

M M W R

- International Notes**
 497 Smallpox Certification – East Africa
 500 Pneumococcal Meningitis – Australia
Epidemiologic Notes and Reports
 498 Shigellosis in a Children's Hospital – Pennsylvania
Current Trends
 505 Urban Rat Control – United States, April-June 1979

MORBIDITY AND MORTALITY WEEKLY REPORT

International Notes

Smallpox Certification – East Africa

Two years ago today the world's last known patient with endemic smallpox had onset of rash (Figure 1). Ali Maow Maalin, a cook at the district hospital in Merka, Somalia, developed smallpox on October 26, 1977. Since then, intensive surveillance has failed to identify any additional cases of naturally transmitted smallpox.*

Separate International Commissions have been assessing campaigns in the last 4 countries requiring certification of eradication: Somalia, Kenya, Ethiopia, and Djibouti. Today in Nairobi, the chairpersons of these commissions will make their reports to the Director-General of the World Health Organization. It is anticipated that the Horn of Africa will be certified to be smallpox free.

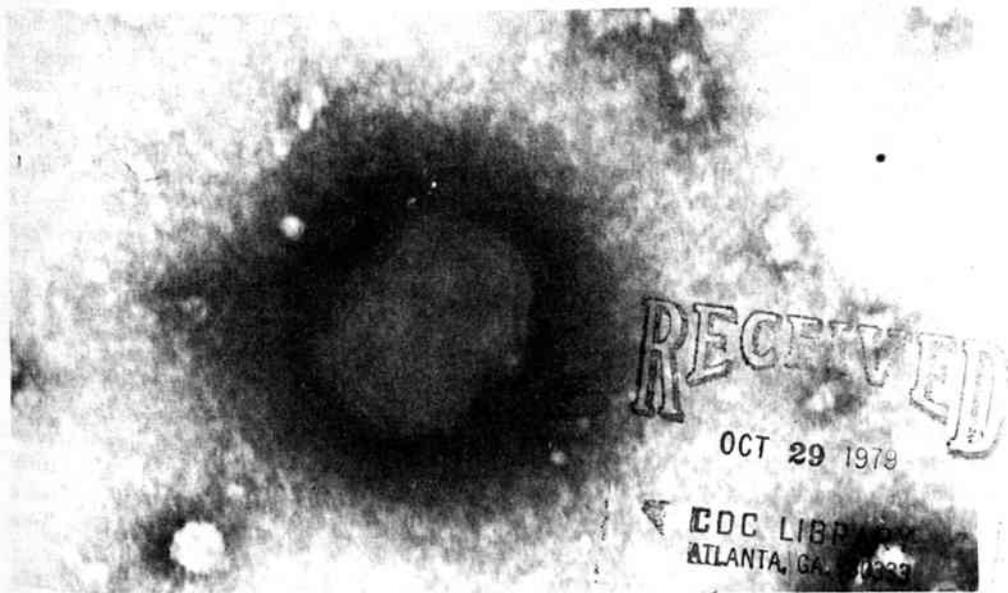


FIGURE 1. Variola minor virus isolate from world's last endemic case, Merka, Somalia, 1977. Magnification, 115,000 X.

*Two cases of laboratory-acquired smallpox occurred in Birmingham, United Kingdom, on August 13 and September 8, 1978, but the World Health Organization's Global Commission for Smallpox Eradication has determined that these cases should not alter the plans for certification of naturally transmitted smallpox.

Smallpox — Continued

This meeting will complete the documentation required to certify global eradication of smallpox. This documentation will be reviewed by the Global Commission for Smallpox Eradication from December 6-9, 1979, in Geneva. If the criteria for global eradication have been met, documentation will be presented to the World Health Assembly in May 1980 for final global certification of smallpox eradication.

Reported by the Bureau of Smallpox Eradication, CDC.

Epidemiologic Notes and Reports

Shigellosis in a Children's Hospital — Pennsylvania

An outbreak of shigellosis occurred May 17-30, 1979, among hospital employees in a children's hospital in Pennsylvania. Thirty-two percent of employees reported being ill. Two hundred eighty employees and visitors with complaints of vomiting and/or diarrhea presented to the employee health service and were cultured; 142 (51%) had positive stool cultures for *Shigella sonnei*. Staffing problems during the outbreak were severe, and the hospital was closed to new admissions for a 3-day period.

Questionnaires were sent to 1,700 employees to determine the symptoms of disease and places where these persons had eaten from May 16-21; a food-specific history was obtained from those who had eaten in the hospital cafeteria. One thousand ninety-three questionnaires (64%) were returned. Analysis showed a strong association between illness and eating in the hospital cafeteria ($p < .0001$). Based on 78 culture-confirmed cases and 150 well controls, significant associations were found between illness and consumption of tuna salad ($p < .0001$) and eating food from the salad bar ($p < .0001$). A negative association between illness and consumption of hot foods was also found.

One cafeteria employee had diarrhea on May 17, the first day of the outbreak. She had been exposed to a child with severe diarrhea at home before onset of her illness. This employee was found to be culture positive for *S. sonnei*. She had worked on May 17 and May 21 and was responsible for preparing all salads and sandwiches in the employee cafeteria, where visitors also sometimes ate. The 2 peaks in the outbreak were on May 19 and May 23—consistent with the 1- to 2-day incubation period of foodborne shigellosis (Figure 2).

The organism identified from culture-positive individuals was resistant to ampicillin and tetracycline and sensitive to trimethoprim-sulfamethoxazole. All symptomatic individuals were treated with a 5-day course of the latter drug, or with furazolidone, if they were sulfa sensitive. For cafeteria employees, 3 negative rectal cultures—taken at 1-day intervals at least 48 hours after antibiotic therapy had ended—were required before a culture-positive individual could return to work. Other culture-positive hospital employees were permitted to return to work after 48 hours of therapy. No hospitalized patients became culture positive for *Shigella* as a result of the outbreak.

Reported by J Lampert, RN, S Plotkin, MD, J Campos, PhD, M Trendler, MT, D Schlagel, RN, The Children's Hospital, Philadelphia; EJ Witte, VMD, Acting State Epidemiologist, Pennsylvania State Dept of Health; Field Services Div, Enteric Diseases Br, Bacterial Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: *Shigella* organisms remain a major cause of gastrointestinal illness in the United States: 15,336 isolates were reported to CDC in 1978 (1). Although transmission is usually from person to person, in the 18-year period from 1961 through 1978 there were 84 reported outbreaks of common-source foodborne illness due to *Shigella*. Unlike most *Salmonella* species, *Shigella* are host specific for man and generally survive poorly in the environment. When foodborne outbreaks do occur, they can almost always be traced to contamination of food by an infected food handler. As in this case, the vehicle

Shigellosis — Continued

in foodborne *Shigella* outbreaks is typically a salad or other food whose preparation requires extensive handling of ingredients. Foodborne *Shigella* outbreaks are frequently large and have a high attack rate. For foodborne *Shigella* outbreaks from 1961 to 1975, the average attack rate was 47%, with an average outbreak size of 148 persons (2).

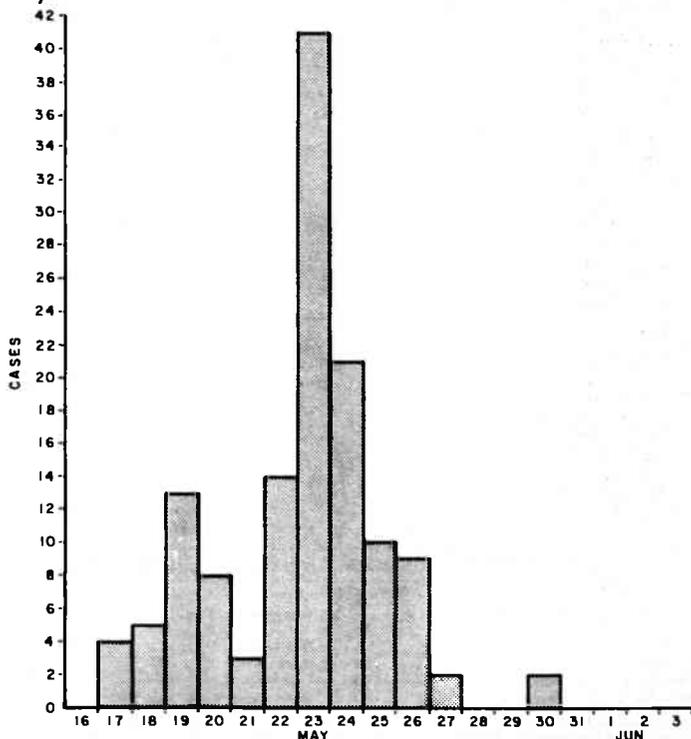
The procedures used in this instance to evaluate food-service employees before their return to work follow the recommendations of the American Public Health Association—i.e., that cultures be obtained 48 hours after cessation of therapy and that they be at least 24 hours apart (3). More specific regulations relating to food-service employees—such as the number of cultures, the amount of time that should elapse between ceasing therapy and starting post-therapy culturing, and the time between cultures—varies from state to state, and there is no single combination of these variables which has been shown to be clearly superior in identifying infectious individuals.

No secondary spread from members of the hospital staff to patients occurred in this outbreak. This contrasts with studies in households, in which up to 35% of children present in the household have been shown to become infected with *Shigella* after an initial infection in 1 adult household member (4).

References

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FIGURE 2. Individuals culture-positive for *Shigella*, by date of onset, a children's hospital, Pennsylvania, May 1979*



*Excludes cases in which date of onset was unknown.

International Notes

Pneumococcal Meningitis Caused by Chloramphenicol- and Tetracycline-Resistant Type 23 Pneumococcus — Australia

A children's hospital in Australia recently reported that a 10-month-old boy in Melbourne developed meningitis caused by a type 23 pneumococcus resistant to chloramphenicol and tetracycline and partially resistant to penicillin. Although antibiotic-resistant or partially-resistant strains of pneumococci have been encountered in Australia during the past 5 years (1), this is the first case of meningitis known to have been caused by a strain resistant to chloramphenicol and partially resistant to penicillin. In South Africa, fatal cases of meningitis caused by type 19 multiply resistant pneumococci have occurred in young children (2,3).

The Australian report concerns a child who had been born in Yugoslavia but had resided, with his family, in Melbourne for 2 months. He was well until August 4, 1979, when vomiting developed. The following day he was admitted to the Western General Hospital, where a lumbar puncture yielded cerebrospinal fluid (CSF) containing 8,800 neutrophils/mm³ and 100 lymphocytes/mm³. Penicillin and chloramphenicol were administered by intramuscular injection, and later on the same day the child was transferred to the Royal Children's Hospital. He was deteriorating clinically and had 3 convulsions. Treatment with penicillin, 125 mg/kg/day, and chloramphenicol, 150 mg/kg/day, were continued, but intravenously.

(Continued on page 505)

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

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

DISEASE	42nd WEEK ENDING		MEDIAN 1974-1978**	CUMULATIVE, FIRST 42 WEEKS		
	October 20, 1979	October 21, 1978*		October 20, 1979	October 21, 1978*	MEDIAN 1974-1978**
Aseptic meningitis	275	252	107	6,375	5,130	3,210
Brucellosis	4	6	6	134	143	185
Chickenpox	649	886	918	173,642	126,711	126,711
Diphtheria	-	-	1	64	63	128
Encephalitis: Primary (arthropod-borne & unsp.)	20	29	44	813	981	981
Post-infectious	4	5	3	184	197	212
Hepatitis, Viral: Type B	277	299	299	11,663	12,104	12,104
Type A	597	629	650	23,672	23,453	27,337
Type unspecified	271	147	147	8,590	6,751	6,641
Malaria	17	15	14	587	607	389
Measles (rubeola)	93	170	110	12,434	24,545	24,545
Meningococcal infections: Total	29	38	25	2,104	1,983	1,279
Civilian	27	37	24	2,092	1,959	1,262
Military	2	1	-	12	24	24
Mumps	155	148	297	11,738	14,037	33,833
Pertussis	25	39	38	1,100	1,718	1,403
Rubella (German measles)	82	68	78	10,939	17,175	15,223
Tetanus	1	1	2	57	68	68
Tuberculosis	525	556	557	22,573	23,467	24,629
Tularemia	1	2	2	167	105	113
Typhoid fever	14	13	12	407	414	340
Typhus fever, tick-borne (Rky. Mt. spotted)	7	15	13	948	990	827
Venereal diseases:						
Gonorrhea: Civilian	19,571	21,631	21,631	804,807	814,359	814,359
Military	582	514	514	22,280	20,913	21,892
Syphilis, primary & secondary: Civilian	592	376	415	19,995	17,236	17,236
Military	3	5	8	245	246	246
Rabies in animals	96	66	66	4,108	2,578	2,470

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1979		CUM. 1979
Anthrax	-	Poliomyelitis: Total	25
Botulism (Alaska 3)	23	Paralytic	21
Cholera	1	Psittacosis (Calif. 1)	82
Congenital rubella syndrome (Mass. 1, Calif. 1)	39	Rabies in man	3
Leprosy (Mass. 1, Va. 1, Fla. 1, Calif. 4)	145	Trichinosis (Mass. 1)	128
Leptospirosis (Mass. 1, La. 1, N.Mex. 1)	40	Typhus fever, flea-borne (endemic, murine)	52
Plague	10		

* Delayed reports received for calendar year 1978 are used to update last year's weekly and cumulative totals.

** Medians for gonorrhea and syphilis are based on data for 1976-1978.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending October 20, 1979, and October 21, 1978 (42nd week)

REPORTING AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKEN-POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
						Primary		Post-infectious	B	A	Unspecified		
						1979	1978*						
UNITED STATES	275	4	649	-	64	20	29	4	277	597	271	17	587
NEW ENGLAND	23	1	79	-	-	1	-	-	7	9	12	1	38
Maine	-	-	21	-	-	-	-	-	-	3	-	-	3
N.H. †	1	-	-	-	-	-	-	-	1	-	-	-	1
Vt.	-	-	-	-	-	-	-	-	-	-	1	-	-
Mass.	6	1	25	-	-	-	-	-	-	2	10	-	11
R.I.	12	-	5	-	-	-	-	-	2	1	-	-	9
Conn.	4	-	28	-	-	1	-	-	4	3	1	1	14
MID. ATLANTIC	48	-	28	-	-	3	1	-	54	52	10	1	84
Lipstate N.Y.	7	-	9	-	-	2	1	-	14	12	1	-	13
N.Y. City	12	-	12	-	-	1	-	-	6	9	6	1	39
N.J.	29	-	NN	-	-	-	-	-	19	11	3	-	14
Pa. †	-	-	7	-	-	-	-	-	15	20	-	-	18
E.N. CENTRAL	33	1	311	-	2	4	8	1	43	60	16	1	41
Ohio †	-	1	9	-	-	1	3	1	18	17	-	-	7
Ind. †	-	-	28	-	1	1	2	-	2	1	6	-	1
Ill.	4	-	30	-	-	-	-	-	12	19	-	1	20
Mich.	23	-	129	-	-	2	1	-	8	15	10	-	11
Wis. †	6	-	115	-	1	-	2	-	3	8	-	-	2
W.N. CENTRAL	9	1	53	-	1	-	2	-	10	19	9	1	19
Minn. †	-	-	2	-	-	-	-	-	2	2	1	-	7
Iowa	6	1	16	-	-	-	2	-	1	1	1	-	2
Mo.	-	-	-	-	1	-	-	-	5	7	7	-	3
N. Dak. †	-	-	2	-	-	-	-	-	-	-	-	1	2
S. Dak.	-	-	-	-	-	-	-	-	-	1	-	-	1
Nebr.	2	-	-	-	-	-	-	-	1	1	-	-	2
Kans.	1	-	33	-	-	-	-	-	1	7	-	-	2
S. ATLANTIC	48	1	55	-	1	3	7	2	50	80	33	3	69
Del.	-	-	-	-	-	-	-	-	4	-	1	-	1
Md.	15	-	1	-	-	1	1	-	-	3	-	1	12
D.C.	-	-	1	-	-	-	-	-	2	3	4	-	6
Va. †	-	-	-	-	-	-	-	-	4	9	5	-	21
W. Va.	11	1	1	-	1	1	-	1	9	9	5	-	2
N.C.	-	-	31	-	-	-	3	-	4	31	-	-	6
S.C.	10	-	NN	-	-	1	3	-	6	6	3	1	6
Ga.	3	-	-	-	-	-	-	-	3	3	3	-	1
Fla.	-	-	-	-	-	-	-	-	3	18	-	-	2
	9	-	21	-	-	-	-	1	19	37	17	1	18
E.S. CENTRAL	16	-	6	-	-	3	6	-	9	28	3	-	9
Ky.	5	-	5	-	-	-	-	-	2	1	-	-	-
Tenn.	-	-	NN	-	-	-	4	-	1	4	-	-	-
Ala.	10	-	1	-	-	-	1	-	5	16	3	-	3
Miss.	1	-	-	-	-	3	1	-	1	7	-	-	6
W.S. CENTRAL	25	-	23	-	-	3	3	-	25	87	79	1	37
Ark.	-	-	-	-	-	-	-	-	3	7	6	-	-
La.	-	-	-	-	-	-	-	-	10	22	5	-	5
Okla.	-	-	NN	-	-	-	3	-	1	2	4	1	6
Tex.	25	-	23	-	-	3	-	-	11	56	64	-	26
MOUNTAIN	15	-	38	-	1	1	-	-	8	92	49	2	17
Mont.	1	-	26	-	-	-	-	-	-	12	-	-	2
Idaho	-	-	3	-	-	-	-	-	-	1	-	-	-
Wyo.	1	-	-	-	-	-	-	-	-	-	-	-	1
Colo.	9	-	5	-	-	1	-	-	2	14	3	2	7
N. Mex. †	2	-	-	-	-	-	-	-	-	26	-	-	1
Ariz.	-	-	-	-	1	-	-	-	1	33	43	-	5
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-
Nev. †	2	-	4	-	-	-	-	-	5	6	3	-	1
PACIFIC	58	-	56	-	59	2	2	1	71	170	60	7	273
Wash.	2	-	35	-	56	-	-	-	7	22	11	-	12
Oreg.	5	-	1	-	-	1	-	1	12	18	-	1	11
Calif. †	48	-	-	-	3	1	1	-	50	128	48	6	248
Alaska	2	-	16	-	-	-	1	-	-	1	1	-	-
Hawaii	1	-	4	-	-	-	-	-	2	1	-	-	2
Guam †	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-
P.R.	3	-	28	-	-	-	-	-	3	12	26	-	2
V.I.	-	-	-	-	-	-	-	-	-	-	-	-	-
Pac. Trust Terr.	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-

NA: Not notifiable.
 *Delayed reports received for 1978 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 cumulative totals: Asep. meng.: N.H. +2, Ohio +1, Ind. +7, Wis. +1; Chickenpox: Wis. -2, Calif. +12, Guam +6; Enceph.: Ohio -1, Ind. +2, Wis. +1; Hep.B: Pa. +17, N.Dak. +1, N.Mex. +2, Guam +1; Hep.A: Pa. +11, Wis. -1, Minn. +1, Nev. +101; Hep. unsp.: Pa. +5, Va. -1; Malaria: Ohio +5.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending October 20, 1979, and October 21, 1978 (42nd week)

REPORTING AREA	MEASLES (RUBEOLEA)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1979	CUM. 1979	CUM. 1978*	1979	CUM. 1979	CUM. 1978*	1979	CUM. 1979	1979	1979	CUM. 1979	CUM. 1979
UNITED STATES	93	12,434	24,545	29	2,104	1,983	155	11,738	25	82	10,939	57
NEW ENGLAND	-	287	1,982	3	111	105	24	471	1	2	1,419	5
Maine †	-	17	1,315	-	6	7	17	173	-	-	61	-
N.H.	-	32	51	1	13	8	-	5	-	1	125	-
Vt.	-	119	33	1	7	2	-	9	-	-	397	-
Mass. †	-	13	247	-	34	44	2	54	1	1	487	3
R.I.	-	102	8	-	7	16	-	41	-	-	93	-
Conn.	-	4	328	1	44	28	5	189	-	-	256	1
MID. ATLANTIC	7	1,503	2,196	6	335	306	23	1,145	5	35	1,949	8
Upstate N.Y.	4	621	1,404	1	113	98	1	145	5	31	1,091	2
N.Y. City	3	779	360	1	78	70	3	125	-	3	269	4
N.J.	-	57	74	4	82	62	18	563	-	1	324	1
Pa.	-	46	358	-	62	76	1	292	-	-	265	1
E.N. CENTRAL	39	3,254	10,982	5	213	275	32	5,024	10	16	2,543	3
Ohio †	12	282	486	-	72	73	5	1,801	-	2	140	-
Ind.	-	214	200	-	42	46	2	295	-	6	741	-
Ill.	10	1,441	1,113	2	20	87	3	888	8	2	187	-
Mich.	4	831	7,708	3	62	58	11	912	2	4	1,211	1
Wis.	13	486	1,475	-	17	11	11	1,128	-	2	264	-
W.N. CENTRAL	9	1,747	400	-	60	79	5	675	-	8	471	2
Minn.	-	1,218	40	-	11	21	1	18	-	-	41	-
Iowa	-	16	57	-	11	10	-	234	-	-	52	-
Mo.	-	414	192	-	29	31	-	195	-	-	61	1
N. Dak.	-	21	196	-	1	3	-	2	-	-	8	1
S. Dak.	-	9	5	-	2	3	-	7	-	-	5	-
Nebr. †	9	9	5	-	-	-	-	7	-	-	202	-
Kans.	-	67	90	-	6	11	4	212	-	8	102	-
S. ATLANTIC	27	1,917	5,256	7	516	473	15	612	4	4	1,234	11
Del.	-	1	7	-	3	2	3	45	-	-	5	-
Md.	-	16	52	-	46	33	5	166	-	-	28	1
D.C.	-	-	48	-	2	2	-	2	-	-	1	-
Va.	2	276	2,830	2	74	56	-	86	-	-	202	1
W. Va.	1	57	1,057	-	8	13	2	104	-	-	107	-
N.C.	-	113	121	2	80	95	2	76	1	1	530	3
S.C.	-	168	199	-	59	31	-	3	-	-	64	-
Ga.	14	488	33	1	77	52	-	7	3	-	11	-
Fla.	10	758	909	2	167	189	3	123	-	3	286	6
E.S. CENTRAL	-	212	1,419	3	158	157	23	1,374	1	1	302	8
Ky.	-	37	119	2	33	30	22	1,133	-	-	68	1
Tenn.	-	66	955	-	44	61	-	101	1	-	98	-
Ala.	-	85	101	-	38	47	-	23	-	-	44	5
Miss.	-	24	244	1	43	39	1	117	-	1	92	2
W.S. CENTRAL	3	930	1,136	2	326	280	1	1,358	-	5	246	16
Ark.	-	9	16	-	27	21	-	481	-	-	7	4
La.	-	250	343	-	118	116	-	36	-	1	29	3
Okl.	-	22	14	-	31	16	-	-	-	-	22	-
Tex.	3	649	763	2	150	127	1	841	-	4	188	9
MOUNTAIN	1	325	254	2	86	46	13	291	3	-	529	-
Mont.	-	57	106	1	10	4	-	9	-	-	69	-
Idaho	-	18	1	-	7	4	-	-	-	-	204	-
Wyo.	-	36	-	-	1	-	-	-	-	-	-	-
Colo.	-	68	32	-	5	3	11	91	-	-	66	-
N. Mex.	-	39	-	-	6	9	-	12	1	-	11	-
Ariz.	-	77	51	1	36	15	2	59	2	-	141	-
Utah	-	18	44	-	9	6	-	96	-	-	36	-
Nev.	1	12	20	-	12	5	-	14	-	-	2	-
PACIFIC	7	2,259	920	1	299	262	19	788	1	11	2,246	4
Wash.	2	1,133	210	-	52	44	-	199	-	-	188	-
Oreg.	-	61	148	-	23	29	1	94	-	-	109	-
Calif.	4	980	552	1	208	178	14	378	1	11	1,921	4
Alaska	-	17	1	-	6	8	2	11	-	-	4	-
Hawaii	1	68	9	-	10	3	2	106	-	-	24	-
Guam †	NA	10	25	-	1	1	NA	11	NA	NA	4	-
P.R.	8	357	270	-	5	7	4	563	-	2	38	9
V.I.	-	4	6	-	3	1	-	20	-	-	-	-
Pac. Trust Terr.	NA	5	615	-	1	3	NA	34	NA	NA	1	-

NA: Not available.

*Delayed reports received for 1978 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 cumulative totals: Measles: Mass. +1, Nebr. +11, Guam +1; Men. inf.: Maine +1, Ohio +6; Tetanus: Ohio +1.

TABLE III (Cont'd). Cases of specified notifiable diseases, United States, weeks ending October 20, 1979, and October 21, 1978 (42nd week)

REPORTING AREA	TUBERCULOSIS		TULA-REMICIA	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSF)		VENEREAL DISEASES (Civilian)						RABIES (In Animals)
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1979	CUM. 1979	CUM. 1978	1979	CUM. 1978	1979	CUM. 1978	1979	CUM. 1978	CUM. 1978*	1979	CUM. 1978	CUM. 1978*	
UNITED STATES	525	22,573	167	14	407	7	948	19,571	804,807	814,359	592	19,995	17,236	4,108
NEW ENGLAND	15	635	3	-	17	-	10	564	19,812	20,881	25	398	474	45
Maine	-	50	-	-	1	-	-	64	1,398	1,692	-	10	7	28
N.H.	1	15	-	-	-	-	-	23	735	967	-	18	5	3
Vt.	1	26	-	-	-	-	1	18	487	512	-	1	3	-
Mass.†	6	329	3	-	10	-	4	209	7,882	9,146	10	220	290	10
R.I.	1	57	-	-	2	-	-	34	1,607	1,490	3	16	20	2
Conn.†	6	158	-	-	4	-	5	216	7,703	7,074	12	133	149	2
MID. ATLANTIC	96	3,529	1	1	67	-	43	1,796	87,497	87,610	92	2,997	2,256	65
Upstate N.Y.†	12	637	1	-	13	-	27	445	15,095	14,641	2	216	157	46
N.Y. City	31	1,316	-	-	29	-	1	744	33,544	33,241	70	2,024	1,562	-
N.J.	21	653	-	1	16	-	5	137	15,679	16,461	11	394	277	5
Pa.	32	923	-	-	9	-	10	470	23,179	23,267	9	363	260	14
E.N. CENTRAL	75	3,313	-	-	27	1	58	2,609	124,915	125,998	72	2,545	1,968	365
Ohio	9	598	-	-	3	1	21	995	34,728	32,591	31	506	353	33
Ind.	5	422	-	-	-	-	2	NA	10,405	13,221	NA	177	135	63
Ill.	34	1,321	-	-	8	-	31	536	39,117	39,808	36	1,421	1,249	171
Mich.†	23	818	-	-	12	-	3	722	29,550	29,200	5	373	177	13
Wis. †	4	154	-	-	4	-	1	356	11,115	11,178	-	68	54	85
W.N. CENTRAL	21	768	24	-	17	1	53	1,024	39,958	41,483	5	259	363	808
Minn.	2	119	-	-	4	-	2	157	6,586	7,058	2	71	135	141
Iowa	-	59	1	-	4	1	14	106	4,771	4,597	-	28	30	154
Mo.	15	417	20	-	6	-	25	322	17,136	18,302	3	120	114	244
N. Dak.	-	16	-	-	-	-	-	26	683	734	-	2	3	67
S. Dak.†	3	46	2	-	-	-	-	34	1,341	1,425	-	2	3	88
Nebr.	-	22	1	-	1	-	4	105	2,843	2,987	-	5	12	-
Kans.	1	89	-	-	2	-	8	274	6,598	6,380	-	31	66	114
S. ATLANTIC	131	5,095	10	-	41	2	540	5,171	194,773	198,209	124	4,734	4,558	578
Del.	4	45	-	-	7	-	3	84	3,234	2,808	-	24	10	-
Md.†	16	652	-	-	7	-	60	400	23,742	25,467	7	307	337	37
D.C.	14	239	2	-	1	-	2	292	12,834	13,193	8	366	348	-
Va.	23	610	1	-	4	-	90	311	18,592	19,083	NA	381	382	19
W. Va.	3	193	-	-	4	-	9	113	2,680	2,741	-	44	18	-
N.C.†	19	807	-	-	2	2	216	765	28,144	28,000	5	369	476	20
S.C. †	7	389	1	-	3	-	72	412	18,130	19,586	10	241	236	160
Ga.	21	797	6	-	2	-	81	901	36,852	38,451	45	1,332	1,140	295
Fla.	24	1,363	-	-	18	-	7	1,893	50,565	48,880	49	1,670	1,611	47
E.S. CENTRAL	29	2,055	14	-	21	1	127	1,513	68,586	69,114	67	1,332	909	277
Ky.	13	536	2	-	7	-	19	201	9,209	9,153	-	135	120	114
Tenn.	10	596	12	-	3	-	73	604	24,775	25,573	30	566	307	92
Ala.†	6	483	-	-	8	-	17	310	20,114	19,582	12	244	159	70
Miss.	-	440	-	-	3	1	18	398	14,488	14,806	25	387	323	1
W.S. CENTRAL	60	2,718	71	6	71	2	96	2,759	103,438	109,937	135	3,663	2,770	1,536
Ark.	4	237	45	-	5	-	22	216	8,066	8,115	10	129	60	287
La.	20	546	5	-	5	-	3	575	18,302	17,920	34	925	580	24
Okla.	6	300	14	-	-	2	55	233	10,224	10,300	2	74	80	240
Tex.	30	1,635	7	6	61	-	16	1,735	66,846	73,602	89	2,535	2,050	985
MOUNTAIN	18	679	38	-	25	-	16	894	32,476	30,875	4	396	356	138
Mont.	3	32	9	-	-	-	5	41	1,607	1,788	-	8	7	8
Idaho	-	13	1	-	1	-	2	42	1,460	1,272	1	25	13	7
Wyo.	-	7	-	-	1	-	-	42	947	755	-	8	8	-
Colo.	2	99	12	-	14	-	4	260	8,581	8,548	2	77	99	51
N. Mex.	2	115	4	-	4	-	1	71	3,991	4,535	-	71	76	39
Ariz.	9	338	-	-	3	-	-	246	9,072	7,847	-	114	81	23
Utah	-	26	10	-	-	-	1	38	1,648	1,677	-	3	12	10
Nev.	2	49	2	-	2	-	3	154	5,170	4,453	1	90	60	-
PACIFIC	80	3,781	6	7	121	-	5	3,241	133,352	130,252	68	3,671	3,582	296
Wash.	6	216	3	1	6	-	-	345	11,814	10,684	NA	166	202	-
Oreg.	3	151	-	-	2	-	-	97	8,298	8,938	2	144	134	14
Calif.	67	3,088	3	6	104	-	5	2,611	106,567	104,256	64	3,260	3,200	280
Alaska	-	63	-	-	2	-	-	76	4,110	4,064	-	21	10	2
Hawaii	4	263	-	-	7	-	-	112	2,563	2,310	2	80	36	-
Guam †	NA	49	-	NA	-	NA	-	NA	73	116	NA	-	-	-
P.R.	8	250	-	1	5	-	-	68	1,798	1,806	19	462	405	20
V.I. †	-	4	-	-	1	-	-	2	132	162	-	7	15	-
Pac. Trust Terr.	NA	29	-	NA	-	NA	-	NA	344	380	NA	1	-	-

NA: Not available.

*Delayed reports received for 1978 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 cumulative totals: TB: Mass. +8, Mich. -1, N.C. -4, Ala. -1, Guam +1; RMSF: Conn. -1, Md. +15; GC: Wis. +456 civ., S. Dak. -1 civ., Guam +9 civ. +8 mil., V.I. +2 civ.; Syphilis: Guam +1; An. rabies: Upstate N.Y. +1, S.C. +1.

TABLE IV. Deaths in 121 U.S. cities,* week ending
October 20, 1979 (42nd week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL	REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL
	ALL AGES	>65	45-64	25-44	<1			ALL AGES	>65	45-64	25-44	<1	
NEW ENGLAND	685	449	179	24	15	36	S. ATLANTIC	1,232	709	289	119	75	60
Boston, Mass.	191	120	53	6	8	5	Atlanta, Ga.	145	80	37	12	13	7
Bridgport, Conn.	49	31	11	3	1	3	Baltimore, Md.	197	116	53	15	4	3
Cambridge, Mass.	30	20	9	1	-	2	Charlotte, N.C.	67	39	12	8	5	7
Fall River, Mass.	21	15	3	1	-	2	Jacksonville, Fla.	96	57	27	5	3	5
Hartford, Conn.	54	31	15	3	4	1	Miami, Fla.	124	74	31	7	6	5
Lowell, Mass.	25	17	8	-	-	2	Norfolk, Va.	49	26	12	7	3	3
Lynn, Mass.	26	16	9	1	-	1	Richmond, Va.	112	56	29	4	2	6
New Bedford, Mass.	16	13	3	-	-	1	Savannah, Ga.	42	24	8	7	2	1
New Haven, Conn.	56	37	14	3	1	10	St. Petersburg, Fla.	104	85	14	1	2	8
Providence, R.I.	77	60	12	3	1	10	Tampa, Fla.	64	35	14	9	6	8
Somerville, Mass.	6	4	2	-	-	2	Washington, D.C.	186	88	42	41	9	4
Springfield, Mass.	61	35	22	1	1	1	Wilmington, Del.	46	29	10	3	2	3
Waterbury, Conn.	30	21	7	1	-	5							
Worcester, Mass.	43	29	11	1	-	1							
							E.S. CENTRAL	715	419	186	49	26	24
MID. ATLANTIC	2,886	1,867	655	208	86	109	Birmingham, Ala.	117	61	35	10	5	-
Albany, N.Y.	48	24	12	4	4	-	Chattanooga, Tenn.	75	53	15	2	2	1
Allentown, Pa.	16	14	2	-	-	4	Knoxville, Tenn.	53	38	11	2	1	3
Buffalo, N.Y.	119	71	32	10	4	5	Louisville, Ky.	121	64	42	8	3	1
Camden, N.J.	50	31	9	3	3	1	Memphis, Tenn.	135	82	37	8	1	6
Elizabeth, N.J.	22	15	7	-	-	2	Mobile, Ala.	61	34	12	7	1	3
erie, Pa.†	47	28	10	1	1	3	Montgomery, Ala.	47	30	10	4	2	3
Jersey City, N.J.	47	34	14	5	1	2	Nashville, Tenn.	106	57	24	8	11	5
Newark, N.J.	65	34	14	8	7	3							
N.Y. City, N.Y.	1,602	1,011	380	125	47	48	W.S. CENTRAL	1,192	670	289	108	48	27
Pateron, N.J.	30	18	8	2	1	-	Austin, Tex.	39	28	9	1	-	1
Philadelphia, Pa.†	400	266	88	28	8	22	Baton Rouge, La.	48	25	19	-	2	2
Pittsburgh, Pa.†	89	53	24	7	4	6	Corpus Christi, Tex.	47	18	15	6	7	2
Reading, Pa.	35	27	8	-	-	3	Dallas, Tex.	200	113	50	18	7	1
Rochester, N.Y.	102	83	8	7	2	6	El Paso, Tex.	55	32	17	1	2	2
Schenectady, N.Y.	29	20	8	1	1	-	Fort Worth, Tex.	93	61	12	7	7	2
Scranton, Pa.†	27	22	3	1	1	2	Houston, Tex.	283	135	76	40	8	2
Syracuse, N.Y.	82	55	19	3	2	2	Little Rock, Ark.	59	31	14	5	2	5
Trenton, N.J.	33	20	11	-	1	4	New Orleans, La.	127	75	27	12	5	-
Utica, N.Y.	16	12	3	1	-	3	San Antonio, Tex.	120	68	29	7	5	4
Yonkers, N.Y.	34	29	3	2	-	1	Shreveport, La.	44	27	11	5	-	3
							Tulsa, Okla.	77	57	10	6	3	5
E.N. CENTRAL	2,373	1,453	586	147	102	66	MOUNTAIN	492	283	121	39	26	19
Akron, Ohio	52	29	17	2	2	-	Albuquerque, N. Mex.	50	23	12	8	3	4
Canton, Ohio	47	26	14	3	4	4	Colorado Springs, Colo.	31	19	7	2	1	3
Chicago, Ill.	558	347	127	38	30	14	Denver, Colo.	105	54	26	8	9	2
Cincinnati, Ohio	149	95	38	7	6	2	Las Vegas, Nev.	42	17	18	4	1	2
Cleveland, Ohio	226	119	60	17	15	5	Ogden, Utah	11	7	3	-	-	2
Columbus, Ohio	132	82	29	11	4	2	Phoenix, Ariz.	118	71	29	10	5	4
Dayton, Ohio	106	58	32	8	4	3	Pueblo, Colo.	16	12	2	1	-	1
Detroit, Mich.	275	179	66	12	9	9	Salt Lake City, Utah	42	24	12	1	4	-
Evansville, Ind.	46	27	15	2	2	2	Tucson, Ariz.	77	56	12	5	3	-
Fort Wayne, Ind.	36	20	10	2	2	4							
Gary, Ind.	21	8	6	5	-	4	PACIFIC	1,564	990	368	96	50	53
Grand Rapids, Mich.	50	30	14	3	1	4	Berkeley, Calif.	16	8	6	2	-	5
Indianapolis, Ind.	169	85	48	14	13	3	Fresno, Calif.	49	30	12	3	2	1
Madison, Wis.	38	30	7	-	1	1	Glendale, Calif.	10	6	3	-	-	1
Milwaukee, Wis.	115	76	32	4	2	-	Honolulu, Hawaii	55	31	17	4	2	1
Peoria, Ill.	57	43	9	2	-	6	Long Beach, Calif.	87	64	20	1	1	11
Rockford, Ill.	42	28	7	4	2	4	Los Angeles, Calif.	384	244	86	27	11	4
South Bend, Ind.	60	41	13	4	2	4	Oakland, Calif.	69	42	15	6	1	2
Toledo, Ohio	121	81	24	7	4	3	Pasadena, Calif.	27	18	5	2	2	1
Youngstown, Ohio	73	49	18	2	1	-	Portland, Ore.	114	80	21	10	1	6
							Sacramento, Calif.	79	53	17	2	4	4
W.N. CENTRAL	847	557	175	52	35	30	San Diego, Calif.	119	74	28	8	4	4
Des Moines, Iowa	68	41	23	1	2	3	San Francisco, Calif.	140	78	39	9	7	7
Duluth, Minn.	25	18	3	2	1	3	San Jose, Calif.	156	93	38	13	4	4
Kansas City, Kans.	45	21	12	3	3	-	Seattle, Wash.	165	99	42	7	10	5
Kansas City, Mo.	126	84	26	9	3	1	Spokane, Wash.	42	34	6	1	-	2
Lincoln, Nebr.	27	23	3	1	-	5	Tacoma, Wash.	52	36	13	1	1	2
Minneapolis, Minn.	111	80	17	9	4	1							
Omaha, Nebr.	83	58	12	3	6	-							
St. Louis, Mo.	190	120	42	11	9	4							
St. Paul, Minn.	81	52	16	6	4	2							
Wichita, Kans.	91	60	21	7	3	11	TOTAL	11,986	7,397	2,848	842	463	424

*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.

Meningitis — Continued

A CSF culture yielded a type 23 pneumococcus which, on disc-diffusion testing, was resistant to tetracycline and relatively resistant to chloramphenicol, penicillin G, and co-trimoxazole. Sensitivity was demonstrated to erythromycin and lincomycin. Minimal inhibitory concentration (MIC) values were determined, using a tube-dilution method in meat-extract broth that contained 10% horse serum, with inocula of approximately 10^2 to 10^4 colony-forming units (Table 1).

TABLE 1. Minimal inhibitory concentrations ($\mu\text{g/ml}$) of antibiotics for resistant pneumococci, Royal Children's Hospital, Australia

Antibiotic	Test	Control
Chloramphenicol	12.0	1.5
Penicillin G	0.25	0.02
Tetracycline	25.0	0.3

The child responded poorly to therapy, and additional samples of CSF, collected during the first 10 days of treatment, again yielded the pneumococci. On August 7, the dosage of penicillin was increased to 225 mg/kg/day, and the chloramphenicol treatment was discontinued. As therapeutic failure was evident, lincomycin, 25 mg/kg/day, was begun on August 11, and several doses of penicillin G were administered intrathecally. On August 13, a computerized axial tomogram (CAT) scan revealed changes consistent with a mild communicating hydrocephalus. A Rickham reservoir was inserted for intrathecal administration of antibiotics. An air-encephalogram, performed on August 23, showed slight enlargement of the lateral ventricles. CSF cultures yielded the pneumococcus until August 15, then were negative for the next 10 days. However, CSF specimens collected on August 27 and 28 and on September 6 and 7 again yielded the pneumococcus. On September 12, rifampin was added to the regimen. The child's condition had greatly improved by September 13, and the CSF white blood cell count was almost within normal limits.

Reported by D Hansman, MD, Microbiology Dept, Adelaide Children's Hospital, North Adelaide; A Hewstone, M Ritchie, Bacteriology Dept, Royal Children's Hospital, Melbourne, Australia; Commonwealth Health Dept, Canberra, Australia.

References

1. Hansman D: Multiple drug resistance in pneumococcus (*Diplococcus pneumoniae*), in Siegenthaler W, Lüthy R (eds): Current Chemotherapy: Proceedings of the 10th International Congress on Chemotherapy, Vol. I. Washington, D.C., American Society for Microbiology, 1978
2. Applebaum PC, Bhamjee A, Scragg JN, et al: *Streptococcus pneumoniae* resistant to penicillin and chloramphenicol. Lancet 2:995-997, 1977
3. MMWR 26:285-286, 1977

*Current Trends***Urban Rat Control — United States, April-June 1979**

During the third quarter of fiscal year 1979, Urban Rat Control Programs in 68 communities reported that 1,333 blocks had achieved "in maintenance" status—an indication that they are essentially rat free. Some 2,112 more blocks were designated as environ-

Rat Control - Continued

mentally improved (EIB) (Table 2). EIBs are the final measure of program success, and this is the third consecutive quarter in which over 2,000 have been identified.

As of June 30, programs had provided services to 52,437 blocks. Of these, 27,540 have achieved EIB status and are sustained locally. As a result of program efforts, approximately 6 million people now live in areas that are environmentally improved and essentially rat free.

Reported by Environmental Health Services Div, Bur of State Services, CDC.

TABLE 2. Urban Rat Control Program target-area status report, third quarter fiscal year 1979 (April 1 - June 30)

Program community	Target-area blocks				Environmentally improved blocks*	
	Total	Attack phase	Maintenance phase		New this quarter	Cumulative
			<12 months	≥12 months		
REGION I	792	462	254	76	38	976
Hartford	249	111	80	58	0	277
Boston	423	292	113	18	0	0
Worcester	120	59	61	0	38	699
Previously funded programs						0
REGION II	4,365	1,787	1,201	1,237	46	3,202
Camden	270	211	59	0	0	81
Jersey City	258	77	78	103	0	67
Newark	272	217	38	17	0	0
Paterson	118	39	30	19	0	102
New York City	1,665	764	434	467	0	594
Newburgh	47	8	13	26	0	39
Rochester	287	52	60	65	0	285
Yonkers	121	26	57	38	0	28
Aguadilla, P.R.	196	82	51	63	0	69
Arecibo, P.R.	184	62	49	73	16	131
Mayaguez, P.R.	276	125	70	81	4	116
Ponce, P.R.	212	25	96	91	26	172
San Juan, P.R.	459	99	166	194	0	96
Previously funded programs						1,422
REGION III	4,343	1,586	1,401	939	345	5,668
"War on Rats," D.C.	836	290	218	328	233	923
Baltimore	511	234	84	81	0	165
Chester	120	27	60	33	13	55
Harrisburg	368	199	96	73	0	0
N.E. Pa. V.C. Assn.†	430	180	250	0	0	958
Philadelphia	1,303	400	425	173	95	1,190
Pittsburgh	410	140	124	146	0	1,121
Chesapeake	53	16	26	11	0	25
Norfolk	257	76	93	88	0	1,193
Portsmouth	55	24	25	6	4	38
Previously funded programs						0
REGION IV	4,761	1,855	1,702	297	466	4,919
Mobile	516	205	264	47	0	224
Ft. Lauderdale	334	163	141	30	249	543
Miami	541	139	355	47	168	616
Pensacola	472	269	66	0	0	0
Tampa	239	30	207	2	47	744
Atlanta ‡	647	11	20	0	0	0
DeKalb Co., Ga.	740	439	266	35	0	0
Lexington	317	125	38	0	0	0
Louisville	530	172	270	88	2	402
Memphis	425	302	75	48	0	392
Previously funded programs						1,998

Rat Control — Continued

TABLE 2.—Continued

Program community	Target-area blocks				Environmentally improved blocks*	
	Total	Attack phase	Maintenance phase		New this quarter	Cumulative
			<12 months	≥12 months		
REGION V	4,410	1,983	1,357	227	643	3,129
Chicago	399	362	37	0	0	0
Ft. Wayne	233	141	83	9	16	122
Gary	381	211	110	60	0	0
Indianapolis	309	36	273	0	58	108
Benton Harbor	190	60	35	0	0	0
Detroit	417	237	148	32	219	306
Highland Park	220	91	17	0	0	0
Saginaw	333	72	25	0	0	0
Akron	234	57	155	22	38	298
Barberton	119	10	29	0	42	58
Cincinnati	159	40	71	22	2	46
Cleveland	485	145	235	5	59	555
Columbus	449	294	78	77	116	116
Toledo	347	102	51	0	93	111
Milwaukee	135	125	10	0	0	0
Previously funded programs						1,409
REGION VI	2,976	795	948	700	0	5,441
Little Rock	403	193	104	0	0	0
Pine Bluff	276	31	155	90	0	0
New Orleans	580	181	268	131	0	2,745
Houston	863	102	282	479	0	1,438
San Antonio	854	288	139	0	0	0
Previously funded programs						1,258
REGION VII	2,129	641	745	743	416	2,365
Kansas City, Kans.	592	98	78	416	201	649
Kansas City, Mo.	355	92	263	0	0	417
St. Louis	622	226	193	203	0	634
Omaha	560	225	211	124	74	269
Council Bluffs	0	0	0	0	141	396
Previously funded programs						0
REGION IX	1,121	243	474	66	158	1,010
Los Angeles	462	25	204	46	49	103
Oakland	293	57	73	12	34	176
San Bernardino	193	75	118	0	0	0
San Francisco	173	86	79	8	75	249
Previously funded programs						482
REGION X						830
Previously funded programs						830
TOTAL	24,897	9,352	8,082	4,285	2,112	27,540

*Contiguous blocks where maintenance has been achieved and sustained for a minimum of 12 months. These blocks are no longer part of the approved project target area.

†Northeastern Pennsylvania Vector Control Association. Serves Lackawanna and Luzerne counties and the cities of Nanticoke, Wilkes-Barre, and Hazleton.

‡Target-area blocks are confined to public housing projects.

Erratum, Vol. 28, No. 36

- ‡ 433 In the article "Tick Paralysis — Canal Zone, Panama," the editorial note incorrectly stated that the American dog tick, *Dermacentor variabilis*, is a prevalent species in the Rocky Mountains; in fact, *D. variabilis* has limited distribution in the Rocky Mountains, although it is widely distributed east of that range.

The Morbidity and Mortality Weekly Report, circulation 87,803, 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.

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