

MNMR

MORBIDITY AND MORTALITY WEEKLY REPORT

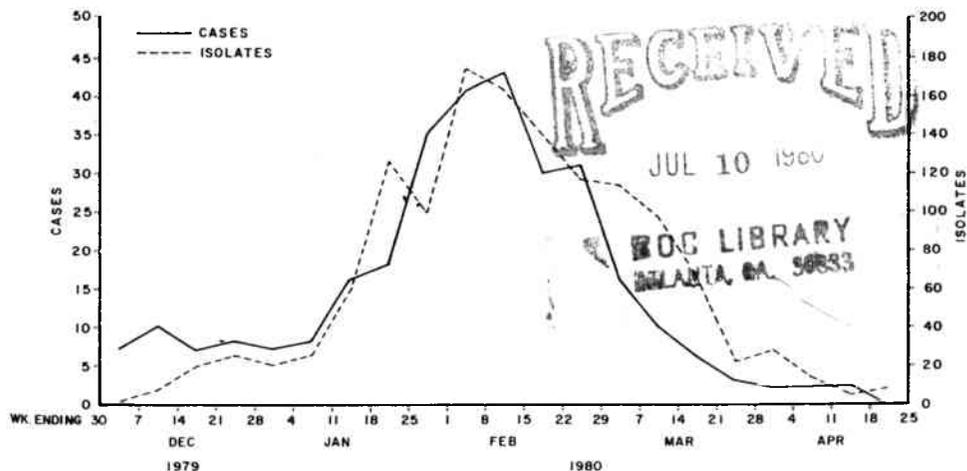
- 321 **Epidemiologic Notes and Reports**
Follow-up on Reye Syndrome — United States
- 323 Follow-up on Mount St. Helens
- 329 Imported Poliomyelitis — Oregon
- International Notes**
- 324 Cholera — Spain
- Current Trends**
- 330 Urban Rat Control — United States

Epidemiologic Notes and Reports

Follow-up on Reye Syndrome — United States

For the period December 1, 1979 through April 30, 1980, CDC received written reports of 304 patients with Reye syndrome that met the standard CDC case definition. The 304 cases were reported from 37 states and the District of Columbia. They were divided equally between males and females. Among 284 cases of known race, 94% were in whites, 3% in blacks, 3% in Hispanics, and 1% were in Asians or Pacific Islanders. Of the patients for whom symptoms were reported, 75% (204/273) had respiratory symptoms as part of their antecedent illness, 15% had diarrhea, and 15% had a varicella exanthem. Of 282 patients for whom the ages were reported, 71% (199) were between the ages of 5 and 14 years; 22% (62) were less than 4 years and 7% (21) were 15 years or older. The number of reported cases peaked in early to mid-February, approximately the same time as the peak in reports of isolations of influenza B viruses made by World Health Organization collaborating laboratories in the United States (Figure 1). There were 66 deaths among 287 cases in which the outcome was reported, for a case-fatality rate of 23%.

FIGURE 1. Reported Reye syndrome cases, by week of onset of prodrome, and influenza B isolates, by week of report, United States, November 30, 1979-April 25, 1980



Reye Syndrome — Continued

These current 1979-1980 surveillance data reveal a third nationwide outbreak of Reye syndrome epidemiologically associated with influenza B. Nationwide outbreaks of Reye syndrome have been reported previously in association with influenza B during the 1973-74 and 1976-77 influenza seasons, and with influenza A (H1N1) in the 1978-79 season (1-3).

In addition to certain viruses, several reports have suggested that other factors, such as medications or toxins, may contribute to the pathogenesis of this disease. Among toxins that have been implicated in some cases of Reye syndrome are isopropyl alcohol, pteridines, warfarin, and aflatoxins (4). Aspirin is one medication that has been mentioned frequently as a possible contributing factor in the pathogenesis of Reye syndrome, although it has been reported that aspirin toxicity and Reye syndrome may be differentiated on the basis of serum amino acid patterns (4-6). A recently reported study (7) conducted last year in Arizona of a cluster of 7 cases of Reye syndrome and 16 ill classmate controls demonstrated that the patients with Reye syndrome used salicylates during their prodromal illness more frequently (7/7) than their controls (8/16), ($p < .05$, 1 Tail Fisher Exact Test). All 7 patients with Reye syndrome had serologic evidence of recent influenza A (H1N1) infection; there were no serologic studies on the ill controls. Reported rates of salicylate use in Reye syndrome patients have ranged from 53% to 100%. However, with the exception of this study, no controlled studies of salicylate use have been previously reported. Further investigations are needed to more clearly define the possible role of salicylate use and toxins in the pathogenesis of Reye syndrome.

Reported by State and Territorial Epidemiologists, K Starko, MD, Acting State Epidemiologist, Arizona Dept of Health Services; and Enteric and Neurotropic Viral Diseases Br, Viral Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: CDC continues to receive case-report forms on Reye syndrome cases with onset from December 1979 through April 1980. By early April, state health departments had informed CDC by telephone of 429 suspected cases, including the 304 confirmed ones reported above; it is estimated that approximately 85% to 90% of these will meet the CDC case definition. This definition requires that a patient have an acute non-inflammatory encephalopathy with 1) microvesicular fatty metaphorphosis of the liver confirmed by biopsy or autopsy, or 2) a serum glutamic oxaloacetic transaminase (SGOT), a serum glutamic pyruvic transaminase (SGPT), or serum ammonia (NH_3) greater than 3 times normal. If cerebral spinal fluid is obtained, it must have ≤ 8 leukocytes/ mm^3 . In addition, there should be no other more reasonable explanation for the neurologic or hepatic abnormalities.

References

1. Corey L, Rubin RJ, Hattwick MAW, Noble G, Cassidy E. A nationwide outbreak of Reye's syndrome. its epidemiologic relationship to influenza B. *Am J Med* 1976;61:615-25.
2. *MMWR* 1978;27:15.
3. *MMWR* 1979;28:97-8.
4. Chaves-Carballo E. Epidemiology of Reye syndrome. In: Schoenberg BS, eds. *Advances in neurology. Neurological epidemiology: principles and clinical applications*. New York: Raven Press, 1978; 231-48.
5. Linnemann CC, Shea L, Partin JC, Schubert WK, Schiff GM. Reye's syndrome: epidemiologic and viral studies, 1963-1974. *Am J Epidemiol* 1975;101:517-26.
6. DeVico DC. Reye syndrome: a metabolic response to an acute mitochondrial insult? *Neurology* 1978;28:105-8.
7. Starko KM, Ray CG, Dominguez LB, Stromberg W, Woodall D. Reye's syndrome and salicylate use. *Pediatrics*, in press.

Follow-up on Mount St. Helens

The Mount St. Helens Technical Information Network, established through the Federal Coordinating Office of the Federal Emergency Management Agency (FEMA), has, to date, issued 33 Technical Information Bulletins (Table 1). The health bulletins in this series have been based primarily on the Mount St. Helens Volcano Health Reports, which are issued twice a week by CDC's Chronic Diseases Division. Technical bulletins on other aspects of the volcanic eruptions—geology, agriculture, economics, ecology, and environment, among others—are prepared with the assistance of other agencies.

One of the bulletins, #30, details the management approaches to controlling dust exposure that are recommended by the National Institute for Occupational Safety and Health

TABLE 1. Technical Information Bulletins on the Mount St. Helens volcanic eruptions

Number and title	Issue date (1980)
1. The Nature of Mount St. Helens Ash	May 27
2. Driving and Vehicle Maintenance in Heavy Ash Areas	May 30
3. Precautions in Handling Volcanic Ash	May 27
4. Current Volcanic Hazards at Mount St. Helens, Washington	May 29
5. Volcanic Ash Could Reduce Insect Populations . . . Temporarily	May 30
6. Advice for Farmers from Washington State University — Tractors and Water Pumps	June 1
7. Ash Particles and Home Clean-up Problems — Advice from the University of Idaho	May 30
8. Physical and Chemical Characteristics of the Mount St. Helens Deposits of May 18, 1980	June 2
9. Volcanic Ash Advice to Berry Growers	June 2
10. Center for Disease Control (CDC) Community Based Health Surveillance Program (Update)	June 3
11. Poultry — Bees — Livestock	June 5
12. Foodstuffs and Volcanic Ashfall	June 5
13. Research into the Free Crystalline Silica Content of Mount St. Helens Ash	June 6
14. Protecting Children from Volcanic Ash — Related Health Hazards	June 7
15. Volcanic Ash and Your Water Supply	June 7
16. Health and Medical Update	June 8
17. Insurance Concerns	June 9
18. Health and Medical Update	June 10
19. Controlling Blowing Dust from Volcanic Ash	June 16
20. Health and Medical Update	June 16
21. Aviation Considerations	June 20
22. Electric/Electronic Protection — Commercial and Major Systems	June 20
23. Farm Equipment "Ash" Maintenance	June 21
24. Vehicle Maintenance Guidelines	June 23
25. Flood Hazard Reduction in the Vicinity of Mount St. Helens	June 25
26. Volcanic Ash Effects on Municipal Water Supply and Sewage Treatment Plants	June 26
27. Air Quality Monitoring Network for Volcanic Ash	June 26
28. Volcanic Hazard Analysis	June 27
29. Wildlife and Plant Community Impacts	June 27
30. Management Approaches to Dust Exposure Control	June 28
31. Economic Factors	June 28
32. Health Surveys and Analysis — Center for Disease Control (CDC) Surveillance Program (Update)	June 28
33. Mount St. Helens Technical Information Network Closeout	July 1

Mount St. Helens – Continued

(NIOSH). This bulletin includes recommended chemical dust suppressants, methods of cleaning, administrative controls, equipment maintenance, emergency controls, and personal protective equipment, including the types of respirators that should be used for work in areas with low, medium, and high concentrations of volcanic dust.

Copies of these bulletins may be requested directly from FEMA, Mount St. Helens Technical Information Network, 1220 Main St., Vancouver, Washington 98660.

Reported by FEMA; NIOSH, and the Chronic Diseases Div, Bur of Epidemiology, CDC.

*International Notes***Cholera – Spain**

From July 16 to November 7, 1979, 267 cases of cholera were reported in 8 Spanish provinces—Melilla, Málaga, Barcelona, Granada, Córdoba, Sevilla, Ceuta, and Navarra. The first case was observed in Melilla on July 16.

In Málaga, there were 141 cases between August 6 and October 24. Eighty-three percent of the patients lived in or near the city. There were only a few cases in August, but many in September. The overall incidence among women was higher than among men,

(Continued on page 329)

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

(Cumulative totals include revised and delayed reports through previous weeks.)

DISEASE	27th WEEK ENDING		MEDIAN 1975-1979	CUMULATIVE, FIRST 27 WEEKS		
	July 5, 1980	July 7, 1979		July 5, 1980	July 7, 1979	MEDIAN 1975-1979
Aseptic meningitis	87	125	89	1,788	1,674	1,271
Brucellosis	4	3	3	87	62	101
Chickenpox	1,719	1,492	1,442	149,453	166,253	145,559
Diphtheria	—	1	—	2	5	53
Encephalitis: Primary (arthropod borne & unspec.)	9	9	14	304	272	340
Post-infectious	2	6	6	97	134	134
Hepatitis, Viral: Type B	295	258	258	8,634	7,248	7,029
Type A	418	460	483	13,585	15,041	16,202
Type unspecified	185	186	163	6,024	5,159	4,437
Malaria	31	25	18	917	304	248
Measles (rubeola)	262	233	451	11,852	10,807	21,683
Meningococcal infections: Total	25	33	26	1,584	1,638	1,063
Civilian	25	33	26	1,578	1,621	1,057
Military	—	—	—	6	17	17
Mumps	49	128	223	6,545	10,113	14,742
Pertussis	39	35	24	587	659	659
Rubella (German measles)	56	226	192	2,957	9,983	14,081
Tetanus	2	1	1	31	29	31
Tuberculosis	460	434	539	14,032	14,288	15,072
Tularemia	2	3	3	66	88	65
Typhoid fever	10	11	10	186	232	183
Typhus fever, tick-borne (Rky. Mt. spotted)	27	50	47	405	383	383
Venereal diseases:						
Gonorrhoea: Civilian	17,598	18,105	18,643	489,358	492,891	489,144
Military	706	694	694	13,827	14,187	14,187
Syphilis, primary & secondary: Civilian	376	317	352	13,316	12,309	12,309
Military	3	8	6	161	151	159
Rabies in animals	99	89	58	3,398	2,477	1,542

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1980		CUM. 1980
Anthrax	—	Polioomyelitis: Total	7
Botulism (Calif. 2)	25	Paralytic	5
Cholera	8	Psittacosis (Ups. N.Y. 1, Wis. 1)	40
Congenital rubella syndrome	38	Rabies in man	—
Leprosy (Wis. 1, Calif. 6)	97	Trichinosis (La. 1)	65
Leptospirosis (N.C. 1, Ark. 1)	30	Typhus fever, flea-borne (endemic, murine) (Tex. 3)	32
Plague (N. Mex. 1, Calif. 1)	6		

All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending July 5, 1980, and July 7, 1979 (27th week)

REPORTING AREA	ASEPTIC MENINGITIS			CHICKEN-POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
	1980	1980	1980		1980	CUM. 1980	Primary		Post-infectious	B	A	Unspecified	1980	CUM. 1980
							1980	1979						
UNITED STATES	87	4	1,719	-	2	9	9	2	295	418	185	31	917	
NEW ENGLAND	5	-	275	-	-	-	2	-	5	8	4	-	61	
Maine	-	-	7	-	-	-	-	-	1	1	-	-	12	
N.H.	-	-	27	-	-	-	-	-	-	-	-	-	6	
Vt.	-	-	14	-	-	-	-	-	-	-	-	-	-	
Mass.	-	-	60	-	-	-	-	-	2	2	4	-	28	
R.I.	5	-	16	-	-	-	-	-	1	1	-	-	6	
Conn.	-	-	151	-	-	-	2	-	1	4	-	-	9	
MID. ATLANTIC	12	-	234	-	1	2	-	-	48	43	9	10	125	
Upstate N.Y.	3	-	83	-	-	1	-	-	8	18	-	-	20	
N.Y. City	-	-	143	-	1	-	-	-	3	1	2	-	31	
N.J.	9	-	NN	-	-	-	-	-	18	16	6	2	33	
Pa.	-	-	8	-	-	1	-	-	19	8	1	8	41	
E.N. CENTRAL	2	-	586	-	1	-	5	-	34	52	15	-	40	
Ohio	-	-	13	-	-	-	3	-	7	7	4	-	8	
Ind.	-	-	61	-	-	-	-	-	2	3	5	-	3	
Ill.	-	-	45	-	-	-	1	-	14	21	2	-	9	
Mich.	2	-	149	-	1	-	-	-	10	17	4	-	14	
Wis.	-	-	338	-	-	-	1	-	1	4	-	-	6	
W.N. CENTRAL	3	-	230	-	-	-	-	1	7	11	3	-	33	
Minn.	-	-	-	-	-	-	-	-	1	4	1	-	13	
Iowa	1	-	18	-	-	-	-	-	1	2	-	-	4	
Mo.	1	-	3	-	-	-	-	-	5	1	2	-	8	
N. Dak.	-	-	3	-	-	-	-	-	-	-	-	-	2	
S. Dak.	-	-	2	-	-	-	-	-	-	1	-	-	2	
Nebr.	-	-	28	-	-	-	-	-	-	-	-	-	4	
Kans.	1	-	176	-	-	-	-	1	-	3	-	-	2	
S. ATLANTIC	14	1	140	-	-	1	-	-	44	43	17	2	97	
Del.	-	-	4	-	-	-	-	-	-	-	-	-	-	
Md.	-	-	50	-	-	-	-	-	13	5	7	1	20	
D.C.	-	-	-	-	-	-	-	-	1	-	1	-	1	
Va.	-	-	8	-	-	1	-	-	3	4	2	-	33	
W. Va.	1	-	76	-	-	-	-	-	1	2	-	-	3	
N.C.	7	-	NN	-	-	-	-	-	2	7	3	-	5	
S.C.	3	-	2	-	-	-	-	-	3	-	1	1	5	
Ga.	-	1	-	-	-	-	-	-	13	10	-	-	13	
Fla.	3	-	NA	-	-	-	-	-	8	15	3	-	17	
E.S. CENTRAL	5	1	33	-	-	-	-	-	13	22	5	-	9	
Ky.	-	-	11	-	-	-	-	-	1	4	-	-	2	
Tenn.	2	-	NN	-	-	-	-	-	8	12	1	-	-	
Ala.	3	-	7	-	-	-	-	-	2	2	4	-	6	
Miss.	-	1	15	-	-	-	-	-	2	4	-	-	1	
W.S. CENTRAL	15	1	104	-	-	1	-	-	35	65	60	1	92	
Ark.	-	-	4	-	-	-	-	-	-	5	1	-	6	
La.	5	-	NN	-	-	-	-	-	10	11	9	-	37	
Okla.	2	-	-	-	-	-	-	-	5	8	4	-	9	
Tex.	8	1	100	-	-	1	-	-	20	41	46	1	40	
MOUNTAIN	6	-	22	-	-	-	-	-	7	20	4	-	36	
Mont.	-	-	-	-	-	-	-	-	-	-	-	-	-	
Idaho	1	-	-	-	-	-	-	-	-	-	-	-	-	
Wyo.	-	-	-	-	-	-	-	-	2	-	-	-	2	
Colo.	4	-	22	-	-	-	-	-	3	14	3	-	19	
N. Mex.	1	-	-	-	-	-	-	-	-	-	-	-	2	
Ariz.	NA	NA	NN	NA	-	NA	-	-	NA	NA	NA	NA	10	
Utah	-	-	-	-	-	-	-	-	2	6	1	-	-	
Nev.	-	-	-	-	-	-	-	-	-	-	-	-	3	
PACIFIC	25	1	95	-	-	5	2	1	102	154	68	18	424	
Wash.	-	-	78	-	-	-	-	-	-	4	2	-	32	
Oreg.	-	-	-	-	-	-	-	-	7	4	2	1	25	
Calif.	22	1	-	-	-	4	2	1	91	143	63	17	352	
Alaska	-	-	11	-	-	-	-	-	-	1	-	-	4	
Hawaii	3	-	6	-	-	1	-	-	4	2	1	-	11	
Guam	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	2	
P.R.	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	1	
V.I.	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-	
Pac. Trust Terr.	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-	

NN: Not notifiable.

NA: Not available.

All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending July 5, 1980, and July 7, 1979 (27th week)

REPORTING AREA	MEASLES (RUBELLA)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1980	CUM. 1980	CUM. 1979	1980	CUM. 1980	CUM. 1979	1980	CUM. 1980	1980	1980	CUM. 1980	CUM. 1980
UNITED STATES	262	11,852	10,807	25	1,584	1,636	49	6,545	39	56	2,957	31
NEW ENGLAND	1	653	278	-	92	81	2	535	-	1	196	-
Maine	-	33	15	-	3	4	1	282	-	-	68	-
N.H.	-	318	29	-	6	8	-	19	-	-	30	-
Vt.	-	226	116	-	13	5	1	7	-	-	3	-
Mass.	1	50	13	-	31	27	-	117	-	1	73	-
R.I.	-	2	102	-	7	4	-	20	-	-	9	-
Conn.	-	24	3	-	32	33	-	90	-	-	13	-
MID. ATLANTIC	73	3,542	1,266	5	287	238	5	733	6	4	457	3
Upstate N.Y.	24	641	553	3	94	86	2	88	2	2	164	1
N.Y. City	37	1,083	623	-	75	62	2	69	-	2	83	1
N.J.	NA	777	53	1	58	58	1	91	-	-	65	-
Pa.	12	1,041	37	1	60	32	-	485	4	-	145	1
E.N. CENTRAL	90	2,075	2,825	2	176	165	11	2,549	2	8	727	1
Ohio	29	279	226	-	64	64	3	1,091	2	-	4	1
Ind.	-	86	167	-	31	35	-	99	-	2	309	-
Ill.	3	301	1,280	-	27	4	1	326	-	-	155	-
Mich.	3	228	729	2	42	45	1	763	-	-	120	-
Wis.	55	1,181	423	-	12	17	6	270	-	6	139	-
W.N. CENTRAL	11	1,268	1,447	2	62	54	5	239	1	2	209	3
Minn.	11	1,050	955	-	20	10	-	21	-	-	51	2
Iowa	-	-	15	1	8	7	1	37	-	-	5	-
Mo.	-	63	405	-	22	28	-	69	1	-	41	-
N. Dak.	-	-	14	-	1	1	-	4	-	-	5	-
S. Dak.	-	-	1	-	4	3	-	1	-	-	-	-
Nebr.	-	81	-	-	-	-	-	9	-	-	-	-
Kans.	-	74	57	1	7	5	4	98	-	2	107	1
S. ATLANTIC	46	1,811	1,612	9	375	406	8	835	8	5	291	6
Del.	-	3	1	-	2	5	-	37	-	-	-	-
Md.	-	70	7	1	36	35	4	282	-	4	70	-
D.C.	-	-	-	-	1	-	-	3	-	-	-	-
Va.	3	298	240	2	34	58	-	47	-	-	48	2
W. Va.	-	15	50	-	13	8	1	68	-	-	21	1
N.C.	7	122	107	1	74	56	-	81	2	-	42	-
S.C.	15	154	143	1	49	48	-	198	-	-	49	2
Ga.	14	798	346	3	68	61	-	1	5	-	-	-
Fla.	7	351	718	1	98	135	3	118	1	1	61	1
E.S. CENTRAL	19	333	167	3	150	119	4	813	7	1	75	3
Ky.	-	51	23	2	49	23	-	720	3	-	35	1
Tenn.	19	176	67	-	42	36	1	24	4	1	35	1
Ala.	-	22	77	1	38	28	1	14	-	-	4	1
Miss.	-	84	20	-	21	32	2	55	-	-	1	-
W.S. CENTRAL	8	890	866	2	178	266	2	227	3	2	102	7
Ark.	1	12	7	-	15	23	-	20	-	-	3	1
La.	-	13	243	-	66	101	1	64	-	-	9	1
Okla.	7	736	22	-	16	23	-	-	-	1	4	-
Tex.	-	129	594	2	81	119	1	143	3	1	86	5
MOUNTAIN	2	327	285	-	48	68	1	162	5	-	108	-
Mont.	-	1	51	-	2	6	-	47	-	-	30	-
Idaho	-	-	18	-	4	5	-	15	-	-	17	-
Wyo.	-	-	36	-	2	1	-	-	-	-	-	-
Colo.	2	19	47	-	12	4	1	41	1	-	5	-
N. Mex.	-	9	38	-	7	4	-	-	3	-	5	-
Ariz.	NA	245	69	-	7	31	NA	24	NA	NA	24	-
Utah	-	46	15	-	2	8	-	26	-	-	23	-
Nev.	-	7	11	-	12	9	-	9	1	-	4	-
PACIFIC	12	953	2,061	2	216	241	11	452	7	33	792	8
Wash.	2	168	1,109	-	40	40	1	116	1	-	67	-
Oreg.	-	1	48	-	37	16	-	51	-	1	48	-
Calif.	10	773	825	1	135	172	10	265	6	29	662	8
Alaska	-	5	17	1	3	5	-	11	-	1	10	-
Hawaii	-	6	62	-	1	8	-	9	-	2	5	-
Guam	NA	3	3	-	1	1	NA	7	NA	NA	-	-
P.R.	NA	84	293	-	7	3	NA	111	NA	NA	11	7
V.I.	NA	6	4	-	1	3	NA	2	NA	NA	-	-
Pac. Trust Terr.	NA	6	6	-	-	1	NA	13	NA	NA	1	-

NA: Not available.

All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending
July 5, 1980, and July 7, 1979 (27th week)

REPORTING AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSE)		VENEREAL DISEASES (Civilian)						RABIES (in Animals)
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1980	CUM. 1980	CUM. 1980	1980	CUM. 1980	1980	CUM. 1980	1980	CUM. 1980	CUM. 1979	1980	CUM. 1980	CUM. 1979	CUM. 1980
UNITED STATES	460	14,032	66	10	186	27	405	17,598	489,358	492,891	376	13,316	12,309	3,398
NEW ENGLAND	12	388	1	-	4	2	10	324	12,362	12,539	6	339	235	29
Maine	-	29	-	-	-	-	-	7	718	872	-	4	5	16
N.H.	-	6	-	-	-	-	-	3	404	453	-	1	13	4
Vt.	-	11	-	-	-	-	-	7	290	295	-	3	1	-
Mass.	9	212	-	-	2	1	6	156	5,107	5,042	3	215	138	3
R.I.	1	42	-	-	1	1	2	26	753	1,012	1	16	8	-
Conn.	2	88	1	-	1	-	2	105	5,090	4,865	2	100	70	6
MID. ATLANTIC	78	2,311	1	4	47	-	21	1,712	52,753	52,818	57	1,927	1,883	21
Upstate N.Y.	-	423	-	1	7	-	3	372	9,916	8,452	4	159	136	10
N.Y. City	19	835	1	1	19	-	2	586	20,379	20,583	40	1,273	1,285	-
N.J.	33	499	-	-	9	-	7	173	9,461	10,320	3	238	253	5
Pa.	24	554	-	2	12	-	9	581	12,997	13,463	10	257	209	6
E.N. CENTRAL	45	2,007	1	3	15	1	8	2,981	75,559	76,661	38	1,263	1,660	519
Ohio	10	332	-	-	4	-	6	1,005	20,376	20,920	5	204	303	25
Ind.	-	210	-	-	-	-	-	464	7,348	7,283	3	98	119	54
Ill.	6	728	-	3	6	1	2	942	23,716	23,531	1	698	978	308
Mich.	27	622	1	-	4	-	-	570	17,023	17,961	29	212	210	3
Wis.	2	115	-	-	1	-	-	NA	7,096	6,966	NA	51	50	129
W.N. CENTRAL	33	522	10	1	8	3	13	784	22,234	23,617	3	159	165	1,077
Minn.	7	96	1	-	1	-	-	189	3,709	3,975	-	56	47	99
Iowa	8	46	1	-	1	-	-	79	2,437	2,816	-	8	23	219
Mo.	13	238	7	1	4	-	5	230	9,610	10,205	2	76	67	268
N. Dak.	1	25	-	-	-	-	-	8	323	410	1	3	2	128
S. Dak.	1	29	-	-	1	-	-	28	695	806	-	2	1	212
Nebr.	3	24	1	-	-	-	-	112	1,831	1,592	-	7	2	51
Kans.	-	64	-	-	1	3	8	138	3,629	3,813	-	7	23	100
S. ATLANTIC	104	3,129	9	1	23	14	267	5,092	121,759	118,495	72	3,148	2,979	228
Del.	2	46	-	-	1	-	1	80	1,688	1,958	-	8	17	1
Md.	20	405	2	-	2	1	26	864	12,918	14,548	6	218	204	8
D.C.	3	182	-	-	3	-	-	284	8,484	7,658	17	226	231	-
Va.	12	357	-	1	4	1	23	150	10,395	11,164	4	286	268	6
W. Va.	5	117	-	-	1	1	2	79	1,510	1,662	-	12	39	10
N.C.	16	541	3	-	1	7	119	745	17,813	17,233	1	226	249	9
S.C.	15	286	-	-	3	4	75	231	11,573	11,140	6	175	141	35
Ga.	-	388	4	-	-	-	18	890	22,844	23,080	20	913	806	115
Fla.	31	807	-	-	8	-	3	1,769	34,534	30,052	18	1,084	1,024	44
E.S. CENTRAL	38	1,296	6	-	6	2	32	1,096	39,811	42,420	29	1,074	785	189
Ky.	12	290	-	-	2	-	2	218	5,936	5,561	-	75	82	82
Tenn.	14	439	6	-	-	2	22	579	14,265	14,924	14	437	339	85
Ala.	8	351	-	-	1	-	6	104	11,537	12,796	8	225	156	22
Miss.	4	216	-	-	3	-	2	195	8,073	9,139	7	337	208	-
W.S. CENTRAL	61	1,487	26	1	22	2	43	2,337	63,687	64,408	91	2,582	2,202	963
Ark.	9	141	18	-	-	-	6	192	4,772	4,915	3	83	74	119
La.	2	262	-	-	-	-	1	378	11,275	11,339	-	604	499	7
Okla.	7	164	5	-	1	2	23	146	6,237	5,932	-	52	41	160
Tex.	43	920	3	1	21	-	13	1,621	41,403	42,222	88	1,843	1,588	657
MOUNTAIN	7	363	10	-	11	2	9	492	18,374	19,288	5	307	237	83
Mont.	-	14	2	-	1	-	3	15	679	960	-	1	6	10
Idaho	-	16	1	-	1	-	1	12	869	804	-	17	16	-
Wyo.	-	15	3	-	-	-	2	18	550	481	1	8	5	5
Colo.	-	40	3	-	2	-	-	203	5,065	5,092	2	84	51	-
N. Mex.	4	79	-	-	2	2	2	85	2,362	2,500	-	55	47	24
Ariz.	NA	148	1	NA	3	NA	-	NA	4,614	5,344	NA	93	76	44
Utah	2	31	-	-	2	-	1	39	878	1,011	2	9	3	-
Nev.	1	20	-	-	-	-	-	120	3,357	3,096	-	40	33	-
PACIFIC	82	2,529	2	-	50	1	2	2,780	82,819	82,645	75	2,517	2,163	309
Wash.	11	213	-	-	-	-	-	NA	6,397	7,119	NA	106	125	-
Oreg.	3	97	-	-	6	-	-	265	5,866	5,198	-	55	96	-
Calif.	68	2,143	2	-	44	1	2	400	66,836	66,170	72	2,252	1,875	265
Alaska	-	40	-	-	-	-	-	61	2,011	2,706	1	7	13	44
Hawaii	-	36	-	-	-	-	-	54	1,709	1,452	2	97	54	-
Guam	NA	22	-	NA	-	NA	-	NA	50	59	NA	-	-	-
P.R.	NA	100	-	NA	1	NA	-	NA	1,270	1,089	NA	259	246	25
V.I.	NA	-	-	NA	-	NA	-	NA	108	89	NA	10	6	-
Pac. Trust Terr.	NA	26	-	NA	-	NA	-	NA	214	256	NA	-	1	-

NA: Not available.

All delayed reports and corrections will be included in the following week's cumulative totals.

TABLE IV. Deaths in 121 U.S. cities,* week ending
July 5, 1980 (27th 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	611	395	141	30	27	35	S. ATLANTIC	969	566	257	69	46	31
Boston, Mass.	183	103	55	7	13	9	Atlanta, Ga.	119	70	35	11	1	5
Bridgport, Conn.	53	34	14	1	4	5	Baltimore, Md.	123	68	35	10	5	3
Cambridge, Mass.	21	17	1	2	-	4	Charlotte, N.C.	47	18	18	5	3	2
Fall River, Mass.	21	16	4	1	-	-	Jacksonville, Fla.	88	55	21	5	4	2
Hartford, Conn.	54	32	11	3	3	2	Miami, Fla.	61	40	12	4	1	1
Lowell, Mass.	17	14	1	2	-	-	Norfolk, Va.	72	40	24	3	4	4
Lynn, Mass.	17	13	4	-	-	-	Richmond, Va.	80	48	23	3	3	2
New Bedford, Mass.	21	17	3	1	-	1	Savannah, Ga.	37	20	12	5	-	2
New Haven, Conn.	41	24	13	3	1	1	St. Petersburg, Fla.	72	55	13	-	4	2
Providence, R.I.	64	38	14	7	4	1	Tampa, Fla.	57	38	6	5	5	5
Somerville, Mass.	5	2	2	1	-	1	Washington, D.C.	149	79	37	14	14	3
Springfield, Mass.	43	30	10	-	2	1	Wilmington, Del.	64	35	21	4	2	-
Waterbury, Conn.	22	18	2	-	-	3							
Worcester, Mass.	49	37	7	2	-	7							
MID. ATLANTIC	2,336	1,491	554	156	53	64	E.S. CENTRAL	536	304	146	45	26	24
Albany, N.Y.	50	35	10	1	1	-	Birmingham, Ala.	99	55	29	5	7	4
Allentown, Pa.	15	13	2	-	-	-	Chattanooga, Tenn.	41	26	9	5	-	4
Buffalo, N.Y.	95	64	21	5	1	3	Knoxville, Tenn.	30	22	7	-	-	-
Camden, N.J.	38	24	10	1	2	-	Louisville, Ky.	78	47	22	3	5	4
Elizabeth, N.J.	24	17	6	-	-	-	Memphis, Tenn.	110	55	34	13	3	2
Erie, Pa.†	33	22	8	2	1	1	Mobile, Ala.	60	34	14	8	2	4
Jersey City, N.J.††	43	27	11	3	1	1	Montgomery, Ala.	38	19	12	3	3	4
Newark, N.J.	41	20	18	1	1	2	Nashville, Tenn.	80	46	19	8	6	2
N.Y. City, N.Y.	1,373	882	300	111	24	31	W.S. CENTRAL	1,009	573	267	79	40	40
Paterson, N.J.	22	14	5	1	2	2	Austin, Tex.	42	32	5	2	-	2
Philadelphia, Pa.†	234	137	69	15	7	13	Baton Rouge, La.	21	13	6	1	-	2
Pittsburgh, Pa.†	53	28	19	2	3	1	Corpus Christi, Tex.	34	19	8	4	-	-
Reading, Pa.	32	26	3	3	-	-	Dallas, Tex.	187	101	53	14	9	-
Rochester, N.Y.	92	53	26	4	6	1	El Paso, Tex.	33	23	6	2	-	4
Schenectady, N.Y.	33	24	7	1	1	2	Fort Worth, Tex.	81	50	20	6	4	7
Scranton, Pa.†	18	9	7	1	1	-	Houston, Tex.	197	95	64	16	8	4
Syracuse, N.Y.	59	31	20	4	2	-	Little Rock, Ark.	52	27	13	5	4	3
Trenton, N.J.	36	24	8	1	-	1	New Orleans, La.	123	64	33	16	4	-
Utica, N.Y.	23	21	2	-	-	1	San Antonio, Tex.	125	78	32	6	6	11
Yonkers, N.Y.	22	20	2	-	-	5	Shreveport, La.	58	36	16	2	2	5
							Tulsa, Okla.	56	35	11	5	3	2
E.N. CENTRAL	2,004	1,204	512	134	63	50	MOUNTAIN	484	291	102	30	27	12
Akron, Ohio	63	35	19	4	3	-	Albuquerque, N. Mex. ††	49	28	11	4	2	2
Canton, Ohio	40	24	11	3	2	4	Colorado Springs, Colo.	30	19	6	2	3	3
Chicago, Ill.	551	326	140	43	14	13	Denver, Colo.	113	63	26	7	8	5
Cincinnati, Ohio	95	62	24	2	1	2	Las Vegas, Nev.	65	41	12	7	1	-
Cleveland, Ohio	143	64	53	11	8	3	Ogden, Utah	8	3	2	-	-	-
Columbus, Ohio	94	50	31	3	4	2	Phoenix, Ariz.	103	60	26	6	7	1
Dayton, Ohio	198	122	60	7	3	5	Pueblo, Colo.	19	14	2	-	-	1
Detroit, Mich.	44	27	10	4	2	-	Salt Lake City, Utah	31	18	5	2	4	-
Evansville, Ind.	41	32	6	1	-	2	Tucson, Ariz.	66	45	12	2	2	-
Fort Wayne, Ind.	22	11	6	2	1	-							
Gary, Ind.	66	45	10	3	3	3							
Grand Rapids, Mich.	157	92	46	12	1	1	PACIFIC	1,561	980	343	125	53	59
Indianapolis, Ind.	22	13	4	3	1	4	Berkeley, Calif.	11	6	2	3	-	-
Madison, Wis.	104	75	24	1	1	5	Fresno, Calif.	52	30	14	3	1	1
Milwaukee, Wis.	41	28	7	3	1	-	Glendale, Calif.	24	19	5	-	-	4
Rockford, Ill.	46	28	9	3	3	1	Honolulu, Hawaii	67	35	21	4	3	5
South Bend, Ind.	27	20	4	-	1	1	Long Beach, Calif.	89	55	22	4	5	1
Toledo, Ohio	75	46	15	11	2	-	Los Angeles, Calif.	478	297	96	50	12	19
Youngstown, Ohio	41	27	9	4	1	1	Oakland, Calif.	59	34	14	7	1	2
							Pasadena, Calif.	27	18	6	1	2	1
W.N. CENTRAL	655	415	148	39	23	18	Portland, Ore.	111	74	22	5	7	4
Des Moines, Iowa	51	29	12	-	4	2	Sacramento, Calif.	59	39	12	4	2	4
Duluth, Minn.	12	9	1	2	-	-	San Diego, Calif.	140	84	33	13	8	-
Kansas City, Kans.	47	30	10	2	1	3	San Francisco, Calif.	110	73	21	11	2	5
Kansas City, Mo.	118	71	33	4	5	4	San Jose, Calif.	136	83	39	7	5	3
Lincoln, Nebr.	33	24	7	2	-	-	Seattle, Wash.	122	86	17	8	3	4
Minneapolis, Minn.	64	46	11	1	4	-	Spokane, Wash.	50	32	12	3	-	4
Omaha, Nebr.	59	33	15	6	2	1	Tacoma, Wash.	26	15	7	2	2	2
St. Louis, Mo.	158	93	40	14	3	-							
St. Paul, Minn.	53	38	9	5	-	2							
Wichita, Kans.	60	42	10	3	4	6	TOTAL	10,165	6,219	2,470	707	358	333

*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.

††Data not available. Figures are estimates based on average percent of regional totals.

Cholera – Continued

mainly due to the large number of cases in females over 54 years old. The disease was not serious in most instances: mild and asymptomatic cases predominated, and the case-fatality ratio was low.

Because there were relatively few cases over a long period in Málaga, water as a vehicle of transmission was considered to play a minor role. In addition, in those parts of the city where a high incidence was observed, the chlorination of water was satisfactory. Only 2 small outbreaks were attributed to water with severe fecal contamination. Vegetables were also ruled out as a major vehicle, because those eaten in Málaga were imported from other provinces where cholera cases had not been reported.

Fish was considered to be the major vehicle of infection for several reasons: 1) many cases occurred among persons who had eaten fish, 2) the coastline at Málaga and the neighboring areas, which is used for fishing, is very polluted; there is a virtual absence of sewage-treatment plants in this area; 3) cases occurred in other parts of the province where fish from Málaga was sold; 4) samples examined at the public health laboratory revealed gross fecal contamination; 5) this fish is often eaten raw and uncleaned; 6) the lower socioeconomic groups were mainly affected, and these groups eat more fish in August and September because of its low price during those months.

Reported by Boletín Epidemiológico Semanal, No. 1398, 9-15, September 1979, as reported by the World Health Organization in the Weekly Epidemiological Record 1980;55:93-4.

Epidemiologic Notes and Reports

Imported Poliomyelitis – Oregon

On February 20, 1980, a 62-year-old woman from Oregon developed fever, myalgias, and weakness, especially in her back, thighs, shoulders, and hips. Two weeks earlier, while on a trip to Mexico, she had developed upper respiratory tract symptoms.

Laboratory evaluation showed a normal white blood cell (WBC) count, a cerebral spinal fluid with 10 WBC/mm³, a protein level of 154 mg/dl, and a negative bacterial culture. Serologic studies showed a 4-fold rise in neutralization antibodies to type 3 poliovirus, and a stool specimen was positive for type 3 poliovirus (1).

Preliminary evidence indicated that the virus was non-vaccine-like. The patient denied any history of vaccination for poliomyelitis or any contact with a vaccine recipient.

In June—more than 60 days after onset—the patient still had residual weakness of the lower motor neuron type. Further strain-characterization studies are pending.

Reported by P Goodall, MD, Portland, Oregon; JA Googins, MD, State Epidemiologist, Oregon Dept of Human Resources; Enteric Virology Br., Virology Div, Bur of Laboratories, Enteric and Neurotropic Viral Diseases Br, Viral Diseases Div, Field Services Div, Bur of Epidemiology, CDC.

Editorial Note: This case of paralytic poliomyelitis has 2 unusual features. First, the patient is one of the oldest cases of poliomyelitis on record. Only 7% of all reported paralytic poliomyelitis cases from 1969-1979 were 40 years of age or older. Second, non-vaccine-like type 3 poliovirus infection is very uncommon in the United States. Only 1 of 28 (3.6%) of all type 3 polioviruses isolated from 1969-1979 at CDC were classified as non-vaccine-like by the modified Wecker technique (2).

CDC recommends that all travelers to areas or countries where poliomyelitis is endemic or epidemic should have an up-to-date vaccination status for poliomyelitis, including a booster, if indicated (3).

*Poliomyelitis – Continued**References*

1. Oregon State Health Division. Poliomyelitis case in Oregon (poliovirus type III). Oregon Communicable Disease Summary 1980;29:19.
2. Nakano JH, Gelfand HM, Cole JT. Antigenic segregation of the type 3 poliovirus isolates related and unrelated to Sabin's vaccine strain with the use of modified Wecker and McBride techniques. Am J Epidemiol 1966;83:130-45.
3. MMWR 1979;28:518.

*Current Trends***Urban Rat Control – United States, January-March 1980**

During the second quarter of fiscal year 1980, 65 reporting urban rat control programs identified 981 environmentally improved blocks (EIBs) (Table 2). An additional 811 blocks achieved maintenance status, indicating that they had become essentially rat free. As of March 31, programs had provided services to a cumulative total of 53,908 blocks; 22,894 of these remained in project target areas, and 31,014 were sustained locally as EIBs. As a result of local project accomplishments, 6,500,000 people now live in areas that are environmentally improved and rat free.

EIBs became the priority of the Urban Rat Control Program in 1976. Since that time, projects have designated 5,400 to 8,800 EIBs annually. EIBs for this fiscal year total 1,874, a figure which is 55% less than the 4,127 reported during the first 2 quarters of fiscal year 1979. It is expected, however, that the EIB achievement for the year will be comparable to that of previous years.

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

TABLE 2. Status of target-area blocks in Urban Rat Control Programs, second quarter fiscal year 1980 (January 1-March 31, 1980)

Program community	Target-area blocks				Environmentally improved blocks*	
	Total	In attack phase	In maintenance phase		New this quarter	Cumulative
			<12 months	≥12 months		
REGION I	671	359	220	92	0	1,065
Hartford	249	105	79	65	0	277
Boston	422	254	141	27	0	0
Previously funded programs						788
REGION II	3,802	1,386	1,066	1,232	112	3,763
Camden	254	148	90	16	0	97
Jersey City	233	18	124	91	0	93
Newark	220	131	77	12	0	0
New York City	1,532	655	270	607	0	727
Newburgh	25	5	4	16	22	61
Rochester	232	68	101	63	55	340
Yonkers	91	14	19	58	0	58
Aquadilla, P.R.	140	75	44	21	35	125
Arecibo, P.R.	160	37	71	52	0	155
Mayaguez, P.R.	212	118	71	23	0	180
Ponce, P.R.	289	1	20	150	0	213
San Juan, P.R.	414	116	175	123	0	141
Previously funded programs						1,573

Urban Rat Control — Continued

TABLE 2. Status of target-area blocks in Urban Rat Control Programs, second quarter fiscal year 1980 (January 1-March 31, 1980) — Continued

Program community	Target-area blocks				Environmentally improved blocks*	
	Total	In attack phase	In maintenance phase		New this quarter	Cumulative
			<12 months	>12 months		
REGION III	3,998	1,348	1,718	820	174	6,299
War on Rats	909	445	210	254	0	968
Baltimore	414	62	122	118	0	262
Chester	120	37	36	47	0	55
Harrisburg	367	72	207	88	0	0
N.E. Pa. V.C. Assn.†	428	76	352	0	84	1,042
Philadelphia	1,214	422	648	144	18	1,366
Pittsburgh	333	149	48	136	54	1,198
Chesapeake	9	0	9	0	0	69
Norfolk	172	63	76	33	18	1,278
Portsmouth	32	22	10	0	0	61
Previously funded programs	.....	.....	.....	.....	.....	0
REGION IV	5,034	1,803	1,914	562	288	5,522
Mobile	506	202	195	109	0	233
Tuscaloosa	344	109	89	0	0	0
Ft. Lauderdale	161	7	154	0	173	716
Miami	686	350	276	60	51	814
Pensacola	573	169	150	0	15	15
Tampa	40	13	27	0	46	943
Atlanta‡	721	442	279	0	0	0
DeKalb Co.	740	163	402	175	0	0
Lexington	317	52	111	0	0	0
Louisville	521	192	151	178	3	411
Memphis	425	104	80	40	0	392
Previously funded programs	.....	.....	.....	.....	.....	1,998
REGION V	4,935	2,443	1,517	243	127	3,441
Chicago	399	352	47	0	0	0
Peoria	324	249	75	0	0	0
Gary	381	292	35	54	0	0
Indianapolis	309	32	277	0	0	108
Benton Harbor	190	55	87	0	0	0
Detroit	416	150	234	32	0	306
Highland Park	220	194	23	3	0	0
Saginaw	333	157	82	0	0	0
Washtenaw Co.-Ypsilanti	236	0	0	0	0	0
Wayne Co.-Ecorse	200	0	0	0	0	0
Akron	301	57	101	5	49	442
Barberton	119	73	42	4	0	58
Cincinnati	105	21	43	25	13	100
Cleveland	396	194	202	0	65	644
Columbus	449	195	156	98	0	116
Toledo	202	95	85	22	0	136
Youngstown	220	203	17	0	0	0
Milwaukee	135	124	11	0	0	0
Previously funded programs	.....	.....	.....	.....	.....	1,531

The Morbidity and Mortality Weekly Report, circulation 88,700, is published by the Center for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly telegrams 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.

Urban Rat Control - Continued

TABLE 2. Status of target-area blocks in Urban Rat Control Programs, second quarter fiscal year 1980 (January 1-March 31, 1980)

Program community	Target-area blocks				Environmentally improved blocks*	
	Total	In attack phase	In maintenance phase		New this quarter	Cumulative
			<12 months	≥12 months		
REGION VI	2,094	627	531	830	90	5,820
Little Rock	403	233	64	0	0	0
Pine Bluff	318	157	68	93	90	90
New Orleans	508	108	137	263	0	2,817
Houston	865	129	262	474	0	1,655
Previously funded programs						1,258
REGION VII	1,424	172	618	634	13	3,069
Kansas City, Kan.	288	2	117	169	0	953
Kansas City, Mo.	177	18	52	107	0	594
St. Louis	487	74	179	234	0	769
Omaha	472	78	270	124	13	357
Previously funded programs						396
REGION IX	936	301	559	76	177	1,205
Los Angeles	358	79	279	0	104	207
Oakland	279	142	114	23	8	188
San Bernardino	158	20	93	45	35	35
San Francisco	141	60	73	8	30	293
Previously funded programs						482
REGION X						830
Previously funded programs						830
TOTAL	22,894	8,439	8,143	4,489	981	31,014

*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.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE / CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333 OFFICIAL BUSINESS

Postage and Fees Paid
U.S. Department of HHS
HHS 396



Director, Center for Disease Control
William H. Foege, M.D.
Editor, Bureau of Epidemiology
Philip S. Brachman, M.D.

Editor
Michael B. G
Managing Editor
Anne D. Mat
Mathematical St.
Keewhan Ch

HCA5 MILLSMA0007657921SXXX
MRS MARY ALICE MILLS
DIRECTOR, LIBRARY
BLDG 1-4007