CENTERS FOR DISEASE CONTROL



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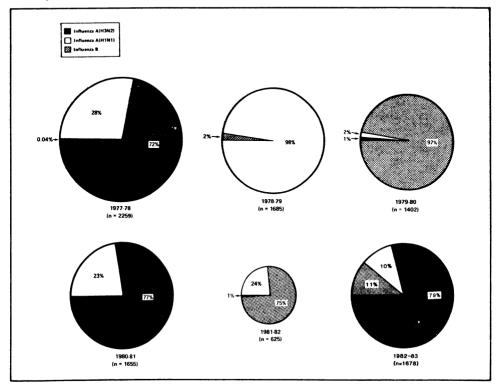
Current Trends

Influenza Surveillance Summary - United States, 1982-1983 Season

Influenza virus types A(H3N2), A(H1N1), and B were isolated during the 1982-1983 U.S. season; H3N2 isolates predominated. The total number of isolates reported to CDC by collaborating laboratories was approximately 1,650, up sharply from the approximately 600 for the preceding season but typical of the numbers reported in the preceding 5 years (Figure 1).

The first outbreaks of influenza activity (type A[H3N2]) occurred in Alaska during October and November, and outbreaks were next reported from Idaho, Montana, Michigan, Minnesota,

FIGURE 1. Isolates of influenza viruses reported to CDC by collaborating civilian and military laboratories – United States, 1977-1983



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Influenza – Continued

and upstate New York beginning in late December. This was reflected by an increase in laboratory virus isolations (Figure 2). The peak of activity for the nation occurred in late February and early March, and then declined to low levels in April. Twelve states reported widespread influenza activity during the period of viral circulation in 1982-1983 (Figure 3), compared with the four and 32 states that reported widespread activity during the 1981-1982 and the 1980-1981 seasons, respectively.

Of the isolates obtained by collaborating laboratories, 79% were influenza virus type A(H3N2); 11% were type B; and 10% were type A(H1N1). The H1N1 and type B isolates were detected later in the season (Figure 4), in many regions of the country. Forty-three states reported type A(H3N2) virus isolates; 29, type B; and 24, type A(H1N1); in 14 states, all three types were isolated. Most of the type A(H3N2) strains were closely related to A/Bangkok/79(H3N2). However, some antigenically distinct H3N2 variants were isolated during the season, including A/Philippines/2/82-like strains (1). In contrast, little antigenic variation was detected among the type A(H1N1) and type B viruses isolated during the season in the United States.

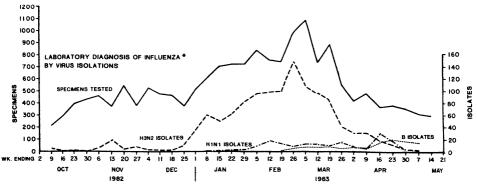
Influenza virus type A(H3N2) infection was associated with reports of outbreaks among all age groups, including many nursing home populations, with clinical attack rates up to approximately 60% (2). Influenza A(H1N1) infections were again recognized predominantly among children and young adults, with occasional school outbreaks. Influenza type B virus, which caused several documented outbreaks in schools, was also associated with occasional outbreaks of influenza in nursing homes during the season, and was responsible for some late outbreaks in May (3).

Pneumonia and influenza (P&I) mortality from 121 cities, which increased slightly above the calculated epidemic threshold level in January, did not later return consistently below this threshold in parallel with the decline in other indices of influenza activity (Figure 5).

Reported by state and territorial epidemiologists and state laboratory directors; participating physicians in the Ambulatory Sentinel Practice Network-CDC Influenza Project; Div of Surveillance and Epidemiologic Studies, Epidemiology Program Office, Statistical Svcs Activity, WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: National data on influenza activity for the 1982-1983 season were obtained from three established sources: (1) weekly reports of the number of respiratory specimens

FIGURE 2. Laboratory surveillance of influenza virus – United States, 1982-1983 season



*Reported to CDC by WHO collaborating laboratories (including military sources).

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Influenza – Continued

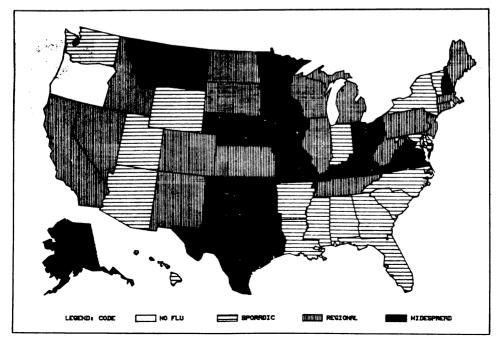
tested and the number and types of influenza virus isolates identified by 66 collaborating state, county, city, or military laboratories; (2) weekly reports of mortality from 121 cities, including the ratio of P&I deaths to total deaths, an index that has historically reflected seasonal mortality attributable to influenza; and (3) weekly, semi-quantitative estimates from each state health department of the extent of influenza-like morbidity indicated by its individual, statewide surveillance system. Spontaneous reports of unusual cases and outbreaks of influenza from a variety of sources were also received by CDC.

In addition, a pilot program was undertaken in collaboration with the Ambulatory Sentinel Practice Network of North America (ASPN) involving weekly reports to CDC of the number of patients seen with influenza-like morbidity (case definition: fever of 37.8 C [100 F] or greater and at least cough or sore throat) in the offices of approximately 150 primary-care physicianmembers of the American Academy of Family Physicians' research panel. The physicians also provided a subjective assessment whether an "outbreak" of influenza was occurring among their patients.

Preliminary analysis of results of the ASPN-CDC pilot study of influenza morbidity (Figure 6), suggests that these types of data may provide another useful, and potentially early, indication of the occurrence of influenza epidemics. Comparisons of morbidity reports in several epidemic and non-epidemic years are required, however, to assess the relative specificity and sensitivity of these data.

It is not clear why P&I deaths from 121 cities remained elevated longer than other measures of influenza activity this season. While this elevation in May and June is principally due to excess P&I deaths among persons 65 years of age and older—the group most susceptible to

FIGURE 3. Highest level of influenza morbidity reported by state — United States, December 1982-June 1983























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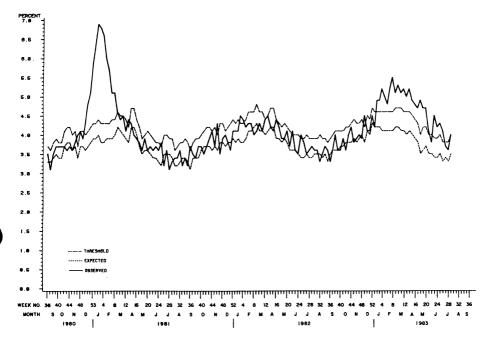
Influenza — Continued

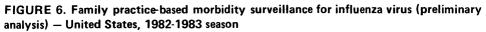
death during periods of influenza virus activity — additional investigation is under way to determine if other factors may have contributed to this observation.

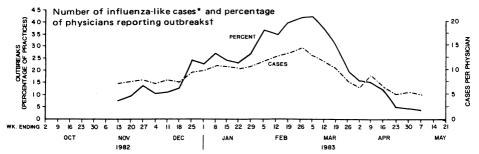
References

- 1. CDC. Antigenic analyses of recent influenza virus isolates. MMWR 1983;32:195-201.
- 2. CDC. Impact of influenza on a nursing home population-New York. MMWR 1983;32:32-4.
- 3. CDC. Late season influenza virus type B activity United States. MMWR 1983;32:271-2.

FIGURE 5. Observed and expected ratio of deaths attributed to pneumonia and influenza in 121 cities — United States, 1980-1983







*Reported to CDC by approximately 150 physician-members of the American Academy of Family Physicians research panel in collaboration with the Ambulatory Sentinel Practice Network. A case was defined as a patient with fever 37.8 C (100 F) or greater and at least cough or sore throat. TAs determined by judgment of physician.

Respiratory Illness Associated with Carpet Cleaning at a Hospital Clinic — Virginia

On November 8, 1982, eight (47%) of 17 employees on one floor of a hospital clinic had cough and throat irritation after entering their work environment. Symptoms disappeared that day when windows were opened or when workers left the building. Inspection of the building and its heating and air conditioning systems by an industrial hygienist failed to uncover any obvious source of chemical or carbon monoxide exposure. Recommendations were made to improve ventilation, but work-related symptoms continued until November 25. Three employees who saw physicians had sore throats of unknown etiology.

Carpeting on that floor had been shampooed the weekend before earliest onset of illness. Employees on another floor had experienced a similar illness after carpet cleaning the previous weekend.

To better define the illness and the factors responsible for it, 48 questionnaires were distributed on December 21 to employees on four floors of the building. Any employee who experienced a work-related symptom was considered a case. Twenty (42%) questionnaires (Continued on page 383)

		29th Week End	ling	Cumulative, 29th Week Ending				
Disease	July 23, 1983	July 24, 1982	Median 1978-1982	July 23, 1983	July 24, 1982	Median 1978-198		
Aseptic meningitis	296	259	211	3.069	2.953	2,268		
Encephalitis: Primary (arthropod-borne								
& unspec.)	44	34	34	530	565	414		
Post-infectious	3	1	4	45	53	119		
Gonorrhea: Civilian	16,149	20,606	20,759	484,340	520,949	530,052		
Military	404	376	547	13,112	14,999	14,999		
Hepatitis: Type A	317	395	521	11,926	12,292	15,113		
Type B	467	392	358	12,391	11.636	9,420		
Non A, Non B	60	36	N	1,853	1,268	N		
Unspecified	168	185	199	4,306	4,704	5,564		
Legionellosis	14	19	N	397	270	N		
Leprosy	6	10	4	145	117	105		
Malaria	10	16	26	404	555	555		
Measles : Total	21	61	124	1,117	1,066	11,126		
Indigenous	10	N	N	925	N	N		
Imported*	11	N	N	192	Ň	N		
Meningococcal infections: Total	43	40	40	1,803	1,931	1,723		
Civilian	43	39	39	1,788	1,919	1.711		
Military	-	1	-	15	12	12		
Mumps	103	50	52	2,221	4.014	6.687		
Pertussis	68	46	46	1.071	655	692		
Rubella (German measles)	12	22	36	716	1,807	2,996		
Syphilis (Primary & Secondary): Civilian	627	649	471	17.677	18,084	14,155		
Military	6	12	6	235	224	172		
Toxic-shock syndrome	5	N	N	238	N	Ň		
Tuberculosis	523	536	536	12,791	14.020	14.831		
Tularemia	14	10	8	153	120	104		
Typhoid fever	7	2	9	198	211	250		
Typhus fever, tick-borne (RMSF)	83	62	60	583	540	540		
Rabies, animal	84	128	128	3,441	3,549	3,549		

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

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1983		Cum. 1983
Anthrax		Plague	21
Botulism: Foodborne Infant	12 36	Poliomyelitis: Total Paralytic	2
Other		Psittacosis (N.Y. City 1, Wash. 1)	67
Brucellosis (Tex. 3) Cholera (N.J. 1)	102	Rabies, human Tetanus (Calif. 1)	2
Congenital rubella syndrome	15	Trichinosis (N.J. 1)	40
Diphtheria Leptospirosis (Ala. 1, Idaho 1, Hawaii 1)	27	Typhus fever, flea-borne (endemic, murine) (Tex. 2)	26

*Three of the 21 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.

July 23, 1983 and July 24, 1982 (29th week)												
	Aseptic	Encer	halitis	Gong	rrhea	н	epatitis (V	'iral), by ty	Legionel-			
Reporting Area	Menin- gitis	Primary	Post-in- fectious	(Civ		A	8	NA,NB	Unspeci- fied	losis	Leprosy	Malaria
	1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1982	1983	1983	1983	1983	1983	Cum. 1983	Cum. 1983
UNITED STATES	296	530	45	484,340	520,949	317	467	60	168	14	145	404
NEW ENGLAND Maine	7	21	-	12,270	12,518	3	11	1	9	-	3	21 1
N.H.	1	4	-	635 365	583 425	1	-	-	-	-	2	-
Vt. Mass.	3	1 8	2	233 5,283	247 5,805	1	1 5	1	- 9	-	-	1 9
R.I. Conn.	3	8	:	671 5,083	834 4,624	1	5	-	-	-	ī	3 7
MID ATLANTIC	35	60	4	61,804	63,190	36	67	14	22	2	20	52
Upstate N.Y. N.Y. City	3 4	18 7	-	9,420 25,441	10,117 26,556	10	23 13	3	9 3	1	19	17 15
N.J.	16	13	-	11,380	11,366	5	7	8	10	i	-	15
Pa.	12	22	4	15,563	15,151	18	24	3	-	-	1	5
E.N. CENTRAL Ohio	48 7	116 44	11	66,559 18,488	74,806 20,520	23 7	57 20	5 2	15 2	5	5 1	25 3
Ind.	27	21	í	7,016	8,841	3	12	2	7	4	-	-
III. Mich.	14	43	-	16,684 18,393	21,401 17,358	1 12	5 20	1	1 5	1	2 2	9 11
Wis.	-	8	3	5,978	6,686		-	-	-	-	-	2
W.N. CENTRAL	5	48 18	5 1	22,413 3,179	24,474	9 4	8 3	1	1	3	5 4	17 6
Minn. Iowa	3	24		2,538	3,676 2,575	-	1	1	-	-	-	2
Mo. N. Dak.	1	2	-	10,862 240	11,504 330	1	4	-	1	3	-	2
S. Dak	-	-	2	628	667	3	-	-	-	-	-	-
Nebr. Kans.	1	3 1	2	1,372 3,594	1,490 4,232	1	-	-	-	-	1	1 4
S. ATLANTIC	61 1	82	14	125,819 2,236	135,803 2,055	37 1	111	8	17 1	1	8	60
Md	6	12	-	15,935	17,162	-	15	3	i	-	1	13
D.C. Va.	- 6	22	2	8,489 10,895	7,496 10,897	1	10 11	-	-	-	- 1	7
W. Va.	2	3	-	1,333	1,491	1	4	1	-	1	-	1
N.C. S.C	19 3	23 2	-	18,482 11,999	21,492 13,133	4 8	6 17	-	6 2	-	-	3 5
Ga	2	4	-	25,940	26,125	6	12	:	-	-	1	5
Fla.	22	16	12	30,510	35,952	16	34	4	7	-	5	19
E.S. CENTRAL Ky	11	19	-	40,941 4,750	44,480 6,002	26 15	29 6	3 2	2 1	-	-	7
Tenn.	4	3	-	16,626	17,187	6	9	1	1	-	-	- 5
Ala. Miss.	6	16	-	12,857 6,708	13,521 7,770	4 1	11 3	-	-	-	-	2
W.S. CENTRAL	78	72	2	69,434	71,351	54 2	42 1	3	76 7	2 1	14	43
Ark. La.	2 6	6 7	-	5,251 13,230	5,857 12,702	9	5	1	5	1	1	1 4
Okla. Tex	13 57	15 44	1 1	8,136 42,817	7,964 44,828	3 40	6 30	2	3 61	-	13	8 30
MOUNTAIN	13	31	4	15,175	17,883	42	30	5	8	-	12	19
Mont. Idaho	- 1	-	-	658 695	750 825	1	1	-	1	-	-	2
Wyo.	4	2	-	404	514	- 6	1	-	1	-	-	1
Colo. N. Mex.	6	16 1	-	4,338 1,831	4,812 2,276	7	2	2	i	-	2	6 5
Ariz.	1	4	4	4,145	4,870 840	21 3	13 3	3	1	-	9	3
Utah Nev.	1	8	-	758 2,346	2,996	3	7	-	2	-	1	2
PACIFIC Wash	38 8	81 7	5 1	69,925 5,197	76,444 6,207	87 9	112 6	20 1	18	1	78 10	160 5
Oreg.	-	-	2	3,674	4,319	11	8	1		-	1	5
Calif. Alaska	26	70	2	57,798 1,805	62,661 1,896	67	98	18	18	1	46	150
Hawaii	4	4	-	1,451	1,361	-	-	-	-	-	21	-
Guam P.R.	U U		1	69 1,480	81 1,687	U	U U	U U	U U	U U	-	2 1
V.L	-	-	:	152	154	-	-	-	-	-	-	-
Pac. Trust Terr.	U	-	-	-	241	U	U	U	U	U	-	•

TABLE III. Cases of specified notifiable diseases, United States, weeks ending July 23, 1983 and July 24, 1982 (29th week)

N: Not notifiable

D

Measles (Rubeola) Meningococcal Mumps Pertussis Rubella Indigenous Imported * Total Infections Reporting Area Cum Cum Cum Cum Cum Cum. Cum. Cum. Cum. Cum UNITED STATES 1.066 1.803 2,221 4.014 1.071 1,807 NEW ENGLAND L Maine я N.H. ā . ā -Vt. ā Mass. . ž R.I à _ -Conn. Δ -. MID ATLANTIC Upstate N Y ž N.Y. City -N.J. --Pa _ E.N. CENTRAL 1,149 2.204 Ohio 1.547 . Ind. Ā ž ñ . 111. . Mich _ Wis . õ W.N. CENTRAL Minn ž lowa _ Mo я -N Dak _ S Dak Δ л . Nebr Kans _ . S. ATLANTIC Del A Md D.C. Va. ŧ W. Va ź N.C -S.C. . -ī Ga _ Fla . -E.S. CENTRAL Kγ. â -Tenn. . -Ala . Miss з W.S. CENTRAL . Ark. 2 § . La. . -. Okia Tex . 8Õ MOUNTAIN Mont Idaho . б Wyo. Colo N. Mex -Ariz -..... ġ Utah -_ fi Nev PACIEIC з 1.233 Wash -Oreg Calif 1.1 Alaska Hawaii . -. -Guarr υ U u P.R. υ υ υ υ υ V.1. . Pac. Trust Terr. υ u υ u u -

 TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending

 July 23, 1983 and July 24, 1982 (29th week)

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

U: Unavailable

[†]International [§]Out-of-state

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Reporting Area		(Civilian) Secondary)	Toxic- shock Syndrome	Tuber	rculosis	Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal		
	Cum. 1983	Cum. 1982	1983	1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983		
UNITED STATES	17,677	18,084	5	523	12,791	153	198	583	3,441		
NEW ENGLAND	394	312	-	13	357	2	10	3	13		
Maine N.H.	10 14	1	-	2 2	22 27	-	-	-	3 2		
Vt.	2	1	-	2	2/	-	-	-	2		
Mass.	246	205	-	6	178	1	8	2	⁻ 5		
R.I.	13	18 84	-	3	27 96	1	2	1	3		
Conn.	109	•••	-	-		-					
MID ATLANTIC	2,186	2,482 268	-	74 16	2,299 382		37 6	12	123 43		
Upstate N.Y. N.Y. City	115 1,343	1,476	-	32	924	-	15	1	43		
N.J.	427	333	-	26	488	-	11	5	3		
Pa.	301	405	-	-	505	-	5	6	77		
E.N. CENTRAL	878	1,145	1	76	1,708	2	31	44	305		
Ohio	258	173	-	6	258	-	6	32	35		
ind. III	73 387	105 653	-	15 33	162 760	1	1 15	1 7	23 164		
III. Mich.	116	156	1	17	441	1	9	4	6		
Wis.	44	58	-	5	87	-	-	-	77		
W.N. CENTRAL	208	328	1	17	407	48	13	27	531		
Minn.	88	64	-	2	83	-	2	-	99		
lowa	.9	17	1	3	34 214	38	-	15	141 75		
Mo.	72	198 4	-	9	214	30		1	50		
N. Dak. S. Dak	9	-	-	-	28	2	-	3	71		
Nebr	11	10	-	3	14	4	-	1	47		
Kans.	18	35	-	-	29	4	5	7	48		
S. ATLANTIC	4,678	4,865	-	106	2,590	13	23	239	1,169		
Del.	20 288	9 268	-	8	23 210	5	4	2 28	476		
Md. D.C.	203	272	-	6	100	-	-	-	ĩ		
Va.	330	344	-	20	262	1	5	35	429		
W. Va.	14	20	-	2	83	-	2	9 80	85		
N.C.	431 291	342 262	-	2	338 242	6	1	45	12 17		
S.C. Ga	862	1,008	-	24	503	1	i	37	130		
Fla.	2,239	2,340	-	35	829	-	9	3	18		
E.S. CENTRAL	1,202	1,260	-	52	1,164	10	3	42	252		
Ky.	76	69 330	-	8 23	284 351	8	1	2 26	58 158		
Tenn.	331 494	464	-	12	306			12	36		
Ala. Miss.	301	397	-	9	223	2	1	2	-		
W.S. CENTRAL	4,741	4,653	-	57	1,478	67	23	211	706		
Ark.	112	118 972	:	7	167 224	48 2	1 3	18	118 20		
La.	1,034 123	104	-		126	14	3	136	77		
Okla. Tex.	3,472	3,459	-	50	961	3	19	57	491		
MOUNTAIN	382	448	2	17	345	8	7	3	113		
Mont.	5	3	-	-	34	2	1	1	66		
Idaho	6	19	1	-	17	1	-	1	1 3		
Wyo.	7 94	11 125	-	6	8 37	2	1	1	10		
Colo. N. Mex.	114	95	-	4	76	1		-	6		
Ariz.	90	106	-	7	141	1	3	-	26		
Utah	13	13	-	-	22	1	1	-	1		
Nev.	53	76	1	-	10	•	1	-			
PACIFIC	3,008	2,591 92	1	111	2,443 125	3 2	51 2	2	229 2		
Wash.	95 71	92 65	-	9	110	2	2	-	-		
Oreg. Calif.	2,798	2,355	1	88	2,033	1	45	2	212		
Alaska	7	8	-	-	33	•	-	-	15		
Hawaii	37	71	-	2	142	•	2	-	-		
Guam	-	1	U	U	2	-	-	:	29		
P.R.	400 10	361 18	U	U	263 1	-		-	29		
V.I. Pac. Trust Terr.			Ű	Ū	-	•	-	-	-		
FOC. HUST 10H			-								

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending July 23, 1983 and July 24, 1982 (29th week)

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending July 23, 1983 (29th week)

· · · · · · · · · · · · · · · · · · ·	All Causes, By Age (Years)									All Cause	es, By Ag	ge (Years	5)		
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I** Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I** Total
NEW ENGLAND	642	435	129	31	26	21	44	S. ATLANTIC	1,174	722	269	90	43	49	34
Boston, Mass.	181	108	48	8	8	9	19	Atlanta, Ga.	138	80	36	15	3	4	1
Bridgeport, Conn.	34	24	8	1	1	-	2	Baltimore, Md.	176 74	102 50	40	15	9	10 2	2 5
Cambridge, Mass. Fall River, Mass.	18 25	16 21	2 2	1	1	-	1	Charlotte, N.C. Jacksonville, Fla.	108	50 74	19 23	3 6	4	1	3
Hartford, Conn.	45	24	12	2	4	3	-	Miami, Fla.	118	72	32	ğ	3	ż	2
Lowell, Mass	19	12	4	3	-	-	1	Norfolk, Va.	45	25	15	2	2	1	3
Lynn, Mass.	20	17	3	-	-	-	-	Richmond, Va.	76	53	12	4	1	6	5
New Bedford, Mas		16	.9	1	2	1	1	Savannah, Ga.	38 88	26 74	8 12	3	1	2	1 3
New Haven, Conn. Providence, R.I.§	76 60	46 54	18	3 3	5	4 3	4 3	St. Petersburg, Fla Tampa, Fla.	63	35	18	3	1	6	6
Somerville, Mass	3	3	-	-	-	-	ĭ	Washington, D.C.	200	84	54	30	17	15	1
Springfield, Mass.	33	22	6	2	2	1	5	Wilmington, Del.§	50	47	-	-	2	-	2
Waterbury, Conn.	41	33	5	2	1	-	4								
Worcester, Mass	60	39	12	5	4	-	3	E.S. CENTRAL	721	460	185	34	30	12	31
MID. ATLANTIC	2,599	1,717	579	166	65	71	107	Birmingham, Ala. Chattanooga, Ten	95 n. 45	63 30	21 13	4	7	-	4
Albany, N.Y.	42	25	11	3	3	<u></u>	107	Knoxville, Tenn.	46	30	9	3		4	-
Allentown, Pa	26	19	7	-	-	-	-	Louisville, Ky.	126	81	32	5	6	2	10
Buffaio, N.Y.	143	96	32	6	3	6	5	Memphis, Tenn.	165	103	48	8	5	1	9
Camden, N.J.	44 26	26	14	1	1	2	1	Mobile, Ala.	59	39	11	3	5	1	2
Elizabeth, N.J. Erie, Pa.†	20 44	19 32	3 7	2	2	1	3	Montgomery, Ala.	26 159	17 97	7 44	10	1 5	1	1 5
Jersey City, N.J.	43	30	9	4	-		1	Nashville, Tenn.	155	97	44	10	5	3	5
N.Y. City, N.Y.	1.376	896	310	103	33	34	36	W.S. CENTRAL	1,250	720	309	113	64	43	35
Newark, N.J.	56	32	12	4	3	4	9	Austin, Tex.	42	29	7	2	2	2	4
Paterson, N.J.	28	21	5	2	-		1	Baton Rouge, La	30	12	9	4	2	3	1
Philadelphia, Pa.†	336 72	209 49	84 17	21 3	8 2	14 1	18 2	Corpus Christi, Te	x 45 184	29 99	7	4 13	4 5	1 9	1
Pittsburgh, Pa.† Reading, Pa.	32	27	3	2		-	3	Dallas, Tex. El Paso, Tex.	47	28	58 9	5	2	3	4
Rochester, N.Y.	130	93	24	5	4	4	17	Fort Worth, Tex.	69	46	14	4	4	1	1
Schenectady, N.Y.	31	18	8	3	-	2	1	Houston, Tex.	287	133	77	43	25	9	4
Scranton, Pa.†	24	20	4	-	-	-	2	Little Rock, Ark.	93	57	25	5	3	3	3
Syracuse, N.Y.	60 39	41 26	11	4	3	1		New Orleans, La.	136	83	33	12	6	2	2
Trenton, N.J. Utica, N.Y.	19	14	11	-	1	1	1	San Antonio, Tex. Shreveport, La.	180 40	116 20	39 15	9 4	9	1	8
Yonkers, N.Y.	28	24	3	1	-	-	2	Tulsa, Okla.	97	68	16	8	2	ź	6
E.N. CENTRAL	2,449	1,591	561	132	88	76	70	MOUNTAIN	584	388	115	43	16	22	24
Akron, Ohio	83	53	19	6	1	4	-	Albuquerque, N.M		38	10	11	3		1
Canton, Ohio Chicago, III	32 564	21 367	8 125	1 38	1 22	1 12	2 14	Colo. Springs, Col	o. 30 95	15 65	9 19	4 5	1 3	1 3	3 2
Cincinnati, Ohio	153	103	29	10	8	3	15	Denver, Colo. Las Vegas, Nev.	76	45	22	6	1	2	3
Cleveland, Ohio	210	123	57	11	ĕ	13	3	Ogden, Utah	24	17	5	2	-	-	-
Columbus, Ohio	141	89	40	5	4	3	2	Phoenix, Ariz	144	104	25	6	-	9	4
Dayton, Ohio	129	84	28	6	6	5	2	Pueblo, Colo	22	15	2	2	2	1	2
Detroit, Mich.	268 49	163 34	65 10	22 1	10	8 3	5 2	Salt Lake City, Uta	h 42 89	27	5 18	5 2	1 5	4	1 8
Evansville, Ind. Fort Wayne, Ind.	54	39	11	2	1	1	2	Tucson, Ariz.	03	62	10	2	5	2	0
Gary, Ind. §	18	18	•••	-		:	-	PACIFIC	1,616	1,044	358	100	63	50	88
Grand Rapids, Mic		33	10	4	1	1	-	Berkeley, Calif.	19	12	6	1	-		-
Indianapolis, Ind.	155	97	40	6	5	7	5	Fresno, Calif.	74	45	21	4	2	2	7
Madison, Wis	35 165	20 112	6 37	3	4 5	2 5	1	Glendale, Calif	22 58	20 40	2 10	3	3	2	1
Milwaukee, Wis. Peoria, III.	25	15	6	6	3	1	3	Honolulu, Hawaii Long Beach, Calif.	95	40 65	19	5	3	3	3
Rockford, III.	48	34	ğ	1	2	2	2	Los Angeles, Calif		252	88	32	12	15	15
South Bend, Ind.	58	39	13	3	2	1	5	Oakland, Calif.	54	29	20	4	1	-	4
Toledo, Ohio	138	94	29	5	6	3	4	Pasadena, Calif.	29	17	5	1	3	3	-
Youngstown, Ohio	5 75	53	19	2	-	1	-	Portland, Oreg.	120	81	32	2	3	2	4
W.N. CENTRAL	796	512	184	38	28	32	42	Sacramento, Calif	64 157	41 92	10 36	5 12	13	4	3 15
Des Moines, Iowa	72	51	14	4	1	2	42	San Diego, Calif. San Francisco, Ca		86	23	12	1	8	3
Duluth, Minn.	25	16	2	1	ż	4	2	San Jose, Calif.	161	115	25	11	8	2	21
Kansas City, Kans	33	17	9	4	-	3	-	Seattle, Wash.	137	91	33	3	7	3	2
Kansas City, Mo	121	75	31	5	4	4	6	Spokane, Wash.	42	23	13	3	1	2	2
Lincoln, Nebr	34	25	5	2	1	1	1	Tacoma, Wash	54	35	15	2	2	-	1
Minneapolis, Minn	105 89	73 47	21 27	1 7	3 5	7	5 5	TOTAL	11,831	7,589	2.689	747	423	376	475
Omaha, Nebr	157	100	36	8	7	6	5	TOTAL	11,001	1,009	2,003	/4/	723	370	475
St. Louis, Mo. St. Paul, Minn.	82	53	21	4	3	ĭ	5								
Wichita, Kans	78	55	18	2	2	1	8								

* 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 4 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.

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Respiratory Illness - Continued

were returned. Thirteen (65%) respondents gave a history of work-related symptoms. The most frequently experienced symptoms were cough (76%), headache (53%), sore throat (53%), awareness of an unusual odor (46%), shortness of breath (31%), nausea (23%), other gastrointestinal symptoms (23%), and fatigue (23%). Symptoms lasted from 2 to 17 days (median 5 days). Employees working in carpeted areas were more likely to develop symptoms than those working in uncarpeted areas (12/14 compared with 1/6, p = 0.01). No other risk factors were identified.

Given the temporal and physical association between illness and recently cleaned carpets, the cause of illness was suspected to be dried carpet shampoo aerosolized by employees walking on the carpets. The active ingredient of this shampoo was sodium dodecylsulfate (sodium lauryl sulfate). This type of shampoo had not previously been used in that building. The manufacturer states that "overuse of this superconcentrated product can cause an irritating powder to be formed after drying." Although underdilution of the shampoo concentrate and inadequate vacuuming of the carpet containing dried shampoo were suspected as responsible for the outbreak, neither could be confirmed.

A possible contributing cause was a relative lack of fresh-air ventilation in the building. On December 7, 7-hour air samples for dust analysis were obtained on one of the involved floors using a model "G" MSA air pump with a FWSB filter*. At floor level, the dust concentration was 0.016 μ g/ml³ of air. The dust contained a total of 6.5 μ g sulfate or 56% of the total weight. At breathing level, the measurements were: dust-0.076 μ g/ml³; sulfate-5.2 μ g/ml³ or 8% of total weight. Control samples were obtained from two other buildings-one with new carpeting, the other with no carpeting; both contained less than 0.5 μ g of sulfate.

Ongoing surveillance revealed no new cases after thorough vacuuming and steam cleaning of the carpets.

Reported by VA Lamb, Epidemiology Unit, RF Walter, Environmental Health and Safety, Medical College of Virginia, CW Armstrong, MD, B Schofield, K Wasti, PhD, Div of Health Hazards Control, G Miller, Jr, MD, State Epidemiologist, Virginia State Dept of Health; Hazard Evaluation and Technical Assistance Br, Div of Surveillance, Hazard Evaluation, and Field Studies, National Institute for Occupational Safety and Health, CDC.

Editorial Note: The prevalences of the various symptoms reported here are similar to those reported in two previously published outbreaks (1), except that eye irritation (50%-60% in the previous outbreaks) and sneezing and nasal congestion (30%-40%) were not mentioned in this outbreak, and gastrointestinal symptoms, except nausea, did not occur in the other outbreaks. The reported respiratory symptoms are not specific for sodium dodecylsulfate, but are common to numerous irritant particulates, aerosols, and gases. Nevertheless, the temporal association between use of carpet shampoo and the outbreak, and the absence of further cases after vacuuming and steam cleaning the carpet, tend to implicate carpet-shampoo residue as the etiologic agent.

As in the previous outbreaks, under-dilution of shampoo concentrate was the suspected reason for shampoo residue remaining in the carpet. Since commercial cleaning products may contain a variety of irritating or potentially toxic compounds (e.g., sodium carbonate, sodium perborate, sodium phosphates, ammonium compounds, borax, pine oil, trichlorethylene, perchloroethylene, naphtha, naphthalene, kerosene, petroleum solvents, alkyl benzene sulfonate, alkyl aryl sodium sulfonate) (2), concentrates should be fully diluted before use according to manufacturers' directions, and all such products, especially "heavy-duty" or "industrial strength" varieties, should be used only where there is adequate ventilation.

^{*}Use of trade names is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

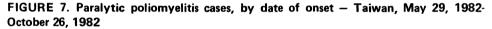
Respiratory Illness – Continued

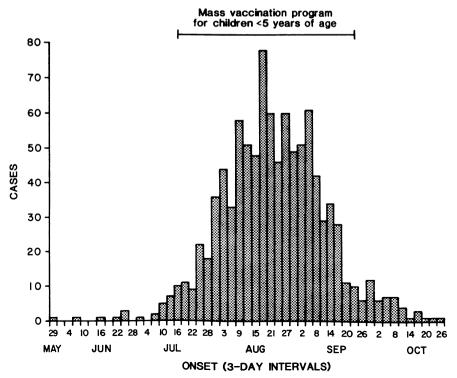
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- Kreiss K, Gonzales MG, Conright KL, Scheere AR. Respiratory irritation due to carpet shampoo: two outbreaks. Environ International 1982:8:337-41.
- 2. Gosselin RE, Hodge CH, Smith RP, Gleason MN. Clinical toxicology of commercial products. 4th ed. Baltimore: Williams & Wilkins, 1976.

Update: Poliomyelitis Outbreak - Taiwan

From May 29 to October 26, 1982, 1,031 cases of paralytic poliomyelitis were reported to the Taiwan health authorities, for an overall attack rate of 5.8 per 100,000 population (Figure 7). This was the largest poliomyelitis outbreak in Taiwan's history (1).

Patients ranged in age from 2 weeks to 31 years (median 16 months). Of the 1,031 patients, 646 (63%) were less than 2 years of age and 189 were 2-5 years of age, yielding age-specific attack rates of 82.2/100,000 and 12.0/100,000, respectively. Ninety-five (9%) persons with polio died. Attack rates varied by geographic area and ranged from a low of 1.3/100,000 population in Tainan County to a high of 15.2/100,000 population in Yun Lin County. Type 1 poliovirus has been isolated from 247 (46%) of 537 specimens submitted from patients during the outbreak. Vaccination status was known for 881 (86%) patients. Discounting doses of oral polio vaccine (OPV) received within 28 days of onset of illness, 65% of





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Poliomyelitis Outbreak — Continued

these had received no prior polio vaccine; 19% had received one dose; 8% had received two doses; and 8% had received three or more doses.

From 1975 through 1981, Taiwan was free of major poliomyelitis outbreaks. Estimates by Taiwan health authorities of vaccination levels in 1981 were that, by the first birthday, approximately 80% of infants had received at least two doses of trivalent OPV. During the outbreak, assessments of immunization levels were conducted using the World Health Organization's Expanded Program on Immunization cluster sampling method* in each of four counties and two cities (2). Assessments of immunization levels for children 12-35 months of age demonstrated that 83%-98% of the 12- to 35-month-old children had received two or more doses of OPV in the six areas before the outbreak. Less than 7% of the surveyed population had not received any doses of OPV.

A mass vaccination program was undertaken by health authorities utilizing OPV. Initially, the program was directed at children under 5 years of age and, subsequently, at those up to 15 years of age (through junior high school age). Following this mass vaccination program, assessments of immunization levels in these six areas indicated that more than 50% of 12- to 35-month-old children received at least one dose of OPV during the control program, resulting in a coverage of 91%-99% for two or more doses of OPV. An average of 59% of surveyed children with no prior history of polio vaccine received at least one dose during the mass campaign.

Yun Lin and Chia Yi counties were studied to determine risk factors for disease. These counties were selected because they represented contiguous rural areas with markedly different attack rates, 15.2/100,000 and 2.5/100,000 population, respectively. Households of non-cases in the cluster sample and households of cases in these counties were assessed for vaccination status of children 12-35 months of age, crowding, socioeconomic status, level of sanitation, and relocation from their official household registration address (persons who moved would be less likely to receive reminder notification for vaccination). Patients had had markedly fewer vaccinations. Vaccine efficacy was estimated to average 82% following a single dose, 96% following two doses, and 98% following three or more doses. In addition, the case households tended to have significantly more young children, be more crowded and less educated, have a greater proportion of fathers who were either unemployed or employed as unskilled laborers, live at addresses other than their household registration, use nonmunicipal sewage disposal and water, and routinely share toilet facilities with other families. Comparison of non-case households in the two counties, however, demonstrated no significant differences in risk factors that could explain the difference in attack rate between the counties.

Reported by TC Hsu, Director-General, ST Hsu, Director, Bureau of Disease Control, KH Hsu, Div Chief, Cl Ma, Div Chief, HM Hsu, Div Chief, Taipei, Taiwan; Div of Viral Diseases, Center for Infectious Diseases, Div of Immunization, Center for Prevention Svcs, CDC.

Editorial Note: Failure to vaccinate rather than vaccine failure represented the most important risk factor for paralytic poliomyelitis. Ensuring that children are vaccinated at the earliest recommended age offers the greatest chance for protection. Data analyses are ongoing to determine whether the other risk factors contributed independently to risk of disease or simply correlated with failure to receive vaccine.

This outbreak demonstrates that major epidemics can occur in areas that have not had substantial poliomyelitis activity for many years and that have relatively high overall communi-

^{*}The cluster sampling technique consists of a random sample of 30 clusters composed of seven persons each in the age group to be surveyed.

Poliomyelitis Outbreak - Continued

ty vaccination levels. Unrecognized clusters of susceptibles can exist and may be sufficient to sustain transmission of wild poliovirus in a community. On a smaller scale, such clusters were responsible for the last two polio outbreaks in the United States in 1972 and 1979 and in the Netherlands and Canada in 1978 among religious groups declining vaccination (3). Identification and vaccination of subpopulations with low coverage is essential to controlling poliomyelitis.

References:

- 1. CDC. Poliomyelitis Taiwan. MMWR 1982; 31; 493.
- Henderson RH, Sundaresan T: Cluster sampling to assess immunization coverage: a review of experience with a simplified sampling method. Bull WHO, 1982;60:253-60.
- 3. CDC. Poliomyelitis surveillance summary 1979, Issued April 1981.

Hospital Bed-Associated Deaths - Canada, United States

Between January 1982 and April 1983, three children were killed when they became caught between the fixed and bottom frames of automatic, electrically operated hospital beds. The children—a 3-year-old girl in Michigan, a 6-year-old boy in Ontario, Canada, and an 11-year-old boy in Illinois— were all ambulatory hospital inpatients at the time of death. The "walk-away down" switch on each child's hospital bed had been activated, presumably by the child; after one touch, this switch automatically lowers the bed fully from its highest position. Each child had crawled beneath the bed's descending frame, which supports the mattress, and then had been crushed between the descending frame and the fixed frame at the bottom of the bed. The children were subjected to approximately 600 pounds of force because of the pincer-like action of the closing frames. The beds involved in Michigan and Illinois were Hill-Rom, Inc., model 840 hospital beds.[•] In Canada, the bed involved was manufactured by Dominion Metal Industries.^{*}

Reported by Bureau of Medical Devices, Health Protection Br, Environmental Health Directorate, Ministry of Health and Welfare, Canada; National Center for Devices and Radiological Health, Food and Drug Administration; Special Studies Br, Chronic Diseases Div., Center for Environmental Health, CDC.

Editorial Note: The combination of the children's apparently activating the "walk-away down" switch and being caught between the descending and fixed frames caused the three deaths. This switch has been promoted by manufacturers as a safety feature because it assures that a bed is fully lowered, thereby lessening the severity of possible injury if a patient falls from the bed. Falls from hospital beds are a well-known problem, especially among elderly patients (1).

In response to these deaths, the Health Protection Branch (HPB) in Canada and the Food and Drug Administration (FDA) in the United States alerted all hospital administrators to the problem. The HPB recommended that (1) the switches on electrically operated beds be of a type that stops all movement if pressure is released, (2) all electromechanical components of electrically operated beds be fitted with covers to prevent unauthorized access or tampering, and (3) switches on electrically operated hospital beds already in use be replaced with the type of switch indicated above.

The FDA recommends to hospital administrators that (1) all electrically powered beds, especially those featuring the automatic "walk-away down" switch with the scissor- or guillotine-type action in the metal underparts, be removed from high-risk areas, such as

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^{*}Use of trade names is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

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Hospital Bed-Associated Deaths - Continued

pediatric and psychiatric wards, and (2) if removal of such beds from high-risk areas is not feasible, consideration be given to deactivating the "walk-away down" switches. In addition to these HPB and FDA alerts, one manufacturer alerted all known owners of its beds to the potential danger and informed them how to inactivate the "walk-away down" switch.

The FDA is continuing to investigate this problem in an effort to prevent future injuries and deaths. Persons with information concerning injuries due to and hazards associated with electrically operated hospital beds should contact Mr. Joseph G. Valentino, Product Problem Reporting Program, U.S. Pharmacopeia, 12601 Twinbrook Parkway, Rockville, Maryland 20852, toll-free number (800) 638-6724.

Reference

1. Walshe A, Rosen H. A study of patient falls from bed. J Nurs Admin 1979;9:31-5.

Notice to Readers

Smallpox Vaccine No Longer Available for Civilians - United States

In May 1983, Wyeth Laboratories, Inc., discontinued general distribution of smallpox vaccine; production for general use was discontinued in 1982. Wyeth is the only active, licensed producer of smallpox vaccine in the United States.

Wyeth continues to produce smallpox vaccine for the Department of Defense, which routinely vaccinates all its active duty personnel.

Reported by International Health Program Office; Center for Infectious Diseases; Quarantine Div, Center for Prevention Svcs, CDC.

Editorial Note: The non-availability of smallpox vaccine for the civilian population should end its misuse in attempts to treat or prevent diseases such as herpes (1,2).

The only non-military persons for whom smallpox vaccination is recommended are laboratory workers exposed to orthopox viruses (including variola, vaccinia, and monkeypox) (3). Means to assure the continued availability of smallpox vaccine to protect these workers are being developed.

References

- 1. CDC. Vaccinia necrosum after smallpox vaccination—Michigan. MMWR 1982;31:501.
- 2. Food and Drug Administration. Inappropriate use of smallpox vaccine. FDA Drug Bulletin 1982;12:12.
- 3. Immunization Practices Advisory Committee. Smallpox vaccine. MMWR 1980;29:417-20.

Errata: Vol. 32, No. 23

p. 305. In the article, "Niacin Intoxication from Pumpernickel Bagels—New York," the following people should be included in the credits: J Sevchick, M Guerrette, E George, PhD, New York State Dept of Agriculture and Markets.

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p. 318. In the article, "Silicosis—South Dakota, Wisconsin," the footnote should read: Actual values are computed and vary according to the percentage of quartz present. The threshold limit value (TLV) for dust containing less than 1% quartz is 10 mg/m³ total dust. If sample analysis indicates more than 1% quartz, the respirable dust TLV is calculated by using the formula <u>10 mg/m³</u>.

% quartz + 2

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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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