

M M M M R

MORBIDITY AND MORTALITY WEEKLY REPORT

	International Notes
145	Marburg Virus Disease — Kenya
155	Quarantine Measures
	Epidemiologic Notes and Reports
146	Imported <i>Plasmodium falciparum</i> Malaria in a U.S. Physician — California
147	Chagas' Disease — Michigan
	Current Trends
153	Urban Rat Control — United States, July-September 1979
155	Influenza — United States

RECEIVED

Marburg Virus Disease—Kenya APR 3 1980

On January 15, 1980, a 58-year-old man with an 8-day history of progressive fever, myalgia, and backache was transferred from a hospital in western Kenya to the Nairobi Hospital. On admission, he was hemorrhaging from the gastrointestinal tract and from needle puncture wounds. The patient died within 6 hours of admission, despite an attempt by a physician and a nurse to resuscitate him. The postmortem examination showed extensive liver necrosis.

The attending physician, a 29-year-old Ugandan male, became ill on January 24 with fever, malaise, myalgia, joint pains, headache, dry mouth, vomiting, and diarrhea. He also developed jaundice and right upper quadrant tenderness. No rash was seen. Laboratory findings included leukopenia (1,400 white blood cells/mm³ on day 7) with atypical monocytes, occult blood in the stool, and elevations of serum transaminases and alkaline phosphatase. A laparotomy performed on the 12th day of illness ruled out obstructive jaundice, but a liver biopsy showed microabscesses consistent with a bacterial septicemia. A *Salmonella* organism was isolated from his stool. Indirect fluorescent-antibody tests performed at CDC on paired sera, using an original Marburg isolate as antigen, showed a reciprocal antibody titer rise from 4 to 256. An organism morphologically similar on electron microscopy to Marburg virus was isolated from an acute serum specimen.

Formalinized liver and kidney specimens, taken at the autopsy of the first patient, were reviewed by the National Institute for Virology in Johannesburg, South Africa, and by CDC. These specimens showed histologic features characteristic of Marburg virus disease; also, Marburg-like particles were seen by electron microscopic examination of tissues from both organs. The physician, who is recovering, is believed to have had a mild form of Marburg virus disease complicated by bacterial septicemia.

Approximately 120 persons who had contact with these patients, their tissues, or laboratory specimens were placed under medical surveillance and divided into cohorts, according to the degree of contact and the date of their last exposure. Persons with close contact were placed in strict isolation and under active surveillance; casual contacts were confined to their own homes or to their quarters in the nurses' home. Several contacts became ill, but the diagnosis of Marburg virus disease either was unlikely or was ruled out on the basis of antibody testing.

One such contact, the nurse who assisted with the resuscitation of the index patient, became ill on January 26, 11 days after exposure. She developed fever, malaise, myalgia, sore throat, nausea, and vomiting. On the fifth day of illness, a transient erythematous

Marburg Virus Disease – Continued

rash, with subsequent desquamation, was observed on her shoulders and arms. Her menstrual period, which began during the illness, was markedly prolonged, although heavy bleeding did not occur. Laboratory findings included elevated transaminases, amylase, and bilirubin, and an early drop in white cell count with a relative lymphocytosis. Serum samples collected on days 14 and 26 were negative for Marburg virus antibody, when tested at CDC. The patient recovered after 8 days of illness.

Epidemiologic investigations are underway in western Kenya to identify the source of the index patient's infection.

Reported by the World Health Organization in the Weekly Epidemiological Record, 1980;55:59-60; A Bagshaw, MB, FRCP, Nairobi Hospital; B Johnson, PhD, Medical Research Center, Nairobi; D Smith, MBBS, Ministry of Health, Nairobi; JHS Gear, MD, G Lecatsas, PhD, OW Prozesky, MD, National Institute for Virology, Johannesburg, South Africa; Bur of Laboratories and Bur of Epidemiology, CDC.

Epidemiologic Notes and Reports

Imported *Plasmodium falciparum* Malaria in a U.S. Physician – California

A U.S. physician and his wife spent the month of December 1979 in Thailand working as volunteers in the refugee camps. During that time, they made at least 1 trip to the Kampuchean border. Although both knew that malaria was endemic in Southeast Asia, they chose not to take malaria chemoprophylaxis.

On January 1, 1980, the physician returned to California. Eight days later, he experienced the onset of cyclical fever to 104 F (40 C), accompanied by malaise and headache. He did not seek medical advice until January 14, when he presented to the emergency room at the University Medical Center in Loma Linda, California. Initial examination revealed somnolence, intermittent confusion, and marked jaundice. He was found to have hyperbilirubinemia (total bilirubin, 9.4 mg/dl) moderately elevated SGPT, SGOT, anemia (hematocrit, 24%; hemoglobin, 8.3 g), and thrombocytopenia (platelets, 18,000/mm³). The blood urea nitrogen was 101 mg/dl, and the creatinine was 6.8 mg/dl. Examination of blood smears revealed *P. falciparum* malaria.

The patient was immediately treated with oral chloroquine because quinine was not stocked in the pharmacy. Three hours later, oral quinine, pyrimethamine, and sulfadiazine therapy was begun, according to PHS recommendations (1). Review of thin blood smears obtained shortly after admission revealed a 30% parasitemia. Eighteen hours after admission, parasitemia peaked at 72%. Because parasitemias of this magnitude are often fatal, a 20-unit, whole-blood exchange transfusion was started and completed within 32 hours. Twenty-four hours after the transfusion was begun, parasitemia had decreased to 9%. A full course of chemotherapy (quinine sulfate 650 mg thrice daily for 3 days, sulfadiazine 500 mg 4 times daily for 5 days, and pyrimethamine 25 mg twice daily for 3 days) was given following the exchange transfusion. By January 16, parasitemia had further decreased to .04%, and on January 21, following completion of the therapy, the blood smears were negative.

Blood smears remained negative until February 2, when *P. falciparum* was again observed, with a parasitemia of 0.2%. The patient was then treated with pyrimethamine-sulfadoxine (Fansidar*) tablets, unavailable in this country but provided by his wife, who

*Inclusion of trade names is for identification only and does not imply endorsement by the Public Health Service, or the U.S. Department of Health, Education, and Welfare.

Malaria – Continued

had just returned from Thailand. A 6-week course of chemoprophylaxis was also prescribed for her.

Reported by S Kramer, MD, Loma Linda University Medical Center, Loma Linda; L Mahoney, MD, San Bernadino County Health Dept; DE Conwill, MD, California Dept of Health Services; Bur of Tropical Diseases, Parasitic Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: This case illustrates the necessity of malaria prophylaxis for travelers to malarious areas. Guidelines for malaria chemoprophylaxis have been previously published in the MMWR (2). *P. falciparum* malaria contracted in Southeast Asia should be assumed to be chloroquine resistant and treated with a combination of quinine, pyrimethamine, and sulfadiazine. Dosages and alternative drug regimens have been previously published (1). Exchange transfusion, which has proven to be life-saving in previously reported cases (3,4), was indicated considering the extremely high parasitemia in this patient. Although recrudescence of *P. falciparum* malaria following therapy with quinine, pyrimethamine, and sulfadiazine is rare, it can occur. Patients should be advised to seek immediate medical attention if fever develops within 1-2 months of initial chemotherapy.

References

1. MMWR 1979;28:388-90, 395.
2. MMWR 1978;27:81-90 (Suppl).
3. Nielsen RL, Kohler RB, Chin W, McCarty L, Luft FC. The use of exchange transfusions: a potentially useful adjunct in the treatment of fulminant falciparum malaria. *Am J Med Sci* 1979;277:325-9.
4. Kurathong S, Srichaikul T, Isarangkura P, Phanichphant S. Exchange transfusion in cerebral malaria complicated by disseminated intravascular coagulation. *Southeast Asian J Trop Med* 1978;10:389-92.

Chagas' Disease – Michigan

On November 13, 1979, a 28-year-old medical technician was admitted to Bronson Methodist Hospital in Kalamazoo, Michigan, with an 8-day history of fever and myalgias.

The patient had been doing research with the Tulahuen strain of *Trypanosoma cruzi* from Chile. Twelve days before admission, the patient had operated bare-handed on the peritoneal cavity of an infected mouse. Two days later he had developed erythema along the cuticle of his right index finger. At the time of the operation, the patient had not been aware of soreness or a break in the skin surrounding the nail. Eight days before admission, fever and myalgias developed. On admission, a physical examination revealed generalized lymphadenopathy and splenomegaly. An EKG was consistent with myocarditis, and blood smears confirmed infection with *T. cruzi*.

Treatment was begun with nifurtimox. The patient responded promptly to treatment; the temperature returned to normal, the parasitemia cleared within 2 days, and the lymphadenopathy and myocarditis resolved within 10 days. The patient tolerated a 14-week course of therapy without complication, and he is presently in good health.

Reported by JT Cerovski, MD, Bronson Methodist Hospital, Kalamazoo; Parasitic Diseases Div, Bur of Epidemiology, CDC.

Chagas' Disease — Continued

Editorial Note: This case illustrates the importance of wearing gloves, a mask, and eye protection when working with *T. cruzi* in the laboratory. Most laboratory-acquired infections with *T. cruzi* result from needle puncture wounds or parasite exposure to mucous membranes. Because *T. cruzi* is not known to be capable of penetrating intact skin, it is assumed that the parasite gained access to the patient's blood stream through a microscopic break in the skin at the nail margin (1-3).

References

1. Pike RM. Laboratory-associated infections: summary and analysis of 3,921 cases. *Health Lab Sci* 1976;13:105-14.
2. Marsden PD. South American trypanosomiasis. In: Woodruff AW, ed. *Medicine in the tropics*. London: Churchill Livingstone, 1974.
3. Andrade ZA, Andrade SG. Chagas' disease (American trypanosomiasis). In: Marcial-Rojas RA, ed. *Pathology of protozoal and helminthic diseases*. New York: Williams and Wilkins, 1971:69-85.

TABLE I. Summary — cases of specified notifiable diseases, United States
[Cumulative totals include revised and delayed reports through previous weeks.]

DISEASE	13th WEEK ENDING		MEDIAN 1975-1979	CUMULATIVE, FIRST 13 WEEKS		
	March 29, 1980	March 31, 1979*		March 29, 1980	March 31, 1979*	MEDIAN 1975-1979
Aseptic meningitis	71	57	41	795	648	461
Brucellosis	3	1	1	44	20	39
Chickenpox	6,947	7,225	5,918	68,815	82,020	74,183
Diphtheria	—	—	1	1	2	21
Encephalitis: Primary (arthropod-borne & unsp.)	9	10	13	152	118	155
Post-infectious	3	5	5	37	49	49
Hepatitis, Viral: Type B	346	300	279	3,953	3,383	3,574
Type A	519	537	647	6,603	7,396	8,342
Type unspecified	213	185	183	2,821	2,577	2,108
Malaria	46	8	6	336	98	76
Measles (rubeola)	539	501	817	3,222	4,002	6,889
Meningococcal infections: Total	78	66	44	836	893	586
Civilian	78	65	44	831	887	584
Military	—	1	—	5	6	6
Mumps	282	484	669	3,626	4,989	7,792
Pertussis	19	23	21	256	357	293
Rubella (German measles)	113	360	527	1,208	3,487	4,263
Tetanus	2	1	1	10	7	10
Tuberculosis	602	616	616	6,233	6,612	7,127
Tularemia	1	1	1	22	26	19
Typhoid fever	9	12	7	75	101	89
Typhus fever, tick-borne (Rky. Mt. spotted)	1	—	1	7	16	12
Veneral diseases:						
Gonorrhea: Civilian	18,344	17,825	17,308	236,921	236,792	231,732
Military	381	449	537	6,797	7,065	7,065
Syphilis, primary & secondary: Civilian	616	484	462	6,783	6,100	6,100
Military	7	12	6	98	81	81
Rabies in animals	142	123	62	1,228	845	604

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1980		CUM. 1980
Anthrax	—	Poliomyelitis: Total (Colo. 1)	2
Botulism †	9	Paralytic	1
Congenital rubella syndrome (Calif. 1)	23	Psittacosis (Ups. N.Y. 1, Calif. 1)	18
Leprosy (Colo. 1, Calif. 1, Hawaii 1)	17	Rabies in man	—
Leptospirosis (Hawaii 1)	13	Trichinosis †	10
Plague	—	Typhus fever, flea-borne (endemic, murine)	5

* Delayed reports received for calendar year 1979 are used to update last year's weekly and cumulative totals.

† Delayed reports: Botulism: Ariz. +1 (1980); Trichinosis: Maine +2 (1979), Ala. +1 (1979)

TABLE III. Cases of specified notifiable diseases, United States, weeks ending March 29, 1980, and March 31, 1979 (13th week)

REPORTING AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
	1980	1980			1980	1980	CUM. 1980	Primary		Post-infectious	B	A	Unspecified	1980
			1980	1979*				1980	1980	1980	1980	1980		
UNITED STATES	71	3	6,947	-	1	9	10	3	346	519	213	46	336	
NEW ENGLAND	3	-	566	-	-	2	2	-	16	9	12	-	23	
Maine †	-	-	80	-	-	-	-	-	-	-	-	-	3	
N.H. †	-	-	29	-	-	-	-	-	-	-	-	-	2	
Vt.	-	-	5	-	-	-	-	-	-	-	-	-	-	
Mass.	1	-	147	-	-	-	1	-	5	3	7	-	14	
R.I.	1	-	67	-	-	-	-	-	2	2	-	-	1	
Conn.	1	-	238	-	-	2	1	-	9	4	5	-	3	
MID. ATLANTIC	6	-	326	-	1	1	-	-	46	53	19	8	56	
Upstate N.Y.	-	-	159	-	-	-	-	-	6	12	6	2	7	
N.Y. City	3	-	157	†	1	-	-	-	12	15	2	1	23	
N.J.	3	-	NN	-	-	1	-	-	14	18	10	2	17	
Pa.	-	-	10	-	-	-	-	-	14	8	1	3	9	
E.N. CENTRAL	1	-	3,372	-	-	-	-	1	28	50	17	1	12	
Ohio †	-	-	226	-	-	-	-	-	7	16	12	-	3	
Ind. †	-	-	-	-	-	-	-	-	5	6	2	-	-	
Ill.	1	-	1,432	-	-	-	-	-	3	17	1	1	3	
Mich. †	-	-	1,054	-	-	-	-	1	9	8	2	-	3	
Wis. †	-	-	660	-	-	-	-	-	4	3	-	-	3	
W.N. CENTRAL	1	2	731	-	-	-	-	-	12	27	-	1	9	
Minn.	-	1	1	-	-	-	-	-	1	9	-	-	5	
Iowa	-	1	290	-	-	-	-	-	3	6	-	-	2	
Mo.	-	-	127	-	-	-	-	-	3	5	-	-	-	
N. Dak.	-	-	39	-	-	-	-	-	-	-	-	-	-	
S. Dak.	-	-	16	-	-	-	-	-	-	1	-	-	-	
Nebr.	-	-	38	-	-	-	-	-	5	2	-	-	-	
Kans.	1	-	220	-	-	-	-	-	-	4	-	1	2	
S. ATLANTIC	12	-	970	-	-	1	-	2	80	85	36	3	33	
Del.	-	-	13	-	-	-	-	-	2	1	2	-	-	
Md.	-	-	82	-	-	-	-	-	13	9	3	-	5	
D.C.	1	-	3	-	-	-	-	-	2	1	-	-	1	
Va.	-	-	25	-	-	-	-	1	14	4	10	1	12	
W. Va. †	-	-	144	-	-	-	-	-	2	6	-	1	2	
N.C.	2	-	NN	-	-	-	-	-	10	4	3	-	3	
S.C.	1	-	41	-	-	1	-	-	8	6	2	-	2	
Ga.	-	-	201	-	-	-	-	-	11	20	-	-	2	
Fla.	8	-	461	-	-	-	-	1	20	36	16	1	6	
E.S. CENTRAL	5	-	102	-	-	1	1	-	10	27	-	-	4	
Ky.	1	-	91	-	-	1	-	-	1	8	-	-	2	
Tenn.	4	-	NN	-	-	-	-	-	8	9	-	-	-	
Ala.	-	-	5	-	-	-	1	-	-	8	-	-	2	
Miss.	-	-	6	-	-	-	-	-	1	2	-	-	-	
W.S. CENTRAL	4	1	542	-	-	-	2	-	27	54	31	2	31	
Ark. †	1	-	-	-	-	-	-	-	-	6	2	-	1	
La.	-	-	NN	-	-	-	1	-	2	6	2	-	14	
Okla.	-	-	-	-	-	-	-	-	3	11	5	1	7	
Tex.	3	1	542	-	-	-	1	-	22	31	22	1	9	
MOUNTAIN	-	-	126	-	-	-	-	-	20	49	29	4	16	
Mont. †	-	-	27	-	-	-	-	-	-	4	1	-	-	
Idaho	-	-	2	-	-	-	-	-	-	-	-	-	-	
Wyo.	-	-	-	-	-	-	-	-	1	-	-	-	1	
Colo. †	-	-	96	-	-	-	-	-	15	19	4	4	8	
N. Mex. †	-	-	-	-	-	-	-	-	-	-	-	-	1	
Ariz.	-	-	NN	-	-	-	-	-	2	13	19	-	5	
Utah †	-	-	1	-	-	-	-	-	1	4	3	-	-	
Nev.	-	-	-	-	-	-	-	-	1	9	2	-	1	
PACIFIC	39	-	212	-	-	4	5	-	107	165	69	27	152	
Wash.	1	-	200	-	-	-	1	-	8	9	3	-	12	
Oreg.	-	-	-	-	-	1	1	-	6	6	1	2	11	
Calif. †	34	-	-	-	-	3	3	-	91	150	64	25	128	
Alaska	-	-	1	-	-	-	-	-	1	-	-	-	1	
Hawaii	4	-	11	-	-	-	-	-	1	-	1	-	-	
Guam	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
P.R.	3	-	29	-	-	-	-	-	2	8	12	-	-	
V.I.	NA	NA	NA	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pac. Trust Terr.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

NN: Not notifiable.

NA: Not available.

*Delayed reports received for 1979 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: Aseptic meningitis: Ohio +2, Ind. +1, Wis. +1; Chickenpox: Maine +4, Ohio +2, N.Mex. +8, Calif. +77; Encephalitis: Ohio +1, Mich. -4; Hepatitis B: N.H. +1, Ohio -1, W.Va. +1, Colo. -1, Utah +1; Hepatitis A: Ohio +1, Wis. -1, W.Va. -1, Ark. -3, Mont. +1, Colo. -1; Hepatitis unspecified: Ark. -1, Mont. +1, Utah -2.

TABLE III (Cont. 'd). Cases of specified notifiable diseases, United States, weeks ending
March 29, 1980, and March 31, 1979 (13th week)

REPORTING AREA	MEASLES (RUBEOLA)			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	539	3,222	4,002	78	836	893	282	3,626	19	113	1,208	10
NEW ENGLAND	24	268	113	10	48	27	46	347	1	4	75	-
Maine	-	4	4	-	2	1	42	149	-	1	29	-
N.H.†	14	139	3	-	4	3	-	8	-	-	18	-
Vt.	4	115	6	3	5	2	-	-	-	-	-	-
Mass.†	6	6	-	5	19	10	3	101	1	1	17	-
R.I.	-	2	100	-	3	-	-	11	-	2	2	-
Conn.	-	2	-	2	15	11	1	78	-	-	9	-
MID. ATLANTIC	176	732	262	7	134	123	9	460	1	13	93	2
Upstate N.Y.	36	204	121	3	51	43	6	37	1	11	51	1
N.Y. City	64	227	108	2	43	33	-	24	-	1	24	-
N.J.†	20	94	23	1	25	35	1	53	-	1	14	-
Pa.	56	207	10	1	15	12	2	346	-	-	4	1
E.N. CENTRAL	95	420	941	3	86	87	122	1,314	4	36	303	-
Ohio†	-	52	4	-	31	29	52	575	2	1	2	-
Ind.†	2	21	73	-	12	22	5	45	2	22	120	-
Ill.	21	95	351	3	14	3	25	163	-	6	59	-
Mich.	25	116	324	-	22	25	29	388	-	2	77	-
Wis.†	47	136	189	-	7	8	11	143	-	5	45	-
W.N. CENTRAL	69	426	381	6	35	36	5	121	-	10	110	2
Minn.	53	282	172	2	11	6	-	4	-	1	8	1
Iowa	-	-	2	-	3	4	2	15	-	3	3	-
Mo.	-	47	192	3	12	20	3	49	-	2	25	-
N. Dak.	-	-	6	-	1	1	-	1	-	-	3	-
S. Dak.	-	-	1	1	3	2	-	1	-	-	3	-
Nebr.	12	45	-	-	-	-	-	8	-	-	-	-
Kans.†	4	52	8	-	5	3	-	41	-	7	71	1
S. ATLANTIC	65	747	573	31	209	230	44	378	6	14	122	2
Del.	-	1	-	1	2	2	2	30	-	-	-	-
Md.	-	19	5	2	18	14	11	124	-	-	-	-
D.C.	-	-	-	-	-	-	-	2	-	-	-	-
Va.	19	151	58	2	17	34	5	34	-	1	7	1
W. Va.	-	8	34	1	6	3	6	46	2	-	8	-
N.C.	-	37	68	6	40	34	4	59	2	3	31	-
S.C.	-	91	65	4	26	30	1	13	-	5	42	1
Ga.	17	295	35	6	47	36	-	-	2	-	-	-
Fla.	29	145	308	9	53	77	15	70	-	5	34	-
E.S. CENTRAL	8	106	56	4	82	69	8	560	1	7	48	-
Ky.	1	31	13	2	24	13	2	518	1	3	22	-
Tenn.	2	9	8	1	19	21	3	17	-	4	24	-
Ala.	-	15	28	-	23	17	1	8	-	-	2	-
Miss.	5	51	7	1	16	18	2	17	-	-	-	-
W.S. CENTRAL	38	205	478	4	89	151	13	109	4	3	37	-
Ark.	-	1	6	-	4	13	-	13	-	-	1	-
La.	4	9	143	-	26	67	4	22	2	-	3	-
Okla.†	24	119	3	3	9	16	-	-	1	1	1	-
Tex.	10	76	326	1	50	55	9	74	1	2	32	-
MOUNTAIN	4	65	72	-	28	39	5	100	1	-	37	-
Mont.	-	1	18	-	1	2	1	32	-	-	1	-
Idaho	-	-	3	-	3	3	3	10	-	-	7	-
Wyo.	-	-	-	-	1	-	-	-	-	-	-	-
Colo.	-	3	7	-	8	1	-	19	1	-	1	-
N. Mex.	-	1	13	-	5	2	-	-	-	-	3	-
Ariz.	4	29	15	-	4	24	1	13	-	-	9	-
Utah	-	29	13	-	1	3	-	22	-	-	13	-
Nev.	-	2	3	-	5	4	-	4	-	-	3	-
PACIFIC	60	253	1,126	13	125	131	30	237	1	26	383	4
Wash.†	40	99	587	-	18	18	4	73	-	3	22	-
Oreg.	-	-	16	4	26	10	7	38	-	-	28	-
Calif.	20	148	465	8	79	97	18	120	1	23	332	4
Alaska	-	3	14	1	2	2	1	4	-	-	1	-
Hawaii	-	3	44	-	-	4	-	2	-	-	-	-
Guam	NA	1	-	-	-	-	NA	3	NA	NA	-	-
P.R.	7	28	120	-	5	-	3	35	-	1	3	3
V.I.	NA	4	2	-	1	2	NA	1	NA	NA	-	-
Pac. Trust Terr.	NA	3	5	-	-	-	NA	1	NA	NA	1	-

NA: Not available.

*Delayed reports received for 1979 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: N.H. +1, Mass. +2, N.J. +57, Wis. -3, Okla. +40; Men. inf.: Ind. +2, Kans. -1; Pertussis: Ohio +1, Wash. -1; Rubella: Kans. -1.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending March 29, 1980, and March 31, 1979 (13th week)

REPORTING AREA	TUBERCULOSIS		TULA-REMI	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSF)		VENEREAL DISEASES (Civilian)						RABIES (in Animals)
	1980	CUM. 1980	CUM. 1980	1980	CUM. 1980	1980	CUM. 1980	GONORRHEA			SYPHILIS (Pri. & Sec.)			
								1980	CUM. 1980	CUM. 1979*	1980	CUM. 1980	CUM. 1979*	
UNITED STATES	602	6,233	22	9	75	1	7	18,344	236,921	236,792	616	6,783	6,100	1,228
NEW ENGLAND	15	188	-	-	5	-	-	492	6,173	6,094	25	211	110	12
Maine	1	13	-	-	-	-	-	43	391	420	1	1	1	11
N.H.	1	3	-	-	-	-	-	21	225	201	-	-	5	-
Vt.	-	7	-	-	-	-	-	12	173	102	-	1	-	-
Mass.	7	88	-	-	3	-	-	222	2,496	2,320	19	138	74	1
R.I.	2	25	-	-	1	-	-	30	362	529	1	7	3	-
Conn.	4	52	-	-	1	-	-	164	2,526	2,522	4	64	27	-
MID. ATLANTIC	112	1,165	1	2	19	-	1	1,477	25,834	24,659	75	927	971	2
Upstate N.Y.	16	221	-	-	4	-	-	312	4,487	3,766	10	74	77	-
N.Y. City †	35	418	1	2	8	-	-	600	10,437	9,517	49	603	653	-
N.J.	26	252	-	-	3	-	-	126	4,444	4,653	5	118	128	2
P.A.	35	274	-	-	4	-	1	439	6,466	6,723	11	132	113	-
E.N. CENTRAL	74	848	1	-	6	-	-	2,554	38,176	36,614	62	722	754	164
Ohio †	13	144	-	-	-	-	-	304	9,982	10,147	-	97	157	7
Ind.	-	102	-	-	-	-	-	242	3,819	2,924	2	62	43	16
Ill.	37	329	-	-	3	-	-	1,133	12,149	11,569	28	332	433	102
Mich. †	21	216	1	-	3	-	-	557	8,240	8,635	30	200	93	-
Wis.	3	57	-	-	-	-	-	318	3,966	3,339	2	31	28	39
W.N. CENTRAL	24	198	8	-	1	-	2	720	10,548	11,295	4	70	79	323
Minn.	1	31	1	-	-	-	-	42	1,778	1,986	-	25	25	39
Iowa	2	14	4	-	-	-	-	56	1,130	1,550	-	3	7	74
Mo.	12	95	2	-	-	-	2	356	4,487	4,661	3	39	31	86
N. Dak.	1	7	-	-	-	-	-	12	148	198	-	-	-	28
S. Dak.	-	8	-	-	1	-	-	23	330	379	-	-	-	66
Nebr. †	5	12	1	-	-	-	-	61	892	759	-	2	1	5
Kans.	3	31	-	-	-	-	-	170	1,783	1,762	-	1	15	25
S. ATLANTIC	155	1,425	7	2	16	-	2	4,234	57,231	56,812	115	1,589	1,538	98
Del.	1	21	-	-	1	-	-	55	838	919	-	5	9	-
Md.	19	170	1	-	2	-	-	614	5,940	6,950	1	112	103	-
D.C.	7	78	-	-	3	-	-	281	4,254	3,534	8	111	109	-
Va.	20	168	-	1	3	-	-	327	4,771	5,425	10	134	159	-
W. Va.	8	61	-	1	2	-	-	83	728	829	-	4	21	2
N.C.	22	254	2	-	1	-	2	642	9,051	8,756	10	123	138	-
S.C.	13	119	-	-	1	-	-	463	5,446	4,805	5	82	85	17
Ga.	32	183	4	-	-	-	-	696	10,229	10,900	34	460	408	55
Fla.	33	371	-	-	3	-	-	1,073	15,974	14,694	47	558	506	24
E.S. CENTRAL	39	564	1	-	2	-	-	1,127	19,077	20,615	55	542	428	72
Ky.	11	118	-	-	1	-	-	255	2,821	2,770	5	33	44	36
Tenn.	3	179	1	-	-	-	-	285	6,801	7,172	15	216	177	33
Ala.	11	164	-	-	1	-	-	379	5,440	6,219	6	107	88	3
Miss.	14	103	-	-	-	-	-	208	4,015	4,454	29	186	119	-
W.S. CENTRAL	62	556	-	1	2	1	2	2,523	30,548	31,255	83	1,251	1,040	379
Ark.	2	42	-	-	-	-	-	191	2,290	2,395	3	47	32	49
La.	13	123	-	-	-	-	-	455	4,865	5,389	24	295	231	4
Okla.	4	58	-	-	1	1	1	287	3,068	2,764	2	18	21	61
Tex.	43	333	-	1	2	-	1	1,590	20,325	20,707	54	891	756	265
MOUNTAIN	13	174	2	-	5	-	-	600	8,976	9,088	33	169	87	29
Mont.	-	9	-	-	1	-	-	24	326	507	-	-	6	3
Idaho	-	7	1	-	4	-	-	20	458	407	4	12	7	-
Wyo.	4	13	-	-	-	-	-	14	261	238	-	7	3	-
Colo. †	-	16	-	-	1	-	-	152	2,280	2,499	3	41	28	-
N. Mex.	2	33	-	-	1	-	-	45	1,180	1,181	2	25	10	6
Ariz.	7	80	1	-	1	-	-	199	2,469	2,380	22	62	19	20
Utah	-	5	-	-	1	-	-	36	443	457	1	5	2	-
Nev.	-	11	-	-	-	-	-	110	1,559	1,419	1	17	12	-
PACIFIC	108	1,115	2	4	19	-	-	4,617	40,358	40,360	164	1,302	1,093	149
Wash.	5	90	-	-	-	-	-	NA	3,049	3,376	NA	92	64	-
Ore.	4	53	-	-	-	-	-	281	3,903	2,631	2	29	52	-
Calif.	99	951	2	4	19	-	-	4,255	32,977	32,412	147	1,146	952	112
Alaska	-	7	-	-	-	-	-	57	923	1,300	-	2	5	37
Hawaii	-	14	-	-	-	-	-	24	506	641	15	33	20	-
Guam	NA	4	-	NA	-	NA	-	NA	16	26	NA	-	-	-
P.R.	2	30	-	-	-	-	-	64	659	480	9	145	142	13
V.I.	NA	-	-	NA	-	NA	-	NA	40	40	NA	7	-	-
Pac. Trust Terr.	NA	7	-	NA	-	NA	-	NA	94	112	NA	-	-	-

NA: Not available.

* Delayed reports received for 1979 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: NYC -16, Ohio -1, Mich. -1, Colo. +4; Typhoid Fever: Ohio +1; GC, mil.: Nebr. -1, An. rabies: Nebr. +2.

TABLE IV. Deaths in 121 U.S. cities,* week ending
March 29, 1980 (13th 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	728	488	151	44	25	56	S. ATLANTIC	1,332	810	355	70	54	55
Boston, Mass.	194	110	44	23	9	12	Atlanta, Ga.	147	84	42	8	8	4
Bridgeport, Conn.	56	46	8	1	-	6	Baltimore, Md.	323	205	79	22	6	8
Cambridge, Mass.	21	13	6	-	-	1	Charlotte, N.C.	62	30	22	6	1	3
Fall River, Mass.	37	29	6	1	-	2	Jacksonville, Fla.	106	69	27	-	3	6
Hartford, Conn.	61	41	14	3	1	2	Miami, Fla.	149	87	50	5	4	3
Lowell, Mass.	33	29	4	-	-	3	Norfolk, Va.	58	29	19	4	3	1
Lynn, Mass.	18	15	2	-	1	1	Richmond, Va.	94	55	20	3	16	3
New Bedford, Mass.	28	22	5	-	1	3	Savannah, Ga.	55	27	13	4	5	8
New Haven, Conn.	55	30	18	2	2	2	St. Petersburg, Fla.	92	76	10	4	-	4
Providence, R.I.	66	42	17	2	3	7	Tampa, Fla.	79	52	22	2	3	4
Somerville, Mass.	8	8	-	-	-	-	Washington, D.C.	126	74	35	11	5	6
Springfield, Mass.	56	32	11	8	5	5	Wilmington, Del.	41	22	16	1	-	5
Waterbury, Conn.	40	27	9	3	1	2							
Worcester, Mass.	55	44	7	1	2	10							
MID. ATLANTIC	2,687	1,758	625	156	71	143	E.S. CENTRAL	679	418	170	49	21	31
Albany, N.Y.	61	37	14	4	3	2	Birmingham, Ala.	107	65	29	7	5	3
Allentown, Pa.	23	17	6	-	-	-	Chattanooga, Tenn.	43	30	10	3	-	1
Buffalo, N.Y.	113	72	27	4	3	10	Knoxville, Tenn.	47	34	13	-	-	1
Camden, N.J.	42	30	7	4	-	2	Louisville, Ky.	106	64	32	4	5	9
Elizabeth, N.J.	23	17	5	-	-	1	Memphis, Tenn.	183	104	45	19	7	8
Erie, Pa.†	30	21	6	-	1	4	Mobile, Ala.	65	38	16	7	-	1
Jersey City, N.J.	42	32	4	2	-	2	Montgomery, Ala.	39	26	3	4	2	1
Newark, N.J.	54	22	16	6	7	2	Nashville, Tenn.	89	57	22	5	2	7
N.Y. City, N.Y.	1,414	939	318	8	33	50	W.S. CENTRAL	1,330	795	329	92	52	46
Paterson, N.J.	32	17	6	5	1	5	Austin, Tex.	72	45	17	6	-	3
Philadelphia, Pa.†	357	216	94	23	14	22	Baton Rouge, La.	25	15	7	1	1	1
Pittsburgh, Pa.†	73	44	24	2	1	4	Corpus Christi, Tex.	48	32	9	2	3	4
Reading, Pa.	33	23	8	2	-	6	Dallas, Tex.	197	125	44	13	5	6
Rochester, N.Y.	112	82	21	6	2	15	El Paso, Tex.	55	29	14	5	3	4
Schenectady, N.Y.	22	13	5	-	-	1	Fort Worth, Tex.	77	48	17	4	6	5
Scranton, Pa.†	30	22	8	-	-	1	Houston, Tex.	285	149	75	32	10	3
Syracuse, N.Y.	107	80	20	4	2	13	Little Rock, Ark.	75	36	25	6	3	6
Trenton, N.J.	50	30	17	-	1	5	New Orleans, La.	191	110	52	12	11	-
Utica, N.Y.	31	24	7	-	-	3	San Antonio, Tex.	151	100	36	6	5	1
Yonkers, N.Y.	38	20	12	1	1	2	Shreveport, La.	65	42	15	4	1	1
							Tulsa, Okla.	89	64	18	1	4	8
E.N. CENTRAL	2,309	1,467	586	115	64	112	MOUNTAIN	615	367	142	47	28	20
Akron, Ohio	67	44	15	3	1	-	Albuquerque, N.Mex.	67	42	10	9	3	5
Canton, Ohio	42	32	9	-	-	3	Colo. Springs, Colo.	24	15	7	2	-	1
Chicago, Ill.	489	312	116	26	16	14	Denver, Colo.	99	59	22	4	7	4
Cincinnati, Ohio	164	96	57	4	10	9	Las Vegas, Nev.	73	37	25	10	-	3
Cleveland, Ohio	161	82	57	9	5	9	Ogden, Utah	17	10	2	2	3	1
Columbus, Ohio	132	72	46	7	4	10	Phoenix, Ariz.	157	94	35	10	9	1
Dayton, Ohio	120	75	31	3	7	7	Pueblo, Colo.	30	25	3	-	2	3
Detroit, Mich.	259	144	72	23	11	6	Salt Lake City, Utah	56	30	15	4	3	1
Evansville, Ind.	51	37	9	2	2	-	Tucson, Ariz.	92	55	23	6	1	1
Fort Wayne, Ind.	17	11	5	-	-	1							
Gary, Ind.	66	47	15	2	-	7							
Grand Rapids, Mich.	164	106	38	1	4	3	PACIFIC	1,765	1,101	427	119	57	67
Indianapolis, Ind.	40	26	8	2	2	7	Berkeley, Calif.	25	19	5	1	-	1
Madison, Wis.	144	104	27	1	4	5	Fresno, Calif.	66	42	13	5	2	4
Milwaukee, Wis.	41	23	16	1	7	5	Glendale, Calif.	18	13	4	1	-	-
Peoria, Ill.	54	37	11	2	-	1	Honolulu, Hawaii	55	28	15	7	3	7
Rockford, Ill.	55	39	9	3	-	11	Long Beach, Calif.	95	58	27	5	4	5
South Bend, Ind.	129	99	22	2	3	3	Los Angeles, Calif.	398	243	100	21	14	12
Toledo, Ohio	64	43	15	2	3	1	Oakland, Calif.	47	27	7	11	-	1
Youngstown, Ohio							Pasadena, Calif.	26	16	5	4	1	2
							Portland, Ore.	126	76	35	10	3	1
W.N. CENTRAL	767	530	161	34	27	38	Sacramento, Calif.	61	34	15	3	5	3
Des Moines, Iowa	47	35	8	-	2	2	San Diego, Calif.	302	181	80	21	7	1
Duluth, Minn.	31	26	3	1	1	4	San Francisco, Calif.	151	93	34	11	10	4
Kansas City, Kans.	40	31	6	1	1	1	San Jose, Calif.	157	97	40	10	4	10
Kansas City, Mo.	130	83	33	3	5	5	Seattle, Wash.	163	117	33	5	4	9
Lincoln, Nebr.	24	16	7	1	-	3	Spokane, Wash.	44	33	8	3	-	6
Minneapolis, Minn.	99	78	13	4	2	6	Tacoma, Wash.	31	24	6	1	-	1
Omaha, Nebr.	79	52	16	2	6	4							
St. Louis, Mo.	175	105	43	15	10	4	TOTAL	12,212	7,734	2,946	726	399	568
St. Paul, Minn.	85	64	18	-	5	5							
Wichita, Kans.	57	40	14	-	2	4							

*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.

Current Trends**Urban Rat Control — United States, July-September 1979**

During the fourth quarter of fiscal year 1979, Urban Rat Control programs in 65 communities reported that 1,447 additional blocks were in the "maintenance" phase—an indication that they had become essentially rat free. Some 1,530 other blocks were designated as environmentally improved (EIB)—that is, they are rat free, have remained so for 1 year, and are now being sustained by local resources (Table 1).

For the entire fiscal year, the program communities, which serve 4.6 million target-area residents, reported a net gain of 5,007 blocks in maintenance and 7,739 as EIB. As of September 30, programs had provided services to 53,000 blocks; 29,070 of these had achieved EIB status. Approximately 6.2 million people lived in areas that were environmentally improved and rat free as a result of program efforts.

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

TABLE 1. Urban Rat Control Program target-area status report, fourth quarter fiscal year 1979 (July 1-September 30)

Program community	Target-area blocks				Environmentally improved blocks*	
	Total	Attack phase	Maintenance phase		New this quarter	Cumulative
			<12 months	≥12 months		
REGION I	774	398	290	86	19	995
Hartford	249	105	79	65	0	277
Boston	422	262	139	21	0	0
Worcester	103	31	72	0	19	718
Previously funded programs						0
REGION II	4,086	1,686	1,259	1,111	228	3,430
Camden	270	148	90	32	0	81
Jersey City	233	49	93	91	26	93
Newark	220	176	31	13	0	0
Paterson	69	39	0	0	49	151
New York City	1,533	764	427	342	132	726
Newburgh	47	8	13	26	0	39
Rochester	287	117	86	84	0	285
Yonkers	121	26	57	38	0	28
Aguadilla, P.R.	175	52	78	45	21	90
Arecibo, P.R.	184	62	49	73	0	131
Mayaguez, P.R.	276	125	70	81	0	116
Ponce, P.R.	212	21	99	92	0	172
San Juan, P.R.	459	99	166	194	0	96
Previously funded programs						1,422
REGION III	4,130	1,343	1,444	782	296	5,964
"War on Rats," D.C.	790	284	181	325	45	968
Baltimore	414	134	123	45	97	262
Chester	120	31	38	51	0	55
Harrisburg	367	NA	NA	NA	NA	NA
N.E. Pa. V.C. Assn.†	512	156	274	0	0	958
Philadelphia	1,238	497	579	162	68	1,258
Pittsburgh	410	140	124	146	0	1,121
Chesapeake	26	16	10	0	27	52
Norfolk	198	61	90	47	59	1,252
Portsmouth	55	24	25	6	0	38
Previously funded programs						0

Urban Rat Control — Continued

Program community	Target-area blocks				Environmentally improved blocks*	
	Total	Attack phase	Maintenance phase		New this quarter	Cumulative
			<12 months	≥12 months		
REGION IV	5,385	1,867	2,131	421	140	5,059
Mobile	507	126	343	38	9	233
Tuscaloosa	344	0	0	0	0	0
Ft. Lauderdale	334	81	223	30	0	543
Miami	860	345	399	116	24	640
Pensacola	465	204	131	0	0	0
Tampa	138	24	114	0	101	845
Atlanta, Ga. †	731	262	131	0	0	0
DeKalb Co., Ga.	740	233	406	101	0	0
Lexington	317	119	44	0	0	0
Louisville	524	171	265	88	6	408
Memphis	425	302	75	48	0	392
Previously funded programs						1,998
REGION V	4,731	2,029	1,354	206	66	3,195
Chicago	399	358	41	0	0	0
Peoria	324	0	0	0	0	0
Gary	381	238	90	53	0	0
Indianapolis	309	36	273	0	0	108
Benton Harbor	190	36	59	0	0	0
Detroit	416	237	147	32	0	306
Highland Park	220	91	17	0	0	0
Saginaw	333	190	49	0	0	0
Akron	304	57	155	15	7	305
Barberton	119	77	42	0	0	58
Cincinnati	125	36	39	24	34	80
Cleveland	485	202	278	5	0	555
Columbus	449	280	92	77	0	116
Toledo	322	63	65	0	25	136
Youngstown	220	0	0	0	0	0
Milwaukee	135	128	7	0	0	0
Previously funded programs						1,531
REGION VI	2,052	353	853	521	289	5,730
Little Rock	403	174	123	0	0	0
Pine Bluff	276	31	155	90	0	0
New Orleans	508	109	340	59	72	2,817
Houston	865	39	235	372	217	1,655
Previously funded programs						1,258
REGION VII	1,655	454	515	686	474	2,839
Kansas City, Kan.	418	58	73	287	174	823
Kansas City, Mo.	177	66	56	55	178	595
St. Louis	517	166	168	183	105	739
Omaha	543	164	218	161	17	286
Previously funded programs						396
REGION IX	1,117	305	490	135	18	1,028
Los Angeles	462	25	179	71	0	103
Oakland	291	185	121	12	4	180
San Bernardino	193	40	118	35	0	0
San Francisco	171	82	72	17	14	263
Previously funded programs						482
REGION X						830
Previously funded programs						830
TOTAL	23,930	8,435	8,336	3,948	1,530	29,070

* 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.

Current Trends

Influenza — United States

For the week ending March 22, 1 state, Michigan, reported widespread outbreaks of influenza, and 4 states (Virginia, North Carolina, Nebraska, and Oregon) reported regional outbreaks.

For the tenth consecutive week, the number of pneumonia and influenza (P&I) deaths reported from 117 U.S. cities remained above the epidemic threshold. For the week ending March 29, P&I deaths decreased from the previous week's total.

Reported isolations of influenza B virus continued to decline. An analysis of reports received through mid-February indicated that, where age was recorded, 85% of 6,846 specimens collected and 85% of 429 influenza B viruses isolated were from individuals <27 years of age.

Reported by the Immunization Div, Bur of State Services, the World Health Organization Collaborating Center for Influenza, Virology Div, Bur of Laboratories, and the Consolidated Surveillance and Communications Activity, Bur of Epidemiology, CDC.

International Notes

Quarantine Measures

The following changes should be made in the Supplement, "Health Information for International Travel," MMWR, Vol. 28, July 1979:

INDIA

Yellow fever - Change first sentence of the note to: A certificate is required ALSO from travelers arriving from or transiting:

Africa: Delete Central African Empire. Insert Central African Republic.

Smallpox - Delete code. Insert: None. ALSO on page 13 delete code. Insert: None.

INSERT: KIRIBATI. ALSO insert on page 14.

Cholera - None.

Yellow fever - II > 1 yr.

Smallpox - None.

INSERT: KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF (NORTH). ALSO insert on page 14.

Cholera - None.

Yellow fever - None.

Smallpox - None.

KOREA, REPUBLIC OF (SOUTH)

Cholera - Delete: None. Insert code II > 1 yr. ALSO on page 14 delete: None. Insert code II.

Smallpox - Delete all information. Insert: None. ALSO on page 14 delete code. Insert: None.

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 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.

*Quarantine Measures — Continued***KUWAIT**

Cholera - Delete note. Insert: None. ALSO on page 14 delete *. Insert: None.

Smallpox - Delete all information. Insert: A certificate is required ONLY from travelers arriving from:
Africa: Djibouti, Ethiopia, Somalia
ALSO on page 14 delete code. Insert *.

MALTA

Yellow fever - Delete note. Insert: Children under 6 months of age arriving from an infected area may be subject to isolation or surveillance.

Smallpox - Delete all information. Insert: None. ALSO on page 15 delete code. Insert: None.

NAURU

Cholera - Delete all information. Insert: None. ALSO on page 15 delete code. Insert: None.

Smallpox - Delete all information. Insert: None. ALSO on page 15 delete code. Insert: None.

NEW HEBRIDES

Yellow fever - Delete all information. Insert: None. ALSO on page 15 delete code. Insert: None.

Smallpox - Delete all information. Insert: None. ALSO on page 15 delete code. Insert: None.

PANAMA

Smallpox - Delete all information. Insert: A certificate is required ONLY from travelers who within the preceding 30 days have been in or transited:

Africa: Ethiopia

ALSO on page 16 delete code. Insert *.

PITCAIRN ISLAND

Cholera - Delete code. Insert: None. ALSO on page 16 delete code. Insert: None.

Smallpox - Delete all information. Insert: None. ALSO on page 16 delete code. Insert: None.

POLAND

Smallpox - Delete all information. Insert: A certificate is required ONLY from travelers who within the preceding 14 days have been in:

Africa: Ethiopia, Kenya, Somalia, Sudan

ALSO on page 16 delete code. Insert *.

Erratum, Vol. 29, No. 12

p143 In the article, "Influenza — United States," third paragraph, the number of influenza B virus isolations reported in the United States decreased in the weeks ending February 15, 22, and 29, not March, as indicated.

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

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



Director, Center for Disease Control

William H. Foege, M.D.

Director, Bureau of Epidemiology

Phillip S. Br

Editor

Michael B. C

Managing Editor

Anne D. Ma

Mathematical S

Keewhan Ch

HCA 55 MILLSMA0007537921SXXX
MRS MARY ALICE MILLS
DIRECTOR, LIBRARY
BLDG 1-4007