



Reported Morbidity  
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# MONTHLY MORBIDITY REPORT

Provisional Statistics

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## HEALTH STATUS - INDOCHINESE REFUGEES

### I. INTRODUCTION

The United States has recently agreed to accept a large number of Indochinese refugees. The bulk of these immigrants are Vietnamese who have fled from their native land in a human tidal wave over the last year. While waiting to be resettled, the refugees have been living in crowded squalid conditions in camps in Thailand, Malaysia, Indonesia, and other Southeast Asia countries.

The United States has agreed to take in 14,000 refugees per month for an undefined period of time. The program was initially slow in starting but large numbers of refugees are now arriving. Louisiana is a high impact area for resettlement, probably because the climate here is similar to that in Southeast Asia. After the Vietnam war in the mid-1970's, Louisiana resettled 8,000 refugees, 6,000 in the New Orleans area. Only California, Pennsylvania, and Texas settled larger numbers of refugees. Although the exact number of immigrants destined for Louisiana is not known, it is estimated that about 300 per month are now arriving. There are several

sponsoring agencies in the state but Catholic Charities is "placing" most of the new arrivals. Because of the acute housing shortage in the New Orleans area, refugees are now being settled in other areas of the state. After New Orleans, the larger urban areas such as Baton Rouge, Lafayette, Alexandria, Shreveport, and Monroe are absorbing the bulk of the refugees.

After the Vietnam War, refugees were initially sent to four large holding camps around the United States where they had initial health screening. Although the United States Public Health Service has recently sent a team of advisors to Southeast Asia to improve health screening there, only the bare minimum of screening required by United States immigration laws is now being done overseas. This includes a chest X-ray and VDRL for those over 15 years old and a cursory physical examination. Screening camps in the United States will not be set up to process the new influx of refugees. The task of health screening is being left to the individual states.

## BULLETIN

### MURINE TYPHUS - NEW ORLEANS

On September 13, 1979, a 25 year old male was admitted to a New Orleans hospital with an eight day history of severe bitemporal headaches, chills, and persistent fever. He had been treated with Amoxicillin for one week without change in his symptomatology and after he developed a macular rash on his trunk, he was admitted for further evaluation. Initial laboratory examinations were negative except for proteus OX-19 agglutination studies which were positive initially at a dilution of 1:160 and rose to 1:2580. Typical clinical symptoms and a positive screening test raised the suspicion for rickettsial disease. The patient gave no definite history of a flea bite but did work in a grain elevator infested with rats. Since rat fleas are the vector of the rickettsial disease murine typhus, a tentative diagnosis of this disease was made and intravenous chloramphenicol led to a rapid defervescence and a complete recovery over the next several days. To confirm the diagnosis of murine

typhus, acute and convalescent sera were submitted to the State Division of Laboratories for testing. Complement fixation studies confirmed the diagnosis of murine typhus with an increase in titer from 1:16 to 1:2512.

In an effort to delineate the scope of human disease in the grain elevator, 164 random bloods were drawn from workers in the immediate area. Only three samples were minimally positive at a dilution of 1:8 and all three workers had a history of possible typhus immunization in the past. No other clinical disease was detected. Several rats were trapped and found to be positive for murine typhus by complement fixation testing. A rat and flea eradication program is now underway in the grain elevator and in other buildings along the wharves. Physicians should be alert to the possibility of additional sporadic cases. Acute and convalescent sera should be submitted for complement fixation testing when a case of typhus is suspected.



## II. DO THE REFUGEES PRESENT A HEALTH THREAT?

Although the refugees appear to have a higher incidence of disease than native Americans, concern about the threat of outbreaks of communicable disease spawned by the refugees is unfounded. However, it is extremely important for physicians and allied health personnel to be aware of the specific diseases prevalent in refugees so that they may receive adequate medical care. From the limited surveillance data available and the experience gained in the resettlement of over 150,000 Vietnamese since May 1975, it is clear that the majority of refugees are free of major contagious diseases and where an illness is present, it will likely represent a personal rather than a public health problem.

## III. SPECIFIC DISEASES

Below is a review of the more significant infectious disease problems that may be encountered in Indochinese refugees.

### A. Tuberculosis

Tuberculosis is the most serious potential health threat of the refugees. Data from the West Coast indicates that 1-2% of refugees arriving during 1979 have been found to have active TB. As many as 50% have had positive TB skin tests, but the proportion of these who have received prior BCG vaccination is not known. In reviewing the Louisiana active roster of TB patients (1977-79), 17 cases in Vietnamese have occurred. This translates to an attack rate among Vietnamese of 212.5/100,000 which is 7 times the rate in the rest of the Louisiana population (30.2/100,000).

Active pulmonary TB cases are screened out by chest X-ray overseas and the cases should be on therapy and non-infective when they arrive in the United States. The local health units are notified of active cases and arrange follow-up treatment.

#### Recommendations:

1. Because 10% of refugees with TB may be infected with an organism resistant to Isoniazid (INH), it is recommended that treatment be started with INH, rifampin, and ethambutol in adults. Children too young to be assessed for alterations of visual acuity should receive INH, rifampin, and streptomycin. Treatment should continue for 12 months after sputum specimens are negative.
2. Since a positive skin test reaction from prior BCG vaccination cannot be distinguished from natural infection, the tuberculin test should be interpreted without regard to prior history of BCG vaccination. All skin test reactors under 35 years of age without evidence of active disease should be given prophylaxis unless there is a contraindication to therapy. INH is recommended for prophylaxis unless the person is known to have

been exposed to a source case with INH-resistant TB. In that situation one of three approaches can be taken: (1.) treat with INH; (2.) treat with rifampin (alone or in combination with INH or another drug); (3.) use no drugs but assure close clinical follow-up and provide treatment with appropriate drugs if tuberculosis develops.<sup>1</sup>

### B. Malaria

In an initial screening of refugees in 1975, 120 cases of malaria were detected. The key point is that chloroquine-resistant *P. falciparum* malaria is endemic in Southeast Asia.

#### Recommendations:

1. Thick and thin blood films should be done on all Indochinese presenting with a history of fever and anemia, splenomegaly, headache, backache, or malaise.
2. Seriously ill patients with a presumptive diagnosis of *P. falciparum* malaria should have parenteral or preferably, oral quinine therapy. For lab-confirmed *P. falciparum* quinine sulfate 650 mg tid X 3 day plus one of the following three regimens is indicated:
  - a. Pyrimethamine 25 mg bid X 3 days and sulfadiazine 500 mg qid X 5 days
  - b. Bactrim (Septra) DS - 2 tabs bid X 5 days
  - c. Tetracycline - 250 mg qid X 10 days
3. *P. vivax* is treated with 1.5 gms of chloroquine over a three day period (600 mg initial dose, followed by 300 mg at 6, 24 and 48 hours). In addition, eradication of the exoerythrocytic liver phase of *P. vivax* requires Primaquine, 15 mg (base) daily X 14 days or 45 mg (base) weekly for 8 weeks.
4. Since an estimated 10% of refugees have G-6PD deficiency, screening for this deficiency should be done before Primaquine or Bactrim (Septra) is administered.<sup>1</sup>

### C. Parasitic Infections Besides Malaria

Parasitic infections are common in the Indochinese refugees now entering the United States. For example, a survey of 165 Laotian refugees examined in Illinois in February 1979 found hookworms in 64%, *Giardia* in 18%, *Trichuris* in 12%, and *Ascaris* in 9% of those screened. The high infection rate with hookworm, *Trichuris*, and *Ascaris* does not pose a significant health hazard because eggs of these parasites require a two week incubation period in the soil before becoming infective and transmission is interrupted by adequate sewage disposal. From a

public health viewpoint, protozoan infections (e.g. *Entamoeba histolytica* and *Giardia lamblia*) pose a greater potential health risk because the cyst stages of these parasites are infectious at the moment feces are passed. *E. histolytica* infection rate in refugees in the Illinois study was similar to the baseline United States level but the incidence of *Giardia* infections (18%) was much higher than the United States norm (less than 4%). The rate of *Giardia* infection in refugees was particularly high in children 4-14 years of age where 30% were infected. Although the risk of *Giardia* transmission is small where good hygiene is practiced, it may pose a public health problem where children congregate, particularly if hygienic practices are deficient.<sup>2</sup>

#### D. Hepatitis B

Preliminary data from screening of Indochinese refugees entering Canada indicates that about 12% are positive for hepatitis B surface antigen (HB<sub>s</sub>Ag). Most such individuals are asymptomatic and carry the antigen chronically. There may be some increased risk of transmission to adopting families but it appears that dental personnel, oral surgeons, and the babies of antigen positive mothers are at particular risk of acquiring infection.<sup>3</sup>

##### Recommendations:

1. HB<sub>s</sub>Ag status should be determined in all Indochinese admitted to hospitals and all pregnant women. Antigen positive individuals should be counselled and given a record of their test result. Their antigen status should also be put in a prominent place in their hospital medical records.
2. Treatment of HB<sub>s</sub>Ag carriers
  - a. Neonates of a hepatitis B antigen positive mother should receive hepatitis B immune globulin (HBIG) or immune serum globulin (ISG) if HBIG is not available. Either should be given as soon as possible after birth.
  - b. In the hospital setting, the proper handling of blood and other body fluids of HB<sub>s</sub>Ag carriers is also clearly indicated.
3. Since there is such a high carrier rate of hepatitis B in Indochinese, dental personnel and oral surgeons should wear gloves and possibly face masks and eyeglasses when treating any Indochinese patient not known to be HB<sub>s</sub>Ag negative.<sup>3</sup>

#### . Sexually Transmitted Diseases

A VDRL in those over 15 years of age is required for entrance into the United States. Preliminary screening results indicate that the prevalence of sexually transmitted diseases is very low in arriving refugees.

##### Recommendations:

1. Although gonorrhea isolates from Southeast Asia can be relatively resistant to a variety of antibiotics, the usual therapeutic regimens are recommended for initial therapy. However, follow-

up cultures 3-5 days after therapy are important to detect treatment failures caused by resistant organisms.

#### F. Immunizations:

Although there are plans to improve the immunization status of arriving refugees, current indications are that most refugee children are not receiving routine immunizations before leaving Southeast Asia.

##### Recommendations:

1. Unless a refugee has written documentation of vaccinations, it should be assumed that no immunizations have been given.
2. The usual schedules should be followed for the childhood immunizations.
3. Children under 6 years of age should receive DTP and children over 6 years of age and adults should receive Td. Only persons under 19 years of age need to be vaccinated against polio.

#### G. Skin Disorders

Leprosy is relatively rare in incoming Indochinese refugees. It is one of the quarantinable diseases and only persons under appropriate treatment can be admitted to the United States. A much more common problem is scabies. Early reports indicate that 4% or more of refugees may have scabies. Preparations such as Kwell<sup>®</sup> and Eurax<sup>®</sup> are effective in the treatment of scabies.

#### H. Other Diseases

1. **Typhoid** - 20 acute cases were reported among the initial refugees admitted in 1975. Typhoid does not appear to be a major problem in the refugees but no data are available about the number of chronic typhoid carriers.
2. **Cholera** - no reported cases of cholera in refugees to date. The cholera strain in Southeast Asia is distinctly different from the strain seen in Louisiana last year. Therefore, it is extremely unlikely that an Indochinese refugee could have introduced cholera into Louisiana.

### IV. HEALTH SCREENING PLANNED BY THE LOUISIANA DEPARTMENT OF HEALTH AND HUMAN RESOURCES

Although the public health threat posed by incoming refugees is felt to be minimal, the Louisiana Department of Health and Human Resources feels that it is in the interests of all, especially of the incoming refugees, that they have a medical evaluation as soon as possible after arriving in Louisiana. A program of health screening has already been initiated at the parish health units. The Catholic Charities Vietnamese Resettlement Program and the charity hospitals will also be participating in the program. Below is a brief outline of the screening:



#### A. Adults (21 years of age or over)

1. Tuberculin skin test
2. Rectal swab-culture for salmonella and shigella
3. Stool specimen for ova, cysts, and parasites
4. Tetanus-diphtheria (Td) immunizations according to routine series for adults
5. The local Catholic Charities office will make arrangements with the nearest charity hospital for physical examinations which will include a general medical evaluation and a careful skin examination for leprosy, scabies, and other significant skin conditions.

#### B. Infants, Children and Adolescents (birth through age 20)

These will be enrolled in currently existing programs (e.g. MCH - Maternal and Child Health; WIC - Women, Infants, and Children). These programs will ensure that all those under 21 years of age have the routine screening tests employed in each program and also:

1. Tuberculosis skin test
2. Nursing evaluation for acute medical problems including those related to malnutrition
3. Skin examination for significant skin conditions including scabies and leprosy

4. Appropriate immunizations for age

5. Rectal swab-culture for salmonella and shigella

6. Stool specimen for ova, cysts, and parasites

#### C. Miscellaneous

Patients with medical problems requiring hospital admission or other specialized care will be referred to the nearest charity hospital.<sup>4</sup>

**NB:** Results of these screening efforts will be tabulated periodically and will be reported in the Louisiana Monthly Morbidity.

#### REFERENCE:

1. Center for Disease Control: Morbidity and Mortality Weekly Report, 28:385-398, 1979.
2. Center for Disease Control: Morbidity and Mortality Weekly Report, 28:463-470, 1979.
3. Center for Disease Control: Morbidity and Mortality Weekly Report, 28:346-347, 1979.
4. Policy Memorandum No. 19, September 7, 1979, Health Screening of Southeast Asian Immigrants, Louisiana Department of Health and Human Resources.
5. Center for Disease Control: Morbidity and Mortality Weekly Report, 25:139-140, 1976.
6. Center for Disease Control: Morbidity and Mortality Weekly Report, 24:188, 1975.
7. Center for Disease Control: Morbidity and Mortality Weekly Report, 24:180, 1975.
8. Center for Disease Control: Morbidity and Mortality Weekly Report, 24: 267-268, 1975.

# **SELECTED REPORTABLE DISEASES** (By Place of Residence)

STATE AND PARISH TOTALS  Reported Morbidity September, 1979	VACCINE PREVENTABLE DISEASES					ASEPTIC MENINGITIS	HEPATITIS A AND UNSPECIFIED	HEPATITIS B	LEGIONNAIRES DISEASE	MALARIA **	MENINGOCOCCAL INFECTIONS	SHIGELLOSIS	TUBERCULOSIS, PULMONARY	TYPHOID FEVER	OTHER SALMONELLOSIS	UNDERNUTRITION SEVERE	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY	RABIES IN ANIMALS (PARISH TOTALS CUMULATIVE, 1979)
	MEASLES	RUBELLA *	MUMPS	PERTUSSIS	TETANUS														
TOTAL TO DATE 1978	343	483	65	4	1	76	541	163	NA	3	112	85	391	3	96	9	16811	547	12
TOTAL TO DATE 1979	253	29	32	17	2	89	554	197	3	4	117	91	414	5	136	9	17230	829	23
TOTAL THIS MONTH	5	2	0	1	0	16	77	24	1	1	2	16	38	1	30	1	2094	163	3
ACADIA		1						1							1		7	1	
ALLEN							1										6		
ASCENSION															1		15	2	
ASSUMPTION						1											9	1	
AVOYELLES								2					1				15	1	
BEAUREGARD													1				10	3	
BIENVILLE												1							
BOSSIER	1																		
CADDO	3	1					2	1			1				5		35	1	4
CALCASIEU							3	1							6		203	4	3
CALDWELL												1	2				133		
CAMERON																	5	2	
CATAHOULA																	4		
CLAIBORNE																	8	1	
CONCORDIA															2		13	1	
DESOTO																	13		
EAST BATON ROUGE																	2		2
EAST CARROLL								1				3			1		173	13	
EAST FELICIANA							1						1				2	3	
EVANGELINE						1	1								2		4	1	
FRANKLIN																	1		
GRANT													1				4		
IBERIA							3	1					1				11		
IBERVILLE													1				7	3	
JACKSON																	2		1
JEFFERSON	1					2	24	3		1		3	2		4	1	102	11	
JEFFERSON DAVIS																	3		
LAFAYETTE						2	3	1									50	6	
LAFOURCHE								1									11	2	
LASALLE																	2		
LINCOLN							1								1		22	1	
LIVINGSTON							2										4	1	
MADISON																	6		
MOREHOUSE																	12	4	
NATCHITOCHES																	10		
ORLEANS							15	4	1		1		9		4		741	41	
QUACHITA							2	1					4		1		101	10	
PLAQUEMINES																	5		
POINTE COUPEE																	3		
RAPIDES							1						1				102	25	9
RED RIVER																	2		1
RICHLAND							3	1									2		
SABINE																	2		
ST. BERNARD															1		3		
ST. CHARLES						1		1				1			1		5	1	
ST. HELENA												1					6		
ST. JAMES												1					3		
ST. JOHN																	12	1	
ST. LANDRY							3						1				6		
ST. MARTIN												1	2				10	2	
ST. MARY						1											9	1	
ST. TAMMANY							1	1					1				5		
TANGIPAHOA							8	1									10	1	
TENSAS																	34	1	
TERREBONNE						7	1						1	1			1		
UNION																	20	1	
VERMILION																	9	3	
VERNON								1									6	1	
WASHINGTON				1				1					1				12	5	
WEBSTER								1									10	3	
WEST BATON ROUGE																	34		2
WEST CARROLL																	12		
WEST FELICIANA						1											3		
WINN							2										3	2	
OUT OF STATE																	15		1
																	6	3	

\* Includes Rubella, Congenital Syndrome.

\*\* Acquired outside United States unless otherwise stated.

From January 1 through September 30, 1979, the following cases were also reported:

2-Typhus Fever, Endemic:	6-Leptospirosis	1-Blastomycosis
20-Trichinosis	1-Rocky Mountain Spotted Fever	1-Q. Fever
1-Psittacosis	1-Brucellosis	