

A Serological Survey for Infectious Agents Causing Clinical  
and Subclinical Infections in United States Military Personnel in Thailand

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**OBJECTIVE:** To determine the incidence of infection, with serologically identifiable agents common to a tropical environment, in a group of susceptible American soldiers stationed in Thailand.

**BACKGROUND:** Studies on fevers of unknown origin among American personnel in Vietnam indicate arboviruses, scrub typhus, and leptospirosis to be major causes. Little is known, however, of the incidence among susceptible American troops of subclinical disease caused by a variety of infectious agents commonly found in tropical environments. Such knowledge requires specific serologic tests. Many diseases in the subclinical form lead to decreased efficiency, loss of productivity, and have considerable impact upon a unit's performance. The incidence of some of these diseases in a group of men during their tours in the tropics may be ascertained by serial serological studies for diseases such as amoebiasis, selected arbovirus diseases, gonorrhea, hepatitis B, leptospirosis, lymphogranuloma venereum, malaria, scrub typhus, and syphilis.

By coupling this serological survey to periodic interviews we hope, in addition, to assess the effect of attitudes and behavior on the development of these infections. Disease acquisition might be associated with length of time in country, exposure to indigenous populations, residence in civilian areas, utilization of drugs, and personal attitudes towards disease and disease prevention.

Systematically collected information of this nature is of importance to both command and medical personnel involved with American troops. This information might suggest types of precautions necessary for military personnel entering tropical environments.

**DESCRIPTION:** This study interfaces with a study being undertaken by the Department of Neuropsychiatry (SEATO Medical Research Laboratory Annual Report 1971, pp 264-265) designed to validate a psychometric test to predict drug abuse among American troops.

The population being studied was drawn from servicemen ages 18-26 in grades E1-E5 in either the United States Army Support Thailand or the United States Air Force 635th Combat Support Group. Shortly after arrival in Thailand a questionnaire was administered to these men to determine the previous duty station, previous tropical experiences, immunization history, home of record, place of upbringing, etc. Answers were also sought to certain attitudinal questions relating to diseases.

During the ensuing year each serviceman will be interviewed three times at approximately 4 month intervals. A serum sample will be collected at the time of each interview. During the interviews questions will be asked relevant both to drug utilization and to medical problems, including questions on the degree of interaction with indigenous populations and inquiries into illness of any sort during the interview period.

General information as to the health of these men is also being obtained through coordination with command medical personnel and by review of medical records. Sera will be submitted for serological

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tests for amoebiasis, selected arbovirus diseases, gonorrhoea, hepatitis B, leptospirosis, lymphogranuloma venereum, malaria, scrub typhus, and syphilis. Serological information will be related to information acquired from each man through interviews and medical feedback.

*PROGRESS:* Subjects were enrolled in this study between April and December 1973. Questionnaires were completed by 434 individuals and serum was obtained from 424. The first of three interviews with each subject was completed in April 1974. All second interviews will be completed by August 1974 and the third by November 1974. After that time the data will be collated and analysed.