4	-
N.Y. City, N.Y.	1,412	903	266	186	30	27	76
Newark, N.J.	48	23	9	12	3	1	4
Paterson, N.J.	41	22	6	4	7	2	4
Philadelphia, Pa.	400	247	88	30	12	23	18
Pittsburgh, Pa.†	83	55	19	3	1	5	2
Reading, Pa.	32	30	2	-	-	-	7
Rochester, N.Y.	120	97	12	7	3	1	15
Schenectady, N.Y.	23	21	2	-	-	-	3
Scranton, Pa.†	32	24	7	-	-	1	1
Syracuse, N.Y.	70	55	9	3	1	2	6
Trenton, N.J.	44	22	11	8	1	2	3
Utica, N.Y.	19	14	4	1	-	-	-
Yonkers, N.Y.	33	24	6	3	-	-	4
E.N. CENTRAL	2,344	1,571	473	161	58	80	97
Akron, Ohio	67	45	12	6	2	2	-
Canton, Ohio	49	37	8	4	-	-	2
Chicago, Ill.§	564	362	125	45	10	22	16
Cincinnati, Ohio	99	71	20	5	1	2	8
Cleveland, Ohio	151	95	33	14	7	2	4
Columbus, Ohio	207	133	50	8	7	8	1
Dayton, Ohio	114	73	25	8	4	4	8
Detroit, Mich.	253	167	53	21	1	11	7
Evansville, Ind.	57	45	8	4	-	-	6
Fort Wayne, Ind.	67	47	14	3	-	3	5
Gary, Ind.	15	10	3	-	2	-	2
Grand Rapids, Mich.	70	39	12	9	2	8	6
Indianapolis, Ind.	166	110	35	13	5	3	5
Madison, Wis.	32	22	5	-	4	1	4
Milwaukee, Wis.	131	93	27	6	4	1	2
Peoria, Ill.	43	30	6	4	-	3	2
Rockford, Ill.	47	36	7	2	-	2	4
South Bend, Ind.	35	28	3	3	1	-	3
Toledo, Ohio	114	84	15	3	7	5	10
Youngstown, Ohio	63	44	12	3	1	3	2
W.N. CENTRAL	891	635	148	49	26	33	51
Des Moines, Iowa	88	68	12	4	2	2	7
Duluth, Minn.	41	33	5	1	1	1	4
Kansas City, Kans.	54	39	6	4	1	4	1
Kansas City, Mo.	128	88	25	8	3	4	10
Lincoln, Nebr.	36	25	5	3	2	1	2
Minneapolis, Minn.	219	146	40	12	11	10	10
Omaha, Nebr.	70	51	13	4	1	1	3
St. Louis, Mo.	125	91	19	6	3	6	7
St. Paul, Minn.	70	52	12	1	2	3	5
Wichita, Kans.	60	42	11	6	-	1	2

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
S. ATLANTIC	1,209	730	251	154	38	36	65
Atlanta, Ga.	204	112	42	41	8	1	9
Baltimore, Md.	207	132	43	24	3	5	10
Charlotte, N.C.	80	48	22	6	1	3	4
Jacksonville, Fla.	114	74	22	13	4	1	11
Miami, Fla.	88	47	19	12	4	6	2
Norfolk, Va.	53	32	6	5	4	6	4
Richmond, Va.	76	54	9	8	3	2	6
Savannah, Ga.	48	32	12	3	1	-	6
St. Petersburg, Fla.	76	58	11	2	2	3	4
Tampa, Fla.	79	43	22	10	2	2	6
Washington, D.C.	139	59	40	27	6	7	3
Wilmington, Del.	45	39	3	3	-	-	-
E.S. CENTRAL	813	537	143	75	23	35	50
Birmingham, Ala.	114	69	25	11	5	4	3
Chattanooga, Tenn.	70	48	10	8	3	1	5
Knoxville, Tenn.	89	62	18	7	2	-	6
Louisville, Ky.	155	108	23	14	5	5	3
Memphis, Tenn.	161	104	23	18	4	12	16
Mobile, Ala.	50	36	9	2	2	1	1
Montgomery, Ala.	49	32	8	3	1	5	2
Nashville, Tenn.	125	78	27	12	1	7	14
W.S. CENTRAL	1,789	1,108	380	188	65	48	86
Austin, Tex.	49	32	8	3	3	3	1
Baton Rouge, La.	45	31	8	3	2	1	7
Corpus Christi, Tex.	56	40	12	3	1	-	2
Dallas, Tex.	215	120	48	26	12	9	7
El Paso, Tex.	69	34	14	15	2	4	4
Fort Worth, Tex	123	82	26	8	3	4	12
Houston, Tex.§	734	436	169	89	24	16	18
Little Rock, Ark.	70	49	17	1	1	2	5
New Orleans, La.	119	64	27	16	10	2	1
San Antonio, Tex.	179	130	27	13	4	5	23
Shreveport, La.	36	24	6	3	2	1	1
Tulsa, Okla.	94	66	18	8	1	1	5
MOUNTAIN	755	506	137	49	37	26	46
Albuquerque, N. Mex.	88	58	20	5	5	-	4
Colo. Springs, Colo.	39	21	8	2	3	5	4
Denver, Colo.	119	85	16	6	4	8	4
Las Vegas, Nev.	145	87	41	11	5	1	10
Ogden, Utah	30	25	5	-	-	-	7
Phoenix, Ariz.	142	89	22	12	14	5	7
Pueblo, Colo.	26	17	4	3	-	2	1
Salt Lake City, Utah	54	35	9	3	2	5	2
Tucson, Ariz.	112	89	12	7	4	-	7
PACIFIC	1,954	1,280	361	190	55	50	115
Berkeley, Calif.	15	10	3	2	-	-	1
Fresno, Calif.	58	40	14	2	-	2	2
Glendale, Calif.	27	23	3	-	-	-	-
Honolulu, Hawaii	66	47	12	2	4	1	17
Long Beach, Calif.	89	60	19	5	4	1	8
Los Angeles Calif.	545	331	102	67	20	9	18
Oakland, Calif.	83	49	11	9	8	6	4
Pasadena, Calif.	33	23	3	3	2	2	3
Portland, Oreg.	153	110	28	8	1	6	8
Sacramento, Calif.	146	105	25	9	3	4	20
San Diego, Calif.	147	97	26	16	5	2	13
San Francisco, Calif.	155	87	28	32	2	6	5
San Jose, Calif.	198	136	39	15	4	4	11
Seattle, Wash.	142	95	29	14	1	3	2
Spokane, Wash.	57	39	11	3	1	3	1
Tacoma, Wash.	40	28	8	3	-	1	2
TOTAL	13,097††	8,575	2,532	1,188	380	403	709

*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 available 4 weeks.

Displaced Persons — Continued

In urban areas, general food rations were not distributed, although some communities have had supplementary and/or therapeutic feeding programs for acutely undernourished children. The administration of (and access of DP to) these feeding programs, as well as the local availability of food and employment, may have influenced levels of childhood undernutrition. In the camps in southern Darfur, food rations were routinely distributed to displaced families, although rations were sometimes inadequate because of local shortages of foodstocks and difficulties in transporting supplies through the affected areas.

Measles has been a leading cause of childhood death in some refugee and displaced populations (*4*). The high measles vaccination coverage in displaced children living in the seven camps in southern Darfur may have prevented many measles-related deaths in those locations. CDC has recommended that measles vaccination of children be an early priority in the care of refugees and DP (*9*).

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Surveillance of Influenza-Like Diseases through a National Computer Network — France, 1984–1989

In France, national surveillance of influenza-like syndromes has been continuous since November 1984 through the French Communicable Diseases Computer Network (FCDN). This report describes epidemics documented from 1984 to 1989 and emphasizes the 1988–89 epidemic.

FCDN was initiated under the joint auspices of the Institut National de la Santé et de la Recherche Médicale (comparable to the National Institutes of Health in the United States) and the Direction Générale de la Santé (the national department of health). FCDN uses electronic communications to facilitate collection, analysis, and redistribution of epidemiologic information about communicable diseases (*1,2*). Notifiable disease data collected by France's 96 regional departments of health are

Influenza Surveillance – Continued

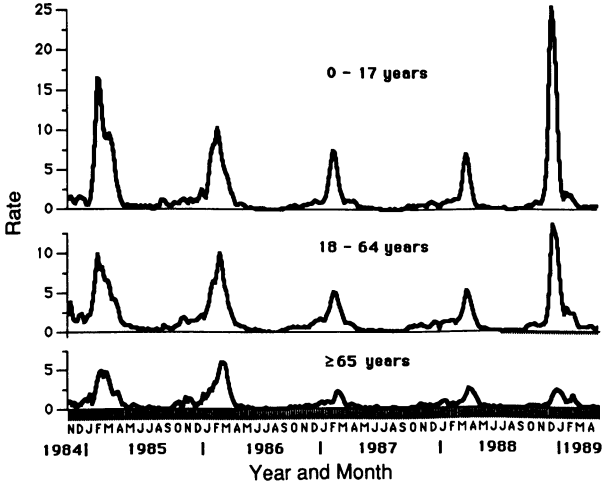
forwarded to the national department of health, analyzed, and redistributed to all users of the network through a weekly electronic bulletin.

FCDN collects epidemiologic data from general practitioners who volunteer to provide sentinel notification of epidemics. In November 1984, 50 sentinel general practitioners (SGPs) participated in FCDN; the number of participants has increased steadily and, since January 1988, has included 550, or approximately 1% of, French general practitioners. The SGPs were selected to be demographically representative of all general practitioners (i.e., by age, sex, geographic distribution, and type of practice). SGPs use terminals or personal computers with modems to report influenza-like syndromes and other selected conditions (e.g., measles, mumps, and viral hepatitis) to FCDN's host computer. SGPs can access the host computer 24 hours a day but must access the computer at least once a week—even if they have no cases to report. In particular, SGPs report the age, sex, and vaccination status of patients meeting the World Health Organization definition of influenza-like syndromes (i.e., a sudden fever of >39 C, myalgia, and respiratory symptoms) (*3*). Estimates of the incidences of influenza-like syndromes are determined by geographic regions and redistributed on FCDN 4–10 days after the report of diagnosis.

From November 1984 through April 1989, a total of 89,705 cases of influenza-like syndromes were reported. In the 1984–85, 1985–86, and 1986–87 epidemics, increased activity began in the second half of December, peaked in early February, and ended by mid-April (Figure 1). During the respective three periods, maximal incidences were 12.7, 9.4, and 5.6 cases per 1000 residents. Although the 1987–88 epidemic began considerably later (late February), the maximal estimated incidence was comparable (5.8 cases per 1000).

In 1988–89, however, increased activity began in mid-November, peaked at 18.3 cases per 1000 residents during the second week of December, and ended in late January. In addition, the 1988–89 epidemic was characterized by a different distribution among age groups (Figure 1)—predominating in persons aged 0–17 years and affecting a smaller proportion of elderly persons than previous epidemics. Among

FIGURE 1. Weekly incidence rate per 1000 cases of influenza-like syndrome, by patient age group – France, 1984–1989



Influenza Surveillance — Continued

persons aged 5–17 years, the peak incidence was 31.4 cases per 1000, compared with 2.4 cases per 1000 persons aged ≥65 years. Thus, the 1988–89 epidemic occurred earlier, was of shorter duration, and affected primarily younger age groups while sparing the elderly.

From 1984 to 1989, the French Reference Centers on Influenza ("France Nord" and "France Sud") provided weekly results of viral isolates. For the 1984–85, 1985–86, and 1986–87 epidemics, most influenza isolates were A(H3N2) and A(H1N1) viruses. In 1987–88, influenza B virus was most frequently isolated. In 1988–89, influenza A(H1N1) predominated, although sporadic A(H3N2) activity occurred (*4*). Respiratory syncytial virus (RSV) was also isolated during each of the five periods. The predominance of illness reported in the 0–4-year age group (peak incidence: 23.5 cases per 1000 persons) may reflect RSV activity during the 1988–89 epidemic.

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Editorial Note: A major strength of the FCDN system for surveillance of infectious diseases is the rapidity of the collection, analysis, and distribution of data. The reports of influenza-like illness from SGPs, combined with information on virus isolations provided by the French Reference Centers, provide timely information for physicians who need to make decisions each year about both the administration of influenza vaccine and use of antiviral agents that are effective only against type A influenza viruses. Rapid diagnostic techniques to determine the type of influenza reported by the SGPs would further enhance the usefulness of this innovative system.

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Current Trends

National Survey of Trauma Registries — United States, 1987

In 1988, a National Academy of Sciences panel recommended that CDC promote the development of a national data set for injury epidemiology, including standardized trauma registries in each state (*1*). The panel emphasized that existing deficiencies in injury surveillance have hampered the implementation of effective public health measures for injury control. In January 1988, a workshop* was held at CDC to develop standard case criteria and a uniform, minimum data set for trauma registries (TRs) (*2*). TRs are information systems maintained primarily to monitor the pre-

*The cosponsors of the Trauma Registry Workshop were the American College of Emergency Physicians, the American College of Surgeons, the American Medical Association Commission on Emergency Medical Services, the National Highway Traffic Safety Administration, and CDC.

Trauma Registries — Continued

hospital and hospital care of severely injured persons (*3*). Hospital TRs are located at individual institutions; regional and state TRs are central registries that aggregate data from two or more hospital TRs.

In 1987, two mailout surveys were conducted by the emergency services department of the San Francisco General Hospital, under the auspices of the National Association of State Emergency Medical Services Directors. In the first survey, emergency medical service directors responded from all 50 states and the District of Columbia. Ten states[†] had legal requirements for the establishment of central TRs; six of these states required participation by all acute-care hospitals, and four required participation by only trauma center hospitals.

In the second survey, of 248 trauma coordinators (TCs) responsible for maintaining TRs at the hospital, regional, and state levels, 147 (59%) responded. TRs were operational in a minimum of 105 hospitals in 35 states. TRs differed in case criteria, data content, coding conventions, and the manner in which data were used.

Emergency medical service directors, TCs, and others responsible for developing TRs must choose from a variety of existing systems or develop their own. Consensus development of standards for TRs was endorsed by 80% of the state emergency medical service directors and 66% of TCs who participated in the surveys.

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Editorial Note: Hospital and central TRs can be used to evaluate the quality of trauma care. For example, in San Diego County, California, the Division of Emergency Medical Services monitors hospital trauma care using data from three sources: TRs maintained at six trauma center hospitals, traumatic injury reports (a subset of the TR data) submitted by 24 nontrauma center hospitals, and the county coroner's records of deaths of patients who received hospital care for trauma (*4*). The San Diego County Medical Audit Committee (MAC), composed of representatives from the Division of Emergency Medical Services, trauma center and nontrauma center hospitals, and the coroner's office, meets monthly and reviews morbidity and mortality among patients hospitalized for major trauma. The MAC classifies the deaths as nonpreventable, potentially salvageable, or preventable if treatment had been altered. These reviews have found that preventable deaths declined among hospital trauma patients following the implementation of a regional trauma system in San Diego County in 1984 (*5,6*).

Data from TRs can be used to support primary prevention initiatives. For example, in Virginia, a legislative subcommittee used data from the Virginia Statewide Trauma Registry and other data sources to recommend legislation regulating the use of all-terrain vehicles (ATVs) (*7*). From January 1987 through August 1988, at least 120 persons sustained ATV-related injuries in Virginia, including 27 persons <12 years of age and 19 persons aged 12–16 years. Legislation enacted in 1989 by the General Assembly of Virginia prohibits use of ATVs by persons <12 years of age, restricts use by those aged 12–16 years, requires operators to wear helmets, and forbids passengers (*8*).

[†]Georgia, Maryland, Missouri, North Carolina, Nevada, New Mexico, Oregon, Pennsylvania, Virginia, and West Virginia. In addition, beginning in 1988, Florida has also required all acute-care hospitals to participate in a statewide TR.

Trauma Registries — Continued

TRs are also a potential source of data for ongoing surveillance of morbidity and mortality resulting from specific types of injuries, such as blunt trauma, penetrating trauma, and burns (*9*).

The TR workshop provided the first opportunity for a multidisciplinary group of researchers, medical practitioners, public health officials, and health-care administrators to participate in the formulation of standards for TRs. Based on the results of the workshop, recommendations for TRs (*2*) and a comprehensive guide to the recommended data definitions and coding formats for TRs have been developed and are available from CDC.[§]

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[§]Available from: Biometrics Branch, Division of Injury Epidemiology and Control, Center for Environmental Health and Injury Control, CDC, Mailstop F36, Atlanta, GA 30333.

Notice to Readers

Announcement of Symposium on Statistical Methods for Evaluation of Intervention and Prevention Strategies

CDC and the Agency for Toxic Substances and Disease Registry will cosponsor the Symposium on Statistical Methods for Evaluation of Intervention and Prevention Strategies, December 5 and 6, 1990, in Atlanta. There is no registration fee. The symposium will provide a forum for current research in 1) statistical methods for evaluation and 2) innovative applications of methods for evaluation of health program intervention and disease prevention strategies.

Abstracts must be postmarked by April 20 and may be submitted on the following evaluation topics: study design, analytic methods, statistical modeling, use of survey or surveillance data, and innovative applications of methods.

Abstract forms and additional information are available from Gladys H. Reynolds, Ph.D., Chair, 1990 Symposium on Statistical Methods for Evaluation of Intervention and Prevention Strategies, Office of the Director, Mailstop D39, CDC, Atlanta, GA 30333.

The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

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: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333; telephone (404) 332-4555.

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