CENTER FOR DISEASE CONTROL

August 24, 1979 / Vol. 28 / No. 33

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

Current Trends

Health Status of Indochinese Refugees

INTRODUCTION

Last month the President announced that by September 1979, 14,000 Indochinese refugees would be accepted monthly for resettlement in the United States. Within the Public Health Service (PHS), CDC shares federal responsibility for the health of refugees with the Health Services Administration (HSA). CDC is responsible for the medical screening of refugees while they are still abroad and for the inspection of refugees upon arrival at U.S. ports of entry. By law, health screening of refugees in Asia includes examination for tuberculosis, leprosy, venereal disease, and mental defects and disorders.* The HSA provides—or helps private, local, or state sources provide—immediate medical services, as well as a more comprehensive medical assessment of refugees after their arrival in the United States. State and local health departments are being notified of the arrival of each refugee to their communities. Both CDC and HSA are seeking to insure that adequate documentation on refugees with special health problems is acquired and distributed to state and local health authorities.

PHS teams have recently visited areas in California, Oregon, Washington, and Hawaii that have already received large numbers of refugees, as well as refugee camps and embarkation areas in Southeast Asian countries. From these visits, as well as from limited surveillance data and the experience gained in the resettlement of over 150,000 Vietnamese refugees in the United States since May 1975, the following may be expected:

1. The majority of refugees will be free of major contagious diseases;
2. Where an illness is present, it will likely represent a personal rather than a public health problem, and;
3. The main health problems, perhaps exceeded only by the stress of resettlement itself, will include tuberculosis and parasitic diseases.

*Conditions for which a person would be excluded entry into the United States are designated as Class A by the Immigration and Naturalization Service. These are as follows: 1) syphilis, gonorrhea, chancroid, granuloma inguinale, and lymphogranuloma venereum. These conditions are not excludable if they are adequately treated. 2) active tuberculosis. 3) infectious leprosy. 4) mental retardation, insanity (past, present), and severe personality disorders, including chronic alcoholism and drug addiction. Mental retardation and previous attacks of insanity are waiverable under certain circumstances, as established in the Immigration and Nationality Act.

Health Status of Indochinese Refugees – Continued

This report represents a summary of recommendations that have been prepared by CDC as a guide to practitioners and state and local health departments concerning some of the more significant infectious disease problems that may be encountered. As surveillance information becomes available, these data will appear in the *MMWR*.

TUBERCULOSIS

Tuberculosis is the most serious potential public health problem of Indochinese refugees. Data from San Francisco, Los Angeles, and the state of Washington, indicate that 1%-2% of refugees who have arrived during 1979 and have been examined have been found to have "active" tuberculosis. This estimate may be high because refugees in whom tuberculosis was identified overseas are more likely to have been examined upon arrival in the United States than other refugees. In San Francisco, 41% (136 of 333) of refugees less than 18 years of age had a skin test that was positive for tuberculosis. In Los Angeles and Washington state, about half of the refugees—of all age groups—had a positive skin test. The proportion who had received BCG vaccination is not known.

Screening and Notification Procedures

At present, refugees 2 years and older are screened in the refugee camps in Southeast Asia with a chest X ray.* "Active" or suspected "active" (Immigration Class A†) tuberculosis is an excludable condition. Refugees so classified must remain in Asia under treatment until their disease is no longer "active," unless excludability is waived. Persons with Class A tuberculosis who are eligible for a waiver of excludability can travel immediately if their disease is non-contagious. If their disease is contagious they must remain under treatment in Asia until their disease is judged non-contagious. Refugees classified as having "active" or suspected "active" (Class A) tuberculosis or tuberculosis "not considered active" (Class B), are referred for medical evaluation upon arrival. In either case, local and state health departments in the United States are notified of the arrival of the person to facilitate initiation or continuation of treatment.

A Class A refugee who is eligible to enter the United States must have at least 2 sputum smears, taken at least 1 day apart, that are negative for acid-fast organisms, before he or she is considered noninfectious and permitted to travel. Any form of extrapulmonary tuberculosis, as well as pulmonary tuberculosis designated Class B, is considered noninfectious for travel purposes. The medical examination form (OF-157, formerly FS-398) must specify if the individual has Class A or Class B tuberculosis, give the results of bacteriologic studies, describe X-ray findings, and detail the treatment. A copy of the OF-157 and the chest X rays remain with the refugee. A copy of the OF-157 should be forwarded to the local health department along with a copy of either the "Report of Alien with Tuberculosis Waiver" (CDC 4.451)—for Class A cases—or the "Report of Alien with Tuberculosis Not Considered Active" (CDC 4.447)—for Class B cases. A copy of the CDC 4.451 or the CDC 4.447 also should be sent to the state health

*The 2 exceptions are Indonesia and Singapore, where only refugees 15 years of age or older are screened for tuberculosis.

†For a description of the Class A designations, see footnote on page 385.

Health Status of Indochinese Refugees – Continued

department at the refugee's destination and a copy given to the refugee. Appropriate follow-up procedures then become the responsibility of the refugee and the health department.

CDC has recommended that Class A tuberculosis cases with positive bacteriology and/or cavitary lesions on chest X ray be started on treatment consisting of isoniazid (INH), rifampin, and ethambutol. Ethambutol has been included because, based on drug-resistance studies done in the United States, it is estimated that approximately 10% of the refugees with tuberculosis may be infected with an organism resistant to INH. Children too young to be assessed for alterations of visual acuity should receive INH, rifampin, and streptomycin. The doses of drugs for adults are INH, 300 mg daily; rifampin, 600 mg daily (450 mg daily for persons weighing less than 50 kg); ethambutol, 15-20 mg per kg body weight daily (the dose can be rounded off, e.g., 800 mg, 1000 mg, 1200 mg). For children the doses are INH, 10 mg per kg of body weight daily up to a maximum of 300 mg; rifampin, 10 to 20 mg per kg of body weight daily; ethambutol, 15 to 20 mg per kg of body weight daily; streptomycin, 20 mg per kg of body weight up to the maximum of 1 g daily. Class A tuberculosis cases other than those with positive bacteriology and/or cavitary lesions on chest X ray may be started on treatment at the discretion of the examining physician, or treatment may be deferred until arrival in the United States.

Follow-up and Treatment after Arrival in the United States

If treatment has not been started abroad on a refugee with Class A tuberculosis, specimens should be obtained for bacteriologic examination (smear and culture) and for drug-susceptibility tests. Depending on the examining physician's clinical judgment, treatment may be started after specimens have been obtained or deferred until the results of the tests are available. Treatment started in the United States should follow the regimens outlined above. When drug-susceptibility results are available, treatment can be adjusted accordingly. However, it is important that the regimen always contain at least 2 drugs to which the organisms are known to be, or thought to be, susceptible. If cultures are negative, precluding drug-susceptibility testing, then INH, rifampin, and ethambutol should all be continued for the duration of therapy. Treatment should continue for a period of 12 months after sputum specimens are negative. For patients with negative bacteriology, the total period of treatment should be 12 months.

If treatment has been started abroad on a refugee with Class A tuberculosis, the refugee would have negative sputum smears before being permitted to travel. Upon arrival, treatment should be continued, but specimens should be obtained for attempted culture and drug-susceptibility tests. If the culture results are positive, proceed as above and adjust regimen, if necessary, according to the drug-susceptibility test results. If the cultures are negative, precluding drug-susceptibility testing, it is necessary to continue a regimen of INH, rifampin, and ethambutol for a period of 12 months after sputum specimens are negative.

Class B tuberculosis patients are a high-risk group and should be re-evaluated upon arrival in the United States. If "active" disease is found, indicating either incorrect classification or development of progressive disease after the initial medical examination, consider the person as a case of tuberculosis and treat as described above. If the Class B designation is correct, these refugees are candidates for preventive therapy with INH. Even though

Health Status of Indochinese Refugees – Continued

as many as 10% of Class B patients may be infected with an INH-resistant organism, it is not possible to identify these individuals. Therefore, it is recommended that INH be used for preventive therapy; if tuberculosis caused by INH-resistant organisms should develop later in any of these persons, it can be treated appropriately with other drugs at that time.

Preventive therapy is recommended for contacts of tuberculosis patients and other infected persons who may be identified. Since a positive reaction from BCG vaccination cannot be distinguished from natural infection, the tuberculin test should be interpreted without regard to BCG vaccination. INH is recommended unless the person is known to have been exposed to a source case with INH-resistant tubercle bacilli. In that situation, 1 of the following 3 alternative approaches may be selected: 1) treat with INH; 2) treat with rifampin (alone or in combination with INH or another drug); or 3) use no drugs for preventive treatment but assure close clinical follow-up and provide treatment with appropriate drugs if tuberculosis develops.

Depending upon the number of refugees in the community and the resources available, health departments will have varying degrees of difficulty in accommodating the increased case load presented by Indochinese refugees. The recommended priorities for tuberculosis control in Indochinese refugees are as follows: 1) evaluation, management, and contact investigation of Class A cases; 2) evaluation, management, and contact investigation (if indicated) of Class B cases; 3) tuberculin screening and preventive therapy programs for children, e.g., testing of all refugee children entering the community's school system; 4) evaluation and follow-up of the family and other close associates of children found to be infected; and 5) tuberculin screening and preventive therapy programs for adult refugees under 35 years of age. Screening programs are not recommended for older refugees because the vast majority would not be candidates for preventive therapy. (The exception would be those with abnormal chest X rays who have already been identified as Class B patients at the time of their arrival in the United States).

Although there is some risk of transmission of tuberculosis from refugees to the U.S. population, the current methods of detection and the use of appropriate containment procedures make the risks minimal. Efforts are being made to improve the medical evaluation of refugees overseas, including the interpretation of X rays and performance of laboratory bacteriologic procedures, and to assure that health departments are properly notified of the arrival of refugees who have tuberculosis.

MALARIA

Diagnosis

Malaria can be definitively diagnosed only through the careful microscopic examination of blood films. Both thick and thin blood films should be made from each patient's blood. Thick films provide the best opportunity to detect the lowest number of parasites but require some training and experience to read. Thin films are used for species identification. Blood films should be prepared from specimens from all refugees who have a fever. The films should be promptly stained (Giemsa stain preferred) and examined for parasites, and the species and approximate density of parasites (i.e., number per 100 white blood cells on thick films) should be noted, if possible.

Health Status of Indochinese Refugees -- Continued

Signs and symptoms other than fever that suggest the possibility of malaria also dictate a blood film examination. These would include anemia, splenomegaly, chills, headache, backache, and malaise. Negative blood films on at least 2 consecutive days aid in ruling out malaria infection. Although detectable parasitemia almost always accompanies a clinical attack of malaria, parasitemia may occur in the absence of significant symptoms.

Treatment

Presumptive Therapy: Identification of the species of *Plasmodium* should be done as soon as possible. However, presumptive therapy should be instituted to prevent serious complications and death before the diagnosis can be confirmed parasitologically. Since many refugees will be coming from areas of Southeast Asia where chloroquine-resistant *P. falciparum* malaria is endemic, presumptive antimalarial therapy for such refugees must be undertaken with the possibility of chloroquine-resistant *P. falciparum* malaria in mind. For patients who are seriously ill with the presumptive diagnosis of *P. falciparum* malaria, parenteral or oral quinine is indicated. Parenteral quinine should be used with extreme caution and is chiefly indicated for patients who cannot take oral medication. For clinically stable patients chloroquine may be started as an alternative to quinine in initial presumptive therapy, but the patient should be kept under careful observation.

Therapy of Laboratory-Confirmed Cases: When the species has been identified, specific therapy should be instituted along the following guidelines:*

1. *P. falciparum*: Because of the high proportion of chloroquine-resistant *P. falciparum* in Southeast Asia, all *falciparum* infections seen in refugees should be assumed resistant, and one of the following regimens should be used:

   a. Quinine sulfate, 650 mg, t.i.d. x 3 days
      plus pyrimethamine, 25 mg, b.i.d. x 3 days
      plus sulfadiazine, 500 mg, q.i.d. x 5 days; these 3 drugs must be administered concurrently (*1*).
   b. Quinine sulfate, 650 mg, t.i.d x 3 days
      plus Bactrim Double Strength† (160 mg trimethoprim and 800 mg sulfamethoxazole), 2 tablets, b.i.d. x 5 days, administered concurrently.
   c. Quinine sulfate, 650 mg, t.i.d. x 3 days
      plus tetracycline 250 mg, q.i.d. x 10 days, administered concurrently (*2*).

Several points about the above therapy should be noted.

Sulfonamides are used in combination with a folic acid antagonist (e.g., pyrimethamine or trimethoprim) because they are synergistic. The type of sulfonamide used is not critical, provided that a sufficient blood level is maintained for at least 5 days. While combinations of sulfonamide, a folic acid antagonist, and a tetracycline are effective schizonticides,

*All chloroquine and primaquine doses are expressed in terms of the base. Dosages of all drugs are given as the adult dose. Proportional reduction in dosage would be necessary for children.

†Use of trade names does not imply endorsement by the PHS or the U.S. Department of Health, Education, and Welfare.

Health Status of Indochinese Refugees – Continued

their rate of action is slow. Thus, at least 3 days of quinine therapy is important to rapidly reduce the parasite density to safe levels. Treatment of *P. falciparum* malaria is effective in up to 95% of cases; however, such patients should be carefully followed up for at least 90 days to detect recurring symptoms or parasitemia. Recurrences are usually within the first 30 days, but may occur later. Retreatment may be with the same or another drug combination.

2. *P. vivax*: The recommended treatment for *P. vivax* infections is a total dose of 1.5 g of chloroquine (base) over a 3-day period (600 mg initial dose, followed by 300 mg at 6, 24, and 48 hours). There have been no reports of resistance of this species to chloroquine, and this regimen should eliminate the parasitemia and symptoms within 24 to 72 hours. Relapses may occur after chloroquine treatment unless radical curative therapy is administered to eliminate the exoerythrocytic schizonts in the liver. The 2 accepted regimens for radical curative therapy are as follows:

a. Primaquine, 15 mg (base) daily for 14 days. The initial dose should be in association with chloroquine, either with the normal therapeutic course, or, if administered later, with a single dose 600 mg (base) of chloroquine.

b. Primaquine, 45 mg (base) weekly for 8 weeks.

(Continued on page 395)

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

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

DISEASE	33rd WEEK ENDING		MEDIAN	CUMULATIVE, FIRST 33 WEEKS		
	August 18, 1979	August 19, 1978*	1974-1978**	August 18, 1979	August 19, 1978*	MEDIAN 1974-1978**
Aseptic meningitis	383	301	128	3,104	2,567	1,711
Brucellosis	7	3	3	93	114	136
Chickenpox	318	296	308	170,297	123,144	123,144
Diphtheria	–	4	2	62	53	125
Encephalitis: Primary (arthropod-borne & unspec.)	37	50	46	443	570	551
Post-infectious	3	2	5	163	142	175
Hepatitis, Viral: Type B	254	280	280	8,994	9,522	9,444
Type A	556	600	616	18,327	18,072	21,810
Type unspecified	216	180	168	6,645	5,168	5,321
Malaria	19	17	10	408	468	273
Measles (rubeola)	191	285	148	11,888	23,371	23,371
Meningococcal infections: Total	32	28	22	1,850	1,699	1,099
Civilian	32	28	22	1,840	1,677	1,083
Military	–	–	–	10	22	22
Mumps	85	98	123	10,946	13,103	32,096
Pertussis	41	43	43	860	1,291	924
Rubella (German measles)	63	153	73	10,508	16,448	14,606
Tetanus	1	1	2	39	51	51
Tuberculosis	569	566	636	18,000	18,537	19,453
Tularemia	7	2	3	127	74	89
Typhoid fever	9	7	9	286	322	239
Typhus fever, tick-borne (Rky. Mt. spotted)	67	39	39	702	730	614
Venereal diseases:						
Gonorrhea: Civilian	20,827	21,772	21,277	617,216	618,106	618,106
Military	759	404	491	17,387	16,266	17,077
Syphilis, primary & secondary: Civilian	715	409	449	15,250	13,141	12,732
Military	4	4	4	185	182	190
Rabies in animals	113	88	69	3,113	2,018	1,872

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1979		CUM. 1979
Anthrax	–	Poliomyelitis: Total	23
Botulism	15	Paralytic	20
Congenital rubella syndrome (Wash. 1)	35	Psittacosis (Pa. 1, Wash. 2, Calif. 1)	73
Leprosy † (Colo. 1, Calif. 1)	107	Rabies in man (Calif. 1)	2
Leptospirosis (Fla. 1, Tenn. 1, Hawaii 1)	28	Trichinosis (Pa. 1)	81
Plague	9	Typhus fever, flea-borne (endemic, murine)	33

*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.

†Delayed report: Leprosy: Fla. +1

TABLE III. Cases of specified notifiable diseases, United States, weeks ending August 18, 1979, and August 19, 1978 (33rd week)

REPORTING AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
						Primary		Post-infectious	B	A	Unspecified		
	1979	1979	1979	1979	CUM. 1979	1979	1978*	1979	1979	1979	1979	1979	CUM. 1979
UNITED STATES	383	7	318	–	62	37	50	3	254	556	216	19	408
NEW ENGLAND	47	1	41	–	–	–	2	–	3	11	8	1	23
Maine	1	–	3	–	–	–	–	–	–	–	–	–	1
N.H.†	1	–	1	–	–	–	–	–	–	2	1	–	–
Vt.	–	–	1	–	–	–	–	–	–	–	–	–	–
Mass.†	16	–	10	–	–	–	–	–	–	5	7	1	5
R.I.	21	–	15	–	–	–	–	–	–	2	–	–	6
Conn.	8	1	11	–	–	–	2	–	3	2	–	–	11
MID. ATLANTIC	87	–	30	–	–	6	4	–	32	34	14	5	58
Upstate N.Y.	47	–	12	–	–	3	–	–	18	19	11	1	12
N.Y. City	3	–	16	–	–	–	1	–	14	15	3	–	26
N.J.	36	–	NN	–	–	1	1	–	NA	NA	NA	–	8
Pa.†	1	–	2	–	–	2	2	–	NA	NA	NA	4	12
E.N. CENTRAL	45	2	131	–	2	10	27	–	49	64	7	–	29
Ohio	–	–	21	–	–	–	17	–	8	11	–	–	6
Ind.	11	–	26	–	1	2	9	–	14	6	1	–	1
Ill.	–	2	28	–	–	–	–	–	7	19	1	–	12
Mich.	24	–	9	–	–	7	–	–	13	21	4	–	8
Wis.	10	–	47	–	1	1	1	–	7	7	1	–	2
W.N. CENTRAL	19	–	7	–	1	7	2	–	6	23	11	1	14
Minn.†	–	–	–	–	–	–	1	–	3	6	1	–	4
Iowa	2	–	3	–	–	–	–	–	–	1	2	–	2
Mo.	–	–	2	–	1	–	1	–	3	5	3	–	3
N. Dak.†	1	–	1	–	–	–	–	–	–	–	–	–	–
S. Dak.	–	–	1	–	–	–	–	–	–	2	–	1	1
Nebr.	1	–	–	–	–	–	–	–	–	5	–	–	2
Kans.	15	–	–	–	–	7	–	–	–	4	5	–	2
S. ATLANTIC	29	–	26	–	1	3	5	2	67	78	25	1	51
Del.	–	–	2	–	–	–	–	–	–	–	–	–	1
Md.	6	–	4	–	–	–	–	–	8	3	4	–	8
D.C.	–	–	–	–	–	–	–	–	4	1	–	–	5
Va.†	6	–	4	–	1	3	1	–	10	5	4	1	17
W. Va.	1	–	9	–	–	–	3	–	4	2	3	–	2
N.C.	6	–	NN	–	–	–	1	–	15	11	3	–	3
S.C.	1	–	2	–	–	–	–	–	3	3	2	–	1
Ga.	–	–	–	–	–	–	–	–	9	32	–	–	2
Fla.	9	–	5	–	–	–	–	2	14	21	9	–	12
E.S. CENTRAL	30	1	2	–	–	4	2	–	14	21	4	–	7
Ky.	1	–	2	–	–	1	–	–	2	1	–	–	–
Tenn.	4	1	NN	–	–	–	2	–	9	7	1	–	–
Ala.	25	–	–	–	–	3	–	–	2	7	3	–	3
Miss.	–	–	–	–	–	–	–	–	1	6	–	–	4
W.S. CENTRAL	52	3	13	–	–	2	3	–	22	96	59	1	24
Ark.	2	2	–	–	–	–	–	–	2	4	5	–	–
La.†	5	–	NN	–	–	–	–	–	9	35	6	–	2
Okla.	10	–	–	–	–	2	1	–	1	1	5	–	3
Tex.	35	1	13	–	–	–	2	–	10	56	43	1	19
MOUNTAIN	23	–	29	–	1	2	1	–	4	70	49	1	12
Mont.	2	–	7	–	–	–	–	–	–	1	–	–	1
Idaho	–	–	–	–	–	–	–	–	2	1	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–	1	–	–	1
Colo.	12	–	21	–	–	2	–	–	1	11	1	–	5
N. Mex.	6	–	–	–	–	–	1	–	–	10	–	1	1
Ariz.	–	–	NN	–	1	–	–	–	1	46	44	–	4
Utah	1	–	1	–	–	–	–	–	–	–	4	–	–
Nev.	2	–	–	–	–	–	–	–	–	–	–	–	–
PACIFIC	51	–	39	–	57	3	4	1	57	159	39	9	190
Wash.	4	–	37	–	55	–	2	–	6	18	3	–	9
Oreg.	4	–	–	–	–	1	–	–	7	22	3	–	9
Calif.†	36	–	–	–	2	2	1	1	42	116	33	9	170
Alaska	5	–	1	–	–	–	1	–	–	–	–	–	–
Hawaii	2	–	1	–	–	–	–	–	2	3	–	–	2
Guam†	NA	NA	NA	NA	–	NA	–	–	NA	NA	NA	NA	–
P.R.	5	–	19	–	–	–	1	–	–	4	5	–	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.

*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.: La. +1; Chickenpox: N.H. +24, Calif. +3, Guam +1; Enceph., prim.: Mass. +1; Hep. B: N.H. +3, Pa. +24, N.Dak. +1, Va. −1; Hep. A: N.H. +3, Pa. +8, Minn. −1, Va. −1, La. −1, Guam +1; Hep. unsp.: N.H. −1, Pa. +1, Va. −1, Guam +1.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending August 18, 1979, and August 19, 1978 (33rd week)

REPORTING AREA	MEASLES (RUBEOLA)			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	191	11,888	23,371	32	1,850	1,699	85	10,946	41	63	10,508	39
NEW ENGLAND	1	295	1,953	3	92	96	5	384	1	2	1,422	4
Maine	–	17	1,314	–	5	5	–	132	–	–	61	–
N.H.†	–	41	45	–	9	7	–	4	–	–	119	–
Vt.	1	118	25	–	6	2	1	8	–	–	397	–
Mass.	–	13	239	–	27	42	2	36	–	1	501	3
R.I.†	–	102	8	1	7	15	2	28	1	1	92	–
Conn.	–	4	322	2	38	25	–	176	–	–	252	1
MID. ATLANTIC	40	1,470	2,133	4	276	276	7	1,069	2	9	1,876	7
Upstate N.Y.	11	643	1,373	1	96	91	1	156	1	5	1,040	2
N.Y. City	27	728	332	–	67	65	2	113	1	3	253	3
N.J.	1	55	73	1	68	52	2	525	–	1	320	1
Pa.	1	44	355	2	45	68	2	275	–	–	263	1
E.N. CENTRAL	17	3,063	10,548	3	174	220	26	4,768	4	11	2,441	3
Ohio	3	249	470	–	63	55	5	1,727	–	–	134	2
Ind.	–	193	182	1	39	34	1	265	1	9	714	–
Ill.	3	1,362	1,047	–	8	71	4	841	1	–	173	–
Mich.	10	814	7,400	2	49	49	1	879	1	1	1,185	1
Wis.†	1	445	1,449	–	15	11	15	1,056	1	1	235	–
W.N. CENTRAL	59	1,717	380	–	51	60	2	640	2	9	433	1
Minn.	57	1,205	36	–	10	14	–	9	–	1	36	–
Iowa	–	16	54	–	9	9	2	227	–	–	52	–
Mo.	–	413	9	–	24	23	–	189	1	6	47	1
N. Dak.	–	20	191	–	1	3	–	2	–	–	8	–
S. Dak.	1	2	–	–	2	2	–	5	–	1	5	–
Nebr.	–	–	5	–	–	–	–	7	–	–	200	–
Kans.	1	61	85	–	5	9	–	201	1	1	85	–
S. ATLANTIC	43	1,768	4,928	5	461	397	18	534	13	13	1,211	7
Del.	–	1	6	–	3	2	1	36	–	–	4	–
Md.	–	13	47	–	42	25	9	146	2	–	28	–
D.C.	–	1	48	–	2	1	–	1	–	–	1	–
Va.	10	263	2,803	1	66	52	–	81	–	3	199	1
W. Va.	–	52	1,030	–	8	9	1	94	3	4	106	–
N.C.	–	110	116	3	70	82	2	66	1	–	526	3
S.C.	–	151	196	–	57	23	–	3	–	2	61	–
Ga.	25	423	17	–	68	46	–	3	7	1	10	–
Fla.	8	754	665	1	145	157	5	104	–	3	276	3
E.S. CENTRAL	4	194	1,385	3	142	134	6	1,311	3	2	292	7
Ky.	–	37	118	–	29	27	3	1,081	–	1	68	–
Tenn.	–	50	933	–	38	32	2	95	3	–	91	–
Ala.†	–	83	101	2	39	42	1	21	–	1	42	5
Miss.	4	24	233	1	36	33	–	114	–	–	91	2
W.S. CENTRAL	7	888	1,006	8	313	254	3	1,329	8	6	222	9
Ark.	–	9	14	–	25	21	1	480	–	–	6	2
La.†	–	245	341	3	128	102	–	37	–	–	26	2
Okla.	–	22	12	1	24	16	–	–	–	–	22	–
Tex.	7	612	639	4	136	115	2	812	8	6	168	5
MOUNTAIN	2	305	250	–	72	36	5	254	2	2	502	–
Mont.	–	57	106	–	7	2	–	10	1	1	68	–
Idaho	–	18	1	–	5	3	–	8	–	–	199	–
Wyo.	–	36	–	–	1	–	–	–	–	–	–	–
Colo.	–	59	30	–	5	2	1	71	1	–	64	–
N. Mex.†	–	35	–	–	4	7	–	12	–	–	10	–
Ariz.	–	72	50	–	31	13	1	49	–	–	126	–
Utah	2	17	44	–	8	5	3	93	–	1	33	–
Nev.	–	11	19	–	11	4	–	11	–	–	2	–
PACIFIC	18	2,188	788	6	269	226	13	657	6	9	2,109	1
Wash.	5	1,124	157	1	44	39	1	186	–	1	172	–
Oreg.†	–	58	142	4	21	22	1	69	–	–	91	–
Calif.	13	925	482	1	191	156	10	301	4	7	1,824	1
Alaska	–	17	–	–	5	6	–	9	–	–	3	–
Hawaii	–	64	7	–	8	3	1	92	2	1	19	–
Guam	NA	3	25	–	1	–	NA	8	NA	NA	4	–
P.R.	3	320	223	–	2	4	9	525	–	–	33	6
V.I.	NA	4	6	–	3	1	NA	15	NA	NA	–	–
Pac. Trust Terr.	NA	6	576	–	1	2	NA	26	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: N.H. –8; Men. inf.: Wis. +1, Ala. –3, La. –13, Oreg. +1; Mumps: La. –1; Pertussis: La. –1; Rubella: N.H. +5, N.Mex. +1.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending August 18, 1979, and August 19, 1978 (33rd week)

REPORTING AREA	TUBERCULOSIS		TULAREMIA	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSF)		VENEREAL DISEASES (Civilian)						RABIES (in Animals)
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1979	CUM. 1979	CUM. 1979	1979	CUM. 1979	1979	CUM. 1979	1979	CUM. 1979	CUM. 1978*	1979	CUM. 1979	CUM. 1978*	CUM. 1979
UNITED STATES	569	18,000	127	9	286	67	702	20,827	617,216	618,106	715	15,250	13,141	3,113
NEW ENGLAND	17	487	1	1	18	–	6	481	15,476	16,075	16	299	374	34
Maine	1	36	–	–	1	–	–	43	1,091	1,211	–	7	7	22
N.H.†	–	8	–	–	–	–	–	13	559	748	3	17	5	3
Vt.	1	22	–	–	–	–	–	2	360	374	–	1	3	–
Mass.	5	268	1	1	11	–	3	217	6,197	7,098	4	166	228	8
R.I.	–	38	–	–	2	–	–	55	1,286	1,151	–	10	16	–
Conn.	10	115	–	–	4	–	3	151	5,983	5,493	9	98	115	1
MID. ATLANTIC	79	2,822	1	4	47	4	29	2,638	67,111	65,786	76	2,319	1,743	44
Upstate N.Y.	20	528	1	1	8	–	20	464	11,049	10,860	–	160	126	31
N.Y. City	36	1,042	–	3	22	–	1	1,062	26,516	25,484	54	1,582	1,227	–
N.J.	10	511	–	–	11	–	4	249	11,986	12,237	11	305	194	5
Pa.	13	741	–	–	6	4	4	863	17,560	17,205	11	272	196	8
E.N. CENTRAL	84	2,636	–	–	22	–	37	2,711	94,539	93,201	60	2,024	1,434	261
Ohio†	3	466	–	–	3	–	9	428	26,135	24,168	18	395	269	18
Ind.	9	341	–	–	–	–	2	179	8,422	9,604	2	133	92	53
Ill.	48	1,052	–	–	7	–	22	1,422	29,034	29,484	36	1,139	889	129
Mich.†	18	655	–	–	10	–	3	682	22,436	21,517	3	297	139	7
Wis.	6	122	–	–	2	–	1	NA	8,512	8,428	1	60	45	54
W.N. CENTRAL	18	602	18	–	10	1	35	1,131	30,228	31,169	7	207	295	631
Minn.	3	98	–	–	2	–	2	198	5,040	5,383	3	54	127	116
Iowa	3	50	–	–	2	–	13	110	3,682	3,484	–	26	28	120
Mo.	8	327	15	–	4	1	12	370	12,968	13,471	4	96	78	198
N. Dak.	–	14	–	–	–	–	–	18	508	569	–	2	2	47
S. Dak.	–	37	2	–	–	–	–	40	1,019	1,101	–	1	2	66
Nebr.	–	3	1	–	1	–	1	79	2,100	2,339	–	2	9	–
Kans.	4	73	–	–	1	–	7	316	4,911	4,822	–	26	49	84
S. ATLANTIC	135	4,113	8	–	31	46	398	5,249	150,099	151,218	123	3,651	3,467	418
Del.	–	33	–	–	–	–	3	89	2,488	2,080	–	18	6	–
Md.†	19	544	–	–	7	–	31	703	18,311	19,140	9	241	267	9
D.C.	10	212	2	–	1	–	2	249	9,635	9,920	7	280	259	–
Va.	10	461	1	–	4	10	73	608	14,264	14,450	9	308	292	11
W. Va.	1	151	–	–	2	–	8	67	2,070	2,108	–	41	10	–
N.C.	31	649	–	–	–	19	154	669	21,407	21,752	13	305	356	6
S.C.†	10	302	1	–	3	5	61	382	13,982	14,823	8	182	179	130
Ga.	27	650	4	–	–	11	63	1,011	28,739	29,029	30	1,009	857	221
Fla.†	27	1,111	–	–	14	1	3	1,471	39,203	37,916	47	1,267	1,241	41
E.S. CENTRAL	41	1,681	12	–	12	12	109	1,238	52,858	53,357	21	991	677	220
Ky.†	11	434	2	–	5	5	18	84	6,895	6,624	–	102	86	91
Tenn.	20	484	10	–	2	5	65	445	18,834	19,683	6	422	227	76
Ala.	10	385	–	–	5	–	16	380	15,702	15,374	5	186	113	52
Miss.†	–	378	–	–	–	2	10	329	11,427	11,676	10	281	251	1
W.S. CENTRAL	71	2,175	55	3	44	3	71	2,552	80,034	84,779	104	2,735	2,076	1,217
Ark.	8	183	36	–	1	1	16	168	6,305	6,232	1	93	47	248
La.	7	451	4	1	4	–	1	405	14,081	13,785	45	665	430	19
Okla.†	10	235	10	–	–	1	41	257	7,528	7,940	1	56	60	193
Tex.	46	1,306	5	2	39	1	13	1,722	52,120	56,822	57	1,921	1,539	757
MOUNTAIN	13	537	28	–	21	–	13	1,085	24,494	23,202	4	287	257	75
Mont.	–	22	7	–	–	–	3	59	1,153	1,366	–	6	7	8
Idaho	2	10	–	–	1	–	2	27	1,066	895	–	19	8	3
Wyo.	–	4	–	–	1	–	–	31	646	546	–	5	8	–
Colo.†	–	74	10	–	12	–	4	237	6,467	6,462	–	61	72	18
N. Mex.	5	96	2	–	2	–	1	88	3,104	3,307	4	57	61	27
Ariz.	4	268	–	–	3	–	–	285	6,851	5,953	–	84	58	17
Utah	–	21	7	–	–	–	–	67	1,273	1,254	–	3	11	2
Nev.	2	42	2	–	2	–	3	291	3,934	3,419	–	52	32	–
PACIFIC	111	2,947	4	1	81	1	4	3,742	102,377	99,319	304	2,737	2,818	213
Wash.	7	178	3	–	2	–	–	371	8,921	7,895	NA	133	147	–
Oreg.	2	123	–	–	1	–	–	222	6,455	6,949	5	112	93	4
Calif.	97	2,395	1	1	70	1	4	3,007	81,856	79,507	298	2,409	2,544	207
Alaska	–	52	–	–	1	–	–	89	3,255	3,145	–	16	7	2
Hawaii	5	199	–	–	7	–	–	53	1,890	1,823	1	67	27	–
Guam†														
P.R.	NA	41	–	NA	–	NA	–	NA	59	81	NA	–	–	–
V.I.	4	203	–	1	4	–	–	87	1,298	1,445	16	312	307	15
Pac. Trust Terr.	NA	3	–	NA	1	NA	–	NA	109	138	NA	6	12	–
	NA	18	–	NA	–	NA	–	NA	242	310	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: Mich. –4, Md. –3, Fla. –3, Ky. –2, Guam +1; GC: Okla. +70 mil., Guam +3 civ., +2 mil.; Syphilis: N.H. +1, Miss. +3; An. rabies: Ohio +2, S.C. +1, Colo. +3.

TABLE IV. Deaths in 121 U.S. cities,* week ending August 18, 1979 (33rd week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P&I** TOTAL
	ALL AGES	>65	45-64	25-44	<1	
NEW ENGLAND	636	404	156	38	19	34
Boston, Mass.	181	103	51	10	9	10
Bridgeport, Conn.	45	29	12	4	–	4
Cambridge, Mass.	16	12	3	–	–	2
Fall River, Mass.	22	19	3	–	–	–
Hartford, Conn.	55	35	9	4	3	2
Lowell, Mass.	23	16	6	1	–	3
Lynn, Mass.	21	17	2	1	–	2
New Bedford, Mass.	28	20	6	2	–	1
New Haven, Conn.	55	29	17	5	2	1
Providence, R.I.	51	31	14	3	2	4
Somerville, Mass.	7	5	2	–	–	–
Springfield, Mass.	50	33	12	4	1	2
Waterbury, Conn.	35	25	8	1	1	–
Worcester, Mass.	47	30	11	3	1	3
MID. ATLANTIC	2,372	1,490	602	151	46	100
Albany, N.Y.	46	26	11	–	6	–
Allentown, Pa.	12	7	5	–	–	–
Buffalo, N.Y.	115	61	41	4	5	6
Camden, N.J.	46	33	9	1	1	2
Elizabeth, N.J.	26	18	8	–	–	–
Erie, Pa.†	26	16	7	2	–	2
Jersey City, N.J.	30	19	8	2	1	–
Newark, N.J.	43	16	14	6	4	4
N.Y. City, N.Y.	1,294	829	308	96	18	42
Paterson, N.J.	31	17	5	4	3	3
Philadelphia, Pa.†	248	158	63	17	4	19
Pittsburgh, Pa.†	80	46	27	3	1	2
Reading, Pa.	31	22	6	1	–	1
Rochester, N.Y.	135	92	31	5	2	10
Schenectady, N.Y.	33	24	5	2	–	–
Scranton, Pa.†	31	19	10	–	–	3
Syracuse, N.Y.	69	37	23	6	–	–
Trenton, N.J.	35	23	8	2	1	5
Utica, N.Y.	21	12	8	–	–	–
Yonkers, N.Y.	20	15	5	–	–	1
E.N. CENTRAL	2,172	1,295	546	151	85	49
Akron, Ohio	61	40	12	3	2	–
Canton, Ohio	45	27	12	2	1	1
Chicago, Ill.	536	301	135	48	16	8
Cincinnati, Ohio	123	73	37	6	5	5
Cleveland, Ohio	164	94	44	7	13	2
Columbus, Ohio	128	68	40	9	4	2
Dayton, Ohio	89	55	23	4	3	–
Detroit, Mich.	259	143	71	28	13	5
Evansville, Ind.	53	38	11	2	1	1
Fort Wayne, Ind.	64	44	11	4	2	5
Gary, Ind.	20	9	5	4	–	1
Grand Rapids, Mich.	43	19	16	2	2	2
Indianapolis, Ind.	167	110	33	6	13	1
Madison, Wis.	27	13	6	2	3	5
Milwaukee, Wis.	139	86	40	9	2	2
Peoria, Ill.	41	31	7	1	2	4
Rockford, Ill.	33	26	6	–	–	–
South Bend, Ind.	39	25	9	3	–	3
Toledo, Ohio	90	58	16	8	3	2
Youngstown, Ohio	51	35	12	3	–	–
W.N. CENTRAL	727	472	157	48	21	23
Des Moines, Iowa	56	41	10	2	1	–
Duluth, Minn.	23	15	3	3	1	3
Kansas City, Kans.	31	22	7	1	–	2
Kansas City, Mo.	118	76	30	9	–	4
Lincoln, Nebr.	28	18	6	1	–	1
Minneapolis, Minn.	97	55	24	5	7	2
Omaha, Nebr.	91	63	18	5	4	–
St. Louis, Mo.	187	116	41	18	5	7
St. Paul, Minn.	65	47	9	2	3	–
Wichita, Kans.	31	19	9	2	–	4

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P&I** TOTAL
	ALL AGES	>65	45-64	25-44	<1	
S. ATLANTIC	970	582	268	55	35	37
Atlanta, Ga.	127	71	41	8	4	2
Baltimore, Md.	104	61	32	8	2	–
Charlotte, N.C.	73	44	19	2	5	3
Jacksonville, Fla.	90	56	25	2	2	4
Miami, Fla.	64	41	13	5	4	1
Norfolk, Va.	47	23	14	5	3	3
Richmond, Va.	80	42	24	7	4	4
Savannah, Ga.	37	24	12	–	1	2
St. Petersburg, Fla.	64	55	7	–	1	4
Tampa, Fla.	76	48	21	4	3	7
Washington, D.C.	152	80	45	13	5	3
Wilmington, Del.	56	37	15	1	1	4
E.S. CENTRAL	621	372	144	41	35	28
Birmingham, Ala.	86	38	24	7	15	–
Chattanooga, Tenn.	50	37	7	3	1	2
Knoxville, Tenn.	39	27	8	3	–	3
Louisville, Ky.	98	61	25	5	3	7
Memphis, Tenn.	128	80	27	8	5	2
Mobile, Ala.	65	35	15	7	2	–
Montgomery, Ala.	32	18	7	2	3	3
Nashville, Tenn.	123	76	31	6	6	11
W.S. CENTRAL	1,096	600	289	98	51	33
Austin, Tex.	36	21	8	5	1	2
Baton Rouge, La.	45	25	13	5	2	5
Corpus Christi, Tex.	33	16	9	1	5	2
Dallas, Tex.	197	110	49	19	8	7
El Paso, Tex.	43	22	10	4	4	1
Fort Worth, Tex.	85	53	17	10	4	3
Houston, Tex.	203	90	61	26	4	5
Little Rock, Ark.	64	33	20	5	4	3
New Orleans, La.	112	55	34	12	6	5
San Antonio, Tex.	166	102	40	9	8	–
Shreveport, La.	59	38	15	1	4	–
Tulsa, Okla.	53	35	13	1	1	–
MOUNTAIN	513	293	136	43	24	18
Albuquerque, N. Mex.	43	21	9	6	3	1
Colo. Springs, Colo.	22	15	5	1	1	2
Denver, Colo.	113	74	22	10	4	4
Las Vegas, Nev.	38	17	14	4	1	4
Ogden, Utah	14	11	2	–	1	–
Phoenix, Ariz.	117	65	35	10	3	2
Pueblo, Colo.	21	16	4	1	–	5
Salt Lake City, Utah	51	23	15	6	5	–
Tucson, Ariz.	94	51	30	5	6	–
PACIFIC	1,537	946	360	107	59	37
Berkeley, Calif.	13	9	3	1	–	1
Fresno, Calif.	55	29	16	4	4	2
Glendale, Calif.	14	9	2	3	–	–
Honolulu, Hawaii	52	28	14	4	6	1
Long Beach, Calif.	91	55	22	8	2	2
Los Angeles, Calif.	412	248	92	39	12	12
Oakland, Calif.	78	52	17	2	6	3
Pasadena, Calif.	22	17	2	–	2	–
Portland, Oreg.	129	84	31	7	3	–
Sacramento, Calif.	59	33	12	7	1	1
San Diego, Calif.	119	66	38	6	4	1
San Francisco, Calif.	149	93	37	8	6	1
San Jose, Calif.	138	83	35	11	3	5
Seattle, Wash.	129	86	27	3	6	4
Spokane, Wash.	39	28	6	1	3	4
Tacoma, Wash.	38	26	6	3	1	–
TOTAL	10,644	6,454	2,658	732	375	359

*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.

Health Status of Indochinese Refugees – Continued

For a closely supervised patient, the 14-day regimen may be preferable because regular drug-taking would be assured and the likelihood of missing doses during the longer 8-week course of treatment would be avoided.

The administration of primaquine or chloroquine-primaquine mixtures may cause gastrointestinal symptoms in some patients. Patients with glucose-6-phosphate dehydrogenase (G6PD) deficiency may experience mild to severe hemolysis during primaquine therapy. Because an estimated 10%-12% of nationals from Southeast Asia may have at least some level of deficiency of this enzyme, it is recommended that all patients be screened for G6PD deficiency before primaquine treatment is begun and that periodic determinations of hematocrit be done during therapy. Those with a G6PD deficiency should be placed on the once-weekly dosage schedule rather than the daily regimen. The hemolysis is reversible upon cessation of the drug, and a significant and persistent fall in hematocrit should dictate cessation of treatment.

3. *P. malariae*: Most authorities believe that *P. malariae* is not a relapsing species of malaria. There are no reports of *P. malariae* resistance to chloroquine. Therefore, this species may be treated with chloroquine in the doses outlined above for *P. vivax*; no primaquine therapy is indicated.

PARASITIC INFECTIONS OTHER THAN MALARIA

Parasitic infections are common in the Indochinese refugees who are now entering the United States. For example, a survey of 165 Laotian refugees examined in Illinois in February 1979 found hookworm to be the most common intestinal parasite in this group (64%), followed by *Giardia* (18%), *Trichuris* (12%), and *Ascaris* (9%) (*3*). Many of these are infections with which most American physicians have had little or no experience.

Refugees infected with intestinal helminths (worms) do not pose a significant public health hazard since adequate sewage disposal interrupts transmission of the helminths, which require several days of incubation in the soil before becoming infective. Adequate hygienic practices will also minimize the risk posed by intestinal protozoa. Although CDC does not consider it necessary to screen routinely all Indochinese refugees for intestinal parasites, testing for such parasites is indicated as part of a complete examination of individual refugees requiring medical care.

Physicians who want consultation on the diagnosis or therapy of parasitic infections, including malaria, should call the Parasitic Diseases Division, Bureau of Epidemiology, CDC, (404) 329-3676.

SEXUALLY TRANSMITTED DISEASES

Adult refugees receive a medical examination and a syphilis serologic test as part of routine medical screening for obtaining a visa. Patients with obvious genital infections or reactive serologic tests are referred to local health-care facilities for further evaluation

Health Status of Indochinese Refugees -- Continued

and treatment before departure for the United States. Preliminary results of special studies that screened refugee groups for the presence of sexually transmitted diseases indicate that the prevalence of these diseases is very low. Upon arrival in the United States, refugees are invited to attend any PHS hospital or state or local health-care facility for full evaluation of new or pre-existing conditions.

Recommended treatment regimens for syphilis and gonorrhea have been published (*4,5*) and should be followed when treating refugees who develop a sexually transmitted disease after arrival in the United States. Although isolates of *Neisseria gonorrhoeae* from Southeast Asia may be relatively resistant to a variety of antibiotics, initial therapy should consist of procaine penicillin G, ampicillin, amoxicillin, or tetracycline in adequate doses, as recommended by CDC. Follow-up cultures 3-5 days after therapy are important to detect treatment failures caused by resistant organisms. Positive follow-up cultures should be tested for the presence of penicillinase (B-lactamase)-producing *N. gonorrhoeae.*

CHILDHOOD IMMUNIZATIONS

Refugee children who have been immunized in the camps should carry a record of such immunizations with them. Current indications are, however, that most refugee children are not receiving routine immunizations before leaving Southeast Asia. CDC is seeking to improve the immunization status of refugees before they enter the United States, but prudence dictates that all children be evaluated carefully to determine their immunization status upon arrival in the United States.

The purpose of these recommendations is to protect immigrants and persons already residing in the United States from vaccine-preventable diseases. The objective is to ensure that all immigrants receive, when appropriate, vaccines recommended for routine use in the U.S. population. These recommendations are adapted from those of the PHS Advisory Committee on Immunization Practices (ACIP).

Because of immunization requirements for U.S. public schools, all refugee children 2 months through 18 years (up to the 19th birthday) should be up to date on diphtheria, tetanus, and pertussis (DTP) vaccine or tetanus-diphtheria toxoid, adult type (Td); oral polio vaccine (OPV); and measles, mumps, and rubella (MMR) vaccinations. Girls 14 through 19 years old may be immunized with MMR vaccine if they are not pregnant and understand that they should avoid pregnancy for 3 months after the vaccine is given. Use of a standard vaccination record facilitates the recording and transfer of immunization records.

Certain vaccines can be given simultaneously without increasing the rate of adverse reactions or interfering with the immune response. Two acceptable combinations are DTP with OPV, and OPV with MMR. While the effectiveness of the combined administration of DTP and MMR is not certain, it is reasonable to give OPV, DTP, and MMR simultaneously under certain circumstances: if the individual is thought to have had no previous immunizations, if further follow-up is questionable, or if the time available to immunize the person is limited.

Health Status of Indochinese Refugees – Continued

None of the live-virus vaccines discussed here has been associated with allergic reactions. Allergy to eggs is not a contraindication to their use. However, these vaccines should not be given to persons known to have compromised immune systems from disease or medical therapy. MMR vaccines should not be given to women known to be pregnant, and women receiving them should avoid pregnancy for 3 months after vaccination.

Previous serious reactions with DTP or Td are a contraindication to the subsequent administration of these vaccines.

Diphtheria-Tetanus-Pertussis

Children 6 weeks through 6 years of age should receive a primary series of DTP vaccine consisting of 4 doses, 3 given at 4- to 8-week intervals and a fourth given 1 year after the third. Immunization should begin at 2 to 3 months of age, if possible. A booster dose of DTP is recommended when the child is 4 to 7 years of age, usually just before entering school.

Persons 7 years of age or older who have not previously received a primary series of DTP vaccine should receive a primary series consisting of 3 doses of Td, with 2 doses 4 to 8 weeks apart and the third dose 6 to 12 months later. A routine booster of Td is recommended only every 10 years.

Persons who have received a partial series of DTP or Td vaccine can simply complete the series and be considered up to date. DTP and Td vaccine received in Southeast Asia should be considered of adequate immunogenicity for purposes of these recommendations. Unnecessary additional doses of these vaccines should not be given, since adverse reactions may occur more frequently when larger numbers of doses have been administered.

Poliomyelitis

Only persons under 19 years of age need to be vaccinated against polio. Most adults from Southeast Asia will be naturally immune if they have not already been vaccinated.

Vaccination may be completed with OPV or inactivated polio vaccine (IPV).

A primary series of OPV consists of 3 doses, 2 given 6 to 8 weeks apart and the third given 8 to 12 months later. Ideally, polio vaccination is initiated during infancy. A booster of OPV is recommended before school entry; other booster doses should not be necessary for persons immigrating to the United States.

A primary series with IPV consists of 4 doses, 3 given at 4- to 8-week intervals and the fourth given 6 to 12 months later. Booster doses of IPV are recommended every 5 years. IPV is the vaccine of choice for persons with compromised immune systems since OPV is contraindicated in this situation.

Measles-Mumps-Rubella

Refugees aged 15 months to 20 years should receive a single dose of combined MMR vaccine.

Health Status of Indochinese Refugees – Continued

LEPROSY

Leprosy has been a relatively uncommon problem among refugees from Southeast Asia. Currently, persons diagnosed as having infectious leprosy are excluded from admission to the United States. However, persons with leprosy under appropriate treatment can be admitted and present a minimal health risk to the U.S. population. Such persons will be reported to the state and local health department in the jurisdiction to which they are destined for follow-up. Guidance on medical management can be obtained from U.S. PHS hospitals in Carville (Louisiana), San Francisco, and Staten Island, and from Leahi Hospital in Honolulu.

References

1. Hall AP, Doberstyn EB, Mettaprakong V, Sonkom P: *Falciparum* malaria cured by quinine followed by sulfadoxine-pyrimethamine. Br Med J 2:15-17, April 1975
2. Colwell EJ, Hickman RL, Intraprasert R, Tirabutana C: Minocycline and tetracycline treatment of acute *falciparum* malaria in Thailand. Am J Trop Med Hyg 21:144-149, 1972
3. MMWR 28:346-347, 1979
4. MMWR 25:101-102, 107, 1976
5. MMWR 28: 13-16, 21, 1979

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.

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.

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

HEW Publication No. (CDC) 79-8017