

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

Current Trends

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Silver Nitrate Prophylaxis for Gonococcal Ophthalmia Neonatorum

The National Society for the Prevention of Blindness and the American Academy of Pediatrics have stated in recent years that infants' eyes should *not* be irrigated after instillation of 1% silver nitrate (AgNO_3) (1,2). The package insert from the drug manufacturer also states that irrigation (usually done with normal saline or distilled water) is not recommended.

Maine's Department of Human Services—noting that many hospitals are irrigating infant's eyes, apparently to minimize the chemical conjunctivitis caused by AgNO_3 —conducted a survey in March 1977 to determine how widespread this practice is. The nursery or delivery suite supervisor was contacted by telephone in all Maine hospitals that deliver babies. Of 44 hospitals 23 (52%) still used irrigation; 11/44 (25%) specified that they had no definite policy on this matter. Thus, 10/44 (23%) of hospitals were acting according to present recommendations. The survey also revealed that a few hospitals routinely used penicillin ophthalmic solutions instead of AgNO_3 , although the latter is required by Maine law. After the survey a letter was circulated to hospitals to correct the practices.

Reported by K Hill, MD, Waterville; E Johnson, WS Nersesian, MD, Acting State Epidemiologist, Maine Dept of Human Services; Clinical Research Sect, Venereal Disease Control Div, Bur of State Services, CDC.

Editorial Note: The chemical conjunctivitis caused by AgNO_3 drops is self-limiting, usually resolving within 24-48 hours. It is less severe if the drops are stored in individual wax ampules. This procedure minimizes evaporation, which would increase the concentration of the solution.

CDC's gonorrhea treatment recommendations include the use of AgNO_3 without saline rinse for all newborn infants (3). AgNO_3 prophylaxis appears to be more effective in preventing gonococcal ophthalmia neonatorum (GC-ON) than saline eye washings or no prophylaxis (4-7). AgNO_3 prophylaxis is not 100% effective, however, as shown in 1 study of 46 cases of gonococcal ophthalmia which occurred in spite of some form of AgNO_3 prophylaxis (8). Nevertheless, according to that study the risk of GC-ON developing in an infant born to an infected mother was less than 2% when AgNO_3 was used.

The occurrence of GC-ON in spite of the use of AgNO_3 may be caused by several factors: (1) improper application, (2) washing with water or saline, (3) silver cation precipitation by saline to form silver chloride crystals, (4) infection of the eyes before delivery because of premature rupture of the membranes in an infected woman, and (5) failure to treat an infected mother with subsequent transmission to her infant after the delivery.

Well-designed studies are needed to investigate other preparations which may be useful as prophylaxis against GC-ON. Other possibly effective agents have either not been adequately studied (tetracycline and erythromycin), are less effective (bacitracin), or have serious adverse effects, such as sensitization (penicillin). The possibility of infection with a penicillinase-producing gonococcus also exists.

In addition to proper instillation of AgNO_3 without rinsing, other measures are essential in preventing GC-ON, including: (1) prenatal screening of pregnant women at their initial visits and before delivery, (2) appropriate evaluation of all neonatal conjunctival discharges with Gram stain and culture, and (3) continuing education for obstetric and pediatric personnel who will be required to diagnose and manage this complication.

References

1. National Society for the Prevention of Blindness: Control of ophthalmia neonatorum: A position statement. *Sight Sav Rev* 43:11-13, 1973
2. American Academy of Pediatrics: The Report of the Committee on Infectious Diseases. Evanston, Illinois, American Academy of Pediatrics, 1977, p 107
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5. Greenberg M, Vanden JE: Ophthalmia neonatorum: Evaluation of different methods of prophylaxis in New York City. *Am J Public Health* 51:836, 1961
6. Pearson HE: Failure of silver nitrate prophylaxis for gonococcal ophthalmia neonatorum. *Am J Obstet Gynecol* 73:804, 1957
7. Mellin GW, Kent MP: Ophthalmia neonatorum. Is prophylaxis necessary? *Pediatrics* 22:1006, 1958
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Epidemiologic Notes and Reports**Bovine Tuberculosis — Maryland**

Two cases of tuberculosis caused by *Mycobacterium bovis* were reported in Maryland in 1976.

The first case was a 29-year-old woman from India who was admitted to a hospital in June 1976 because of fever, cough, chest pain, and general malaise. A chest X-ray examination showed an infiltrate in the right upper lung area with possible cavitation. When sputum smears were reported positive for acid-fast bacilli, she was started on isoniazid (INH), ethambutol, and streptomycin. Subsequent culture results showed the infective organism to be *M. bovis*. She responded well to treatment, and the lesion seen on her chest X ray completely resolved. She had left India in 1971, worked in England for about 4 years, and arrived in the United States in 1975. Her chest X ray at the time of arrival in the United States was negative.

The second patient was a 41-year-old female who participated in a routine tuberculin skin-test screening program. She had a positive reaction (12 mm), and a follow-up chest X ray in September 1976 demonstrated soft infiltrates with cavitation in the right upper lung. Sputum smears were positive for acid-fast bacilli, and cultures were subsequently positive for *M. bovis*. The patient was asymptomatic. She responded well to therapy with rifampin and ethambutol. Born in Lebanon to native-born American parents, the

patient had received BCG vaccination as a child. She had traveled throughout the world and had spent extensive time in India and Bangladesh. On 2 occasions after her diagnosis her husband and 2 children had negative tuberculin skin tests. Reported by H Passes, MD, Montgomery County Health Dept; D Glasser, MD, Baltimore City Health Dept; Division of Laboratories, J Flynn, MD, MPH, KH Acree, MDCM, State Epidemiologist, Maryland Dept of Health and Mental Hygiene; Bacteriology Div, Bur of Laboratories, Tuberculosis Control Div, Bur of State Services, CDC.

Editorial Note: *M. bovis* is an infrequent cause of tuberculosis in the United States. Pasteurization of milk products and systematic testing and destruction of tuberculin-positive cattle have contributed to the virtual disappearance of this type of tuberculosis in this country. The cultures from these 2 patients, confirmed by CDC, were the only such isolations from Maryland received at CDC in the past 5 years. Including these 2 cases, the CDC laboratory has identified *M. bovis* organisms in cultures from only 28 patients residing in 13 different states from July 1, 1972 to December 31, 1977.

M. bovis can be transmitted between animals, between animals and humans, and between humans. Tuberculosis caused by *M. bovis* is treated the same way as that caused

(Continued on page 113)

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

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

DISEASE	12th WEEK ENDING		MEDIAN 1973-1977 ††	CUMULATIVE, FIRST 12 WEEKS		
	March 25, 1978	March 26, 1977 †		March 25, 1978	March 26, 1977 †	MEDIAN 1973-1977 ††
Aseptic meningitis	18	28	28	425	423	421
Brucellosis	3	2	2	31	39	31
Chickenpox	5,411	6,716	6,574	46,400	72,756	64,945
Diphtheria	1	4	5	21	16	57
Encephalitis	7	14	14	120	144	180
{ Primary	2	1	3	27	24	47
{ Post-Infectious	258	318	219	3,343	3,635	2,422
{ Type B	527	625	753	6,231	7,693	8,361
Hepatitis, Viral	175	185	753	1,965	2,159	8,361
{ Type A	8	9	5	94	76	65
{ Type unspecified	1,137	2,039	952	6,064	16,701	7,962
Malaria	73	56	37	643	558	424
Measles (rubeola)	69	56	37	634	556	412
Meningococcal infections, total	4	—	—	9	2	6
Civilian	517	571	1,822	4,804	7,145	18,020
Military	35	22	—	515	172	—
Mumps	537	900	634	2,736	6,314	4,079
Pertussis	2	1	1	9	9	12
Rubella (German measles)	617	627	666	6,161	6,572	6,662
Tetanus	—	2	2	16	19	19
Tuberculosis	5	8	8	92	77	77
Tularemia	—	—	—	10	17	11
Typhoid fever	—	—	—	—	—	—
Typhus, tick-borne (Rky. Mt. spotted fever)	—	—	—	—	—	—
Veneral Diseases:						
Gonorrhea	16,545	16,817	17,876	208,467	215,389	215,389
{ Civilian	321	311	454	4,986	6,108	6,879
{ Military	440	413	503	4,673	5,111	6,018
Syphilis, primary and secondary	9	3	5	72	66	80
{ Civilian	45	53	51	538	542	542
{ Military	—	—	—	—	—	—
Rabies in animals	—	—	—	—	—	—

Table II. Notifiable Diseases of Low Frequency: United States

	CUM.		CUM.
Anthrax:	—	Poliomyelitis, total:	—
Botulism:	4	Paralytic:	—
Congenital rubella syndrome:	7	Psittacosis: *La. 1	16
Leptospirosis:	15	Rabies in man:	—
*Leptospirosis:	7	Trichinosis: Pa. 1, Calif. 1	9
Plague:	—	Typhus, murine:	7

†Delayed reports received for calendar year 1977 are used to update last year's weekly and cumulative totals. ††Medians for Gonorrhea and Syphilis are based on data for 1975-1977
 *Delayed reports: Cong. rubella syn.: Minn. -2, Leptosy: Idaho +1; Lepto.: Ups NY -1, Texas +1, Psittacosis: Idaho +1 (1977)

Table III
Cases of Specified Notifiable Diseases: United States
Weeks Ending March 25, 1978 and March 26, 1977 — 12th Week

AREA REPORTING	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
				1978	1978	1978	1978	CUM. 1978	1978	1977†	1978	1978	1978
UNITED STATES	18	3	5,411	1	21	7	14	2	258	527	175	8	94
NEW ENGLAND	-	3	551	-	-	1	-	-	8	9	8	-	5
Maine	-	-	106	-	-	-	-	-	-	-	-	-	1
New Hampshire	-	-	8	-	-	-	-	-	-	-	-	-	1
Vermont	-	3	7	-	-	-	-	-	-	1	-	-	-
Massachusetts	-	-	142	-	-	1	-	-	1	4	8	-	1
Rhode Island	-	-	14	-	-	-	-	-	4	2	-	-	-
Connecticut	-	-	274	-	-	-	-	-	3	2	-	-	2
MIDDLE ATLANTIC	4	-	512	-	-	-	4	-	33	32	14	2	26
Upstate New York	4	-	367	-	-	-	-	-	6	10	2	-	3
New York City	-	-	56	-	-	-	-	-	10	8	5	1	13
New Jersey*	-	-	NN	-	-	-	2	-	17	14	7	-	3
Pennsylvania*	-	-	89	-	-	-	2	-	NA	NA	NA	1	7
EAST NORTH CENTRAL ..	2	-	2,502	-	-	3	1	-	40	66	13	1	3
Ohio	-	-	374	-	-	-	-	-	8	15	-	-	-
Indiana	-	-	122	-	-	-	-	-	1	3	5	-	-
Illinois	-	-	445	-	-	-	-	-	1	15	1	-	2
Michigan	1	-	1,088	-	-	3	-	-	27	28	7	1	1
Wisconsin*	1	-	473	-	-	-	1	-	3	5	-	-	-
WEST NORTH CENTRAL ..	-	-	414	-	-	-	1	-	11	40	10	1	8
Minnesota	-	-	-	-	-	-	-	-	2	16	-	1	2
Iowa	-	-	145	-	-	-	-	-	2	5	3	-	-
Missouri*	-	-	8	-	-	-	-	-	4	6	7	-	4
North Dakota	-	-	5	-	-	-	-	-	-	4	-	-	-
South Dakota	-	-	20	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	31	-	-	-	1	-	1	2	-	-	1
Kansas	-	-	205	-	-	-	-	-	2	7	-	-	1
SOUTH ATLANTIC	8	-	553	-	-	1	2	-	46	65	16	-	17
Delaware	-	-	9	-	-	-	-	-	-	-	-	-	1
Maryland	1	-	28	-	-	-	-	-	4	-	-	-	6
District of Columbia ..	-	-	1	-	-	-	-	-	5	-	-	-	-
Virginia*	1	-	30	-	-	-	1	-	2	5	-	-	2
West Virginia*	-	-	102	-	-	-	-	-	1	2	2	-	-
North Carolina	-	-	NN	-	-	1	-	-	3	9	3	-	-
South Carolina	-	-	79	-	-	-	-	-	4	1	3	-	1
Georgia	-	-	-	-	-	-	-	-	2	9	-	-	1
Florida	6	-	304	-	-	-	1	-	25	39	8	-	6
EAST SOUTH CENTRAL ..	-	-	81	-	-	1	3	-	16	52	9	-	1
Kentucky	-	-	70	-	-	-	-	-	1	-	1	-	-
Tennessee	-	-	NN	-	-	1	3	-	12	39	8	-	1
Alabama	-	-	10	-	-	-	-	-	1	6	-	-	-
Mississippi	-	-	1	-	-	-	-	-	2	7	-	-	-
WEST SOUTH CENTRAL ..	1	-	386	1	1	-	1	-	14	75	31	2	6
Arkansas	-	-	3	1	1	-	-	-	-	5	2	-	-
Louisiana	-	-	NN	-	-	-	-	-	1	4	2	1	3
Oklahoma	-	-	-	-	-	-	-	-	2	16	4	-	-
Texas*	1	-	383	-	-	-	1	-	11	50	23	1	3
MOUNTAIN	-	-	132	-	1	-	-	-	18	59	35	-	2
Montana	-	-	3	-	-	-	-	-	-	1	-	-	-
Idaho	-	-	27	-	-	-	-	-	-	2	1	-	-
Wyoming	-	-	-	-	-	-	-	-	-	4	-	-	-
Colorado	-	-	99	-	-	-	-	-	6	8	6	-	1
New Mexico	-	-	-	-	-	-	-	-	4	9	1	-	-
Arizona*	-	-	NN	-	-	-	-	-	8	33	27	-	1
Utah	-	-	1	-	-	-	-	-	-	2	-	-	-
Nevada	-	-	2	-	1	-	-	-	-	-	-	-	-
PACIFIC	3	-	280	-	19	1	2	2	72	129	39	2	26
Washington	-	-	272	-	19	-	-	-	6	11	3	-	1
Oregon	-	-	-	-	-	-	-	2	5	18	5	-	2
California*	3	-	-	-	-	1	2	-	61	91	31	2	22
Alaska	-	-	1	-	-	-	-	-	-	9	-	-	-
Hawaii	-	-	7	-	-	-	-	-	-	-	-	-	1
Guam*	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-
Puerto Rico	-	-	14	-	-	-	-	-	2	8	14	-	2
Virgin Islands	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-

NN: Not notifiable

NA: Not available

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

*The following delayed reports will be reflected in next week's issue: Asep. meng: Pa. +1, Chickenpox: Pa. +96, Mo. +159, W. Va. -80, Calif. +56, Guam +8; Enceph.: Pa. +1; Enceph. post other: Wis. +1, Hep. B: N.J. +2, Tex. -1, Guam +1; Hep. A: N.J. +2, Tex. +2, Ariz. +10, Guam +3; Hep. unsp. N.J. -4, Va. -1, Tex. -1, Guam +1; Malaria: W. Va. +1.

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending March 25, 1978 and March 26, 1977 - 12th Week

REPORTING AREA	MEASLES (Rubella)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1978	CUMULATIVE		1978	CUMULATIVE		1978	CUM. 1978	1978	1978	CUM. 1978	CUM. 1978
		1978	1977 †		1978	1977 †						
UNITED STATES	1,137	6,064	16,701	73	643	558	517	4,804	35	537	2,736	9
NEW ENGLAND	164	433	722	3	34	30	41	265	1	23	106	-
Maine	139	249	3	1	4	2	33	178	-	3	53	-
New Hampshire	-	7	220	-	5	3	-	5	-	-	4	-
Vermont	-	5	167	-	1	2	-	2	-	-	-	-
Massachusetts*	6	80	137	-	6	7	5	29	1	11	36	-
Rhode Island	4	4	5	1	8	-	-	9	-	-	1	-
Connecticut	15	88	190	1	10	16	6	42	-	9	12	-
MIDDLE ATLANTIC	83	455	1,878	9	88	71	13	201	5	162	468	-
Upstate New York	70	313	456	5	32	18	7	73	2	19	60	-
New York City	2	74	92	2	24	15	2	60	3	2	16	-
New Jersey*	-	1	54	-	16	20	3	48	-	136	316	-
Pennsylvania*	11	67	1,276	2	16	18	1	20	-	5	76	-
EAST NORTH CENTRAL ..	394	2,279	4,152	16	57	54	245	1,763	9	119	994	1
Ohio	23	102	180	11	14	24	47	191	4	2	59	-
Indiana	2	43	2,048	-	11	2	1	97	1	6	57	1
Illinois	16	287	437	-	3	11	58	581	3	3	67	-
Michigan	220	1,480	470	4	25	13	88	581	-	75	576	-
Wisconsin*	133	367	1,017	1	4	4	51	313	1	33	235	-
WEST NORTH CENTRAL ..	22	57	3,331	2	24	35	28	940	-	7	94	1
Minnesota*	6	10	475	-	3	15	1	11	-	2	8	-
Iowa	-	10	1,897	-	1	4	-	63	-	3	12	-
Missouri*	1	2	295	1	14	11	3	519	-	-	21	-
North Dakota*	9	9	3	-	-	1	-	4	-	-	1	-
South Dakota	-	-	10	-	2	4	-	4	-	-	16	-
Nebraska	-	-	85	-	-	-	1	6	-	-	-	-
Kansas	6	26	566	1	4	-	23	333	-	2	36	1
SOUTH ATLANTIC	227	1,621	751	22	186	114	31	268	7	90	259	2
Delaware	-	4	18	-	-	1	3	19	-	-	1	-
Maryland	-	1	30	1	8	8	12	37	-	-	1	1
District of Columbia ..	-	-	2	-	1	-	-	-	-	-	1	-
Virginia	184	1,147	452	4	26	6	3	49	-	76	105	-
West Virginia*	24	249	40	-	5	6	5	46	-	10	109	-
North Carolina	3	40	17	3	41	31	2	30	2	1	20	-
South Carolina	5	115	73	-	14	10	-	9	-	2	4	-
Georgia	1	5	111	4	24	19	-	8	5	-	1	-
Florida	10	60	8	10	67	33	5	70	-	1	17	1
EAST SOUTH CENTRAL ..	54	473	296	4	53	56	43	413	4	7	98	1
Kentucky	5	50	90	-	11	17	33	74	1	-	32	1
Tennessee	31	335	197	1	18	13	4	214	3	4	47	-
Alabama	-	1	-	1	14	19	5	111	-	-	4	-
Mississippi	18	87	9	2	10	7	1	14	-	3	15	-
WEST SOUTH CENTRAL ..	148	427	852	7	88	117	86	560	4	76	264	4
Arkansas	-	1	8	2	10	5	3	72	1	-	4	1
Louisiana	77	234	53	1	24	56	2	30	-	74	145	1
Oklahoma	2	8	39	-	8	2	-	4	-	-	3	-
Texas	69	184	752	4	46	54	81	454	3	2	112	2
MOUNTAIN	2	51	1,322	1	10	10	4	82	-	4	52	-
Montana	-	29	624	-	1	-	-	7	-	-	7	-
Idaho	-	1	27	-	1	1	-	15	-	-	3	-
Wyoming	-	-	1	-	-	-	-	-	-	-	-	-
Colorado	-	7	308	1	2	1	3	27	-	-	9	-
New Mexico	-	-	184	-	2	2	-	7	-	2	2	-
Arizona	1	9	144	-	3	5	-	2	-	2	17	-
Utah	-	1	3	-	1	-	-	22	-	-	13	-
Nevada*	1	4	31	-	-	1	1	2	-	-	1	-
PACIFIC	43	268	3,397	9	103	71	26	312	5	49	401	-
Washington	2	32	191	-	17	11	13	96	-	7	55	-
Oregon	27	65	84	-	4	6	1	32	-	6	31	-
California	14	165	3,066	9	78	40	14	174	3	35	313	-
Alaska	-	1	55	-	3	13	-	4	2	1	1	-
Hawaii	-	5	1	-	1	1	1	6	-	-	1	-
Guam	NA	1	3	-	-	-	NA	1	NA	NA	-	-
Puerto Rico*	6	54	206	-	-	-	18	252	3	-	3	1
Virgin Islands	NA	5	6	-	-	-	NA	-	NA	NA	-	-

NA: Not available

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

*The following delayed reports will be reflected in next week's issue: Measles: Mass. -3, Wis. +1, Minn. +2; Men. inf.: N.J. -1, Pa. +1, Nev. +1; Mumps: Pa. +15, Mo. +104, P.R. +31; Pertussis: Mass. -2, Pa. +1; Rubella: Pa. +7, Wis. +1, Mo. +1, N. Dak. +1, W. Va. +1.

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending March 25, 1978 and March 26, 1977 — 12th Week

REPORTING AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (RMSF)		VENEREAL DISEASES (Civilian Cases Only)						RABIES IN ANIMALS
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1978	CUM. 1978	CUM. 1978	1978	CUM. 1978	1978	CUM. 1978	1978	CUMULATIVE		1978	CUMULATIVE		
									1978	1977 †		1978	1977 †	
UNITED STATES	617	6,161	16	5	92	-	10	16,545	208,467	215,389	440	4,673	5,111	538
NEW ENGLAND	25	192	-	2	24	-	-	253	5,011	5,553	4	142	183	25
Maine	-	9	-	-	-	-	-	27	386	472	-	2	7	25
New Hampshire	1	7	-	-	5	-	-	21	253	205	-	1	-	-
Vermont	1	9	-	-	-	-	-	10	128	139	-	-	3	-
Massachusetts	22	105	-	1	10	-	-	NA	2,067	2,409	NA	92	132	-
Rhode Island	-	15	-	-	4	-	-	59	344	408	-	3	2	-
Connecticut	1	47	-	1	5	-	-	136	1,833	1,920	4	44	39	-
MIDDLE ATLANTIC	59	999	1	-	12	-	3	1,739	23,119	24,073	62	619	738	10
Upstate New York	18	148	1	-	3	-	1	192	3,494	3,175	-	34	57	10
New York City	16	448	-	-	6	-	-	743	9,306	10,976	42	421	469	-
New Jersey *	25	244	-	-	1	-	-	419	4,337	3,651	5	94	101	-
Pennsylvania *	NA	159	-	-	2	-	2	385	5,982	6,271	15	70	111	-
EAST NORTH CENTRAL ..	115	891	-	-	5	-	-	2,596	28,891	31,910	76	489	585	21
Ohio	22	177	-	-	1	-	-	619	7,620	8,582	10	84	157	-
Indiana	14	129	-	-	-	-	-	173	3,320	2,599	2	28	37	3
Illinois	33	308	-	-	1	-	-	1,045	8,179	10,654	62	323	312	1
Michigan *	41	236	-	-	3	-	-	589	7,027	7,131	2	40	56	-
Wisconsin	5	41	-	-	-	-	-	170	2,745	2,944	-	14	23	17
WEST NORTH CENTRAL ..	10	193	7	-	4	-	-	880	10,411	11,182	12	107	112	160
Minnesota	2	46	-	-	-	-	-	154	1,977	1,966	4	41	36	59
Iowa	3	22	-	-	2	-	-	59	1,262	1,354	2	9	9	31
Missouri	1	69	6	-	2	-	-	458	4,027	4,658	3	31	36	18
North Dakota	3	12	-	-	-	-	-	16	253	171	-	-	1	28
South Dakota	-	18	-	-	-	-	-	31	397	300	-	1	1	18
Nebraska	-	2	-	-	-	-	-	96	802	900	1	3	14	-
Kansas	1	24	1	-	-	-	-	66	1,693	1,833	2	22	15	6
SOUTH ATLANTIC	153	1,416	2	-	6	-	4	4,026	50,250	51,695	117	1,253	1,467	56
Delaware	-	8	-	-	-	-	-	37	837	662	-	3	11	-
Maryland	19	260	1	-	-	-	-	531	7,000	6,358	15	93	97	-
District of Columbia ..	4	74	-	-	-	-	1	257	3,248	3,377	12	110	150	-
Virginia	26	150	-	-	1	-	-	429	4,568	5,299	3	113	140	1
West Virginia	2	62	-	-	-	-	-	57	771	681	-	4	1	1
North Carolina *	17	229	-	-	-	-	2	713	6,801	8,042	6	104	207	-
South Carolina	14	113	-	-	-	-	-	396	4,686	4,748	2	58	72	4
Georgia	31	173	-	-	-	-	1	688	9,446	10,069	26	296	267	42
Florida *	40	347	1	-	5	-	-	918	12,893	12,459	53	472	522	8
EAST SOUTH CENTRAL ..	51	639	3	-	1	-	1	1,449	18,037	18,357	19	215	173	27
Kentucky	14	132	-	-	1	-	-	123	1,984	2,619	3	22	19	19
Tennessee	13	189	3	-	-	-	1	636	6,679	7,440	4	80	45	4
Alabama *	15	151	-	-	-	-	-	360	5,434	4,956	3	30	33	4
Mississippi	9	167	-	-	-	-	-	330	3,940	3,342	9	83	76	-
WEST SOUTH CENTRAL ..	71	696	2	1	3	-	1	2,515	29,437	28,158	87	745	645	143
Arkansas	7	70	2	-	-	-	-	168	2,161	2,201	2	41	16	24
Louisiana	8	152	-	-	-	-	-	242	4,706	3,865	17	152	135	3
Oklahoma	13	87	-	-	-	-	-	258	2,626	2,487	2	25	18	38
Texas	43	387	-	1	3	-	1	1,847	19,944	19,605	66	527	476	78
MOUNTAIN	18	167	-	-	7	-	-	676	7,793	8,614	6	95	103	3
Montana	2	17	-	-	-	-	-	17	476	462	-	6	-	-
Idaho	1	8	-	-	5	-	-	24	264	425	-	-	2	-
Wyoming	-	4	-	-	-	-	-	13	177	237	-	3	2	-
Colorado	-	-	-	-	-	-	-	144	2,131	2,228	1	31	31	-
New Mexico	2	32	-	-	-	-	-	99	1,095	1,313	5	22	22	2
Arizona	13	89	-	-	-	-	-	236	2,008	2,357	-	22	40	1
Utah	-	7	-	-	1	-	-	40	460	493	-	3	4	-
Nevada	-	10	-	-	1	-	-	103	1,182	1,099	-	8	2	-
PACIFIC	115	968	1	2	30	-	1	2,411	35,518	35,847	57	1,008	1,105	93
Washington	NA	19	-	-	1	-	-	146	2,462	2,541	NA	26	41	-
Oregon	7	43	-	-	1	-	-	185	2,532	2,639	6	30	42	-
California	102	759	1	2	28	-	1	1,899	28,737	28,865	51	941	1,006	91
Alaska	-	16	-	-	-	-	-	158	1,133	1,076	-	4	5	2
Hawaii	6	131	-	-	-	-	-	23	654	726	-	7	11	-
Guam *	NA	12	-	NA	-	NA	-	NA	30	73	NA	-	1	-
Puerto Rico	11	107	-	-	-	-	-	12	599	653	1	92	126	4
Virgin Islands	NA	-	-	NA	-	NA	-	NA	44	32	NA	4	1	-

NA: Not available

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

*The following delayed reports will be reflected in next week's issue: TB: N.J. +16, Mich. -3, N.C. -1, Fla. -2, Guam +2; GC: Pa. +186, Guam +6; Syphilis: N.J. -27 civ., Ala. -1 civ. +1 mil.; An rabies: Fla. +2

Table IV
Deaths in 121 United States Cities*
Week Ending March 25, 1978 - 12th Week

REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES	REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES
	ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year			ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year	
NEW ENGLAND	644	425	143	38	17	44	SOUTH ATLANTIC	1,408	826	383	102	53	70
Boston, Mass.	222	139	52	17	4	18	Atlanta, Ga.	132	78	34	15	1	1
Bridgeport, Conn.	43	28	12	1	1	6	Baltimore, Md.	227	120	71	18	7	5
Cambridge, Mass.	14	10	4	-	-	1	Charlotte, N. C.	62	34	14	7	5	4
Fall River, Mass.	25	19	5	-	-	-	Jacksonville, Fla.	84	47	25	4	2	7
Hartford, Conn.	63	40	17	4	2	1	Miami, Fla.	120	73	34	6	5	5
Lowell, Mass.	19	9	5	3	1	-	Norfolk, Va.	51	26	18	3	2	5
Lynn, Mass.	16	9	6	1	-	-	Richmond, Va.	75	42	23	6	2	8
New Bedford, Mass.	15	10	4	-	-	-	Savannah, Ga.	30	16	10	1	3	6
New Haven, Conn.	28	17	4	4	1	2	St. Petersburg, Fla.	101	84	11	1	4	6
Providence, R.I.	66	45	12	2	4	5	Tampa, Fla.	66	37	15	8	1	6
Somerville, Mass.	9	7	2	-	-	-	Washington, D. C.	409	239	112	30	21	15
Springfield, Mass.	47	37	5	3	2	4	Wilmington, Del.	51	30	16	3	-	2
Waterbury, Conn.	25	18	6	1	-	4							
Worcester, Mass.	52	37	9	2	2	3							
MIDDLE ATLANTIC	2,813	1,838	687	150	70	133	EAST SOUTH CENTRAL	656	380	188	38	22	25
Albany, N. Y.	47	28	11	2	3	1	Birmingham, Ala.	96	52	32	5	3	1
Allentown, Pa.	13	9	4	-	-	-	Chattanooga, Tenn.	63	35	18	4	1	6
Buffalo, N. Y.	109	71	28	5	1	6	Knoxville, Tenn.	47	32	12	3	-	-
Camden, N. J.	31	23	6	-	2	2	Louisville, Ky.	113	70	30	3	5	5
Elizabeth, N. J.	20	15	5	-	-	-	Memphis, Tenn.	133	80	36	10	1	5
Erie, Pa.	30	24	5	-	1	1	Mobile, Ala.	55	31	15	5	2	3
Jersey City, N. J.	38	21	14	1	2	-	Montgomery, Ala.	47	26	16	3	1	3
Newark, N. J.	43	23	11	7	1	5	Nashville, Tenn.	102	54	29	5	9	2
New York City, N. Y.	1,420	936	327	91	34	61	WEST SOUTH CENTRAL	1,369	770	372	113	51	49
Paterson, N. J.	28	21	4	-	2	-	Austin, Tex.	40	26	9	2	2	4
Philadelphia, Pa.	504	318	140	20	12	23	Baton Rouge, La.	44	27	12	4	-	4
Pittsburgh, Pa.	186	116	54	6	6	14	Corpus Christi, Tex.	39	27	5	1	5	-
Reading, Pa.	36	27	8	1	-	1	Dallas, Tex.	174	94	55	13	4	5
Rochester, N. Y.	103	74	17	6	3	12	El Paso, Tex.	31	16	9	3	2	2
Schenectady, N. Y.	30	18	11	-	-	-	Fort Worth, Tex.	79	52	19	3	-	1
Scranton, Pa.	31	23	8	-	-	1	Houston, Tex.	513	271	139	54	17	10
Syracuse, N. Y.	69	42	16	4	3	2	Little Rock, Ark.	84	44	27	8	2	4
Trenton, N. J.	21	11	8	2	-	2	New Orleans, La.	113	62	30	11	7	2
Utica, N. Y.	26	19	5	2	-	-	San Antonio, Tex.	147	83	40	9	10	10
Yonkers, N. Y.	28	19	5	3	-	2	Shreveport, La.	60	41	14	2	1	1
							Tulsa, Okla.	45	27	13	3	1	6
EAST NORTH CENTRAL	2,167	1,294	585	126	75	59	MOUNTAIN	546	326	115	42	38	31
Akron, Ohio	60	37	15	4	1	-	Albuquerque, N. Mex.	60	31	18	3	4	5
Canton, Ohio	37	23	10	3	-	2	Colorado Springs, Colo.	38	26	4	3	4	3
Chicago, Ill.	557	323	149	35	22	10	Denver, Colo.	130	69	21	14	20	9
Cincinnati, Ohio	181	99	60	10	3	2	Las Vegas, Nev.	22	13	7	2	-	1
Cleveland, Ohio	129	72	43	10	2	3	Ogden, Utah	20	16	3	1	-	2
Columbus, Ohio	89	57	20	3	3	5	Phoenix, Ariz.	153	92	36	12	5	5
Dayton, Ohio	97	56	30	4	2	7	Pueblo, Colo.	9	8	1	-	-	3
Detroit, Mich.	320	174	88	27	18	5	Salt Lake City, Utah	42	26	9	4	3	2
Evansville, Ind.	42	31	9	1	1	-	Tucson, Ariz.	72	45	16	3	2	1
Fort Wayne, Ind.	40	24	10	3	2	1							
Gary, Ind.	15	7	5	3	-	3							
Grand Rapids, Mich.	70	48	16	-	3	4	PACIFIC	1,680	1,126	376	87	42	50
Indianapolis, Ind.	134	80	37	6	6	2	Berkeley, Calif.	19	12	6	-	1	-
Madison, Wis.	39	21	11	3	1	3	Fresno, Calif.	64	43	14	2	2	1
Milwaukee, Wis.	113	75	31	4	2	1	Glendale, Calif.	41	32	4	3	1	2
Peoria, Ill.	29	20	4	1	4	2	Honolulu, Hawaii	46	24	12	6	2	3
Rockford, Ill.	39	23	11	1	3	4	Long Beach, Calif.	93	59	28	4	1	3
South Bend, Ind.	37	30	4	2	-	3	Los Angeles, Calif.	535	364	124	24	10	21
Toledo, Ohio	85	58	18	5	1	-	Oakland, Calif.	79	56	16	4	1	1
Youngstown, Ohio	54	36	14	1	1	2	Pasadena, Calif.	33	23	6	3	1	-
							Portland, Oreg.	130	92	23	6	3	1
WEST NORTH CENTRAL	734	464	178	40	28	41	Sacramento, Calif.	76	50	17	2	2	3
Des Moines, Iowa	49	31	14	3	1	2	San Diego, Calif.	125	82	20	7	8	4
Duluth, Minn.	36	24	10	1	1	3	San Francisco, Calif.	157	106	36	8	4	4
Kansas City, Kans.	32	17	10	1	-	2	San Jose, Calif.	59	41	10	3	1	4
Kansas City, Mo.	123	74	31	6	8	7	Seattle, Wash.	137	89	35	12	1	4
Lincoln, Nebr.	22	13	6	2	-	2	Spokane, Wash.	46	26	15	1	4	-
Minneapolis, Minn.	72	46	18	2	5	3	Tacoma, Wash.	40	27	10	2	-	-
Omaha, Nebr.	68	38	19	4	4	1							
St. Louis, Mo.	180	110	42	14	7	10							
St. Paul, Minn.	80	62	11	5	1	2	TOTAL	12,017	7,449	3,027	736	396	502
Wichita, Kans.	72	49	17	2	1	9	Expected Number	11,824	7,298	3,035	705	422	498

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

The Morbidity and Mortality Weekly Report, circulation 78,000, is published by the Center for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Send reports to: Center for Disease Control, Attn.: Editor, Morbidity and Mortality Weekly Report, Atlanta, Georgia 30333.

Send mailing list additions, deletions, and address changes to: Center for Disease Control, Attn.: Distribution Services, GSO, 1-SB-36, Atlanta, Georgia 30333. When requesting changes be sure to give your former address, including zip code and mailing list code number, or send an old address label.

Tuberculosis — continued

by *M. tuberculosis*. Contact examination for cases of bovine tuberculosis should include both human and animal contacts. When indicated, INH can be used for preventive therapy in human contacts.

Because the disease in cattle has not been controlled in

International Notes

An outbreak of Rift Valley fever occurred in the Egyptian provinces of Sharqiya, Qalyubia, and Giza in October and November 1977. An estimated 10,000-20,000 human cases occurred; 70-80 were fatal. Also affected were relatively large numbers of sheep, water buffalo, and camels. The disease is not known to have occurred previously in Egypt.

The outbreak, which began approximately October 6 in Sharqiya, was an acute febrile illness, usually lasting 2-4 days, with sudden onset of fever (38-40 C), rigors, myalgia, headache, conjunctivitis, and nausea. Vomiting sometimes occurred. Hemorrhagic manifestations, when present, were a petechial rash on the lower abdomen and rectal bleeding. Jaundice, observed only in some of the fatal cases, appeared about the sixth day. Other complications were encephalitis and macular degeneration and temporary or permanent blindness.

Current Trends**Rocky Mountain Spotted Fever — United States**

During 1977, 1,115 cases of Rocky Mountain spotted fever (RMSF) were reported to CDC. This represents an increase of 19% over the 937 cases reported in 1976 and is the largest number of cases of this illness ever reported in the United States. The southeastern and south central states accounted for 581 or 52% of the total number of reported cases. North Carolina, with 223, led all states. Other states with more than 50 reported cases included Virginia (154 cases), Tennessee (107), Maryland (77), Oklahoma (76), Georgia (65), Arkansas (55), and South Carolina (53).

Case-report forms were submitted on 856 or 76.8% of all reported cases. Information available from these report forms revealed the male-to-female ratio to be 1.5:1. Five hundred six or 59% of these cases occurred in individuals less than 20 years old. Forty-two fatalities were reported out of the 856 cases for a case-fatality ratio of 4.9%. This represents a decrease from 5.9% (40 fatalities) in 1976. However, in individuals over the age of 40 the case-fatality rate was 12.3%.

Reported by *Viral Diseases Div, Bur of Epidemiology, CDC.*

Editorial Note: Reported cases of Rocky Mountain spotted

International Notes

The following changes should be made in the "Supplement-Health Information for International Travel," MMWR Vol. 26, August 1977:

many other parts of the world, it is noteworthy that both of these patients were born outside of the United States and spent a considerable amount of time abroad. In addition to such cases of foreign acquisition, cases may occur in older people in the United States who may have been infected in this country many years ago.

In the areas most affected, as much as 70% of the population was infected. During the month of October there were 35 deaths; most of these were in the 40- to 45-year age group, and postmortem examinations showed internal gastrointestinal bleeding and hepatosplenomegaly. Histopathologically, there was evidence of widespread hepatic necrosis.

After investigations were begun on October 8, virus isolations were made at the Virus Research Center at Agouza from 50 patients and also from mosquitoes, rodents (*Rattus rattus*), and sheep. Two of the mosquito isolates (*Culex pipiens*) were identified as Rift Valley Fever virus. Apart from this species, which was exceptionally abundant during the fall of 1977, virtually no other mosquitoes were found in the affected areas.

Reported by the World Health Organization in the *Weekly Epidemiological Record* 50:401, 1977, and 51:7-8, 1978.

fever in the United States have been increasing since 1960. The incidence of the disease has increased from 0.11 cases/100,000 in 1960 to 0.5/100,000 in 1977.

Data derived from case-report forms reveal age, sex, and mortality patterns similar to those noted in previous reports (1,2). However, the case-fatality rate of 4.9% may not be representative since it excludes the 23.2% of reported cases on which detailed information was not available.

The early diagnosis of Rocky Mountain spotted fever is extremely important and almost always is made on clinical grounds. Both Weil-Felix agglutinins and complement fixings antibodies do not rise until 10 to 14 days after onset of disease. Despite the effectiveness of tetracycline and chloramphenicol in treating RMSF, morbidity and mortality are still significant, particularly in the southeastern states.

References

1. Hattwick MAW, Peters AH, Gregg MB, Hanson BF: Surveillance of Rocky Mountain spotted fever. *JAMA* 225:1338-1343, 1973
2. Hattwick MAW, O'Brien RJ, Hanson BF: Rocky Mountain spotted fever: Epidemiology of an increasing problem. *Ann Intern Med* 84:732-739, 1976

Quarantine Measures**FRANCE**

Smallpox — Delete all information. Insert code II, Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

Current Trends**Influenza — United States**

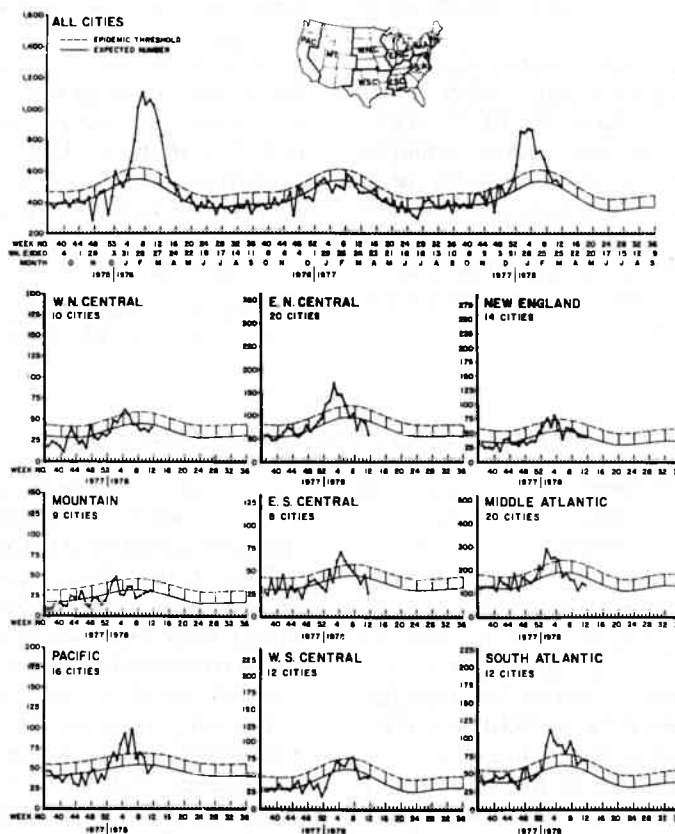
Influenza activity in the United States is declining rapidly for the first time since major outbreaks began in November 1977. The number of states or territories reporting widespread or regional activity has declined to 15, while 25 are reporting sporadic activity, and 3 are reporting no activity. Based on reports sent to CDC from 121 U.S. cities for the week ending March 25, 1978, pneumonia and influenza mortality is below the epidemic threshold nationwide and for each region for the third consecutive week (Figure 1).

During the 1977-1978 influenza season to date, 49 of 50

states have obtained H3N2 (A/Texas-like or A/Victoria-like) isolates and 35 states have obtained A/USSR/90/77-like (H1N1) isolates. Influenza B isolates have been obtained from Houston and San Antonio, Texas.

Reported by Influenza Research Center, Baylor College of Medicine; L. Blouse, G. Lathrop, MD, Epidemiology Div, School of Aerospace Medicine, Brooks AFB; Surveillance and Assessment Br, Immunization Div, Bur of State Services, WHO Collaborating Center for Influenza, Respiratory Virology Br, Virology Div, Bur of Laboratories, and National Morbidity and Mortality Surveillance Activity, Bur of Epidemiology, CDC.

FIGURE 1. Pneumonia-influenza deaths in 121 United States cities



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