

## SEATO MEDICAL RESEARCH STUDY ON MELIOIDOSIS

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**Objective** This study was designed to determine the presence and distribution of Pseudomonas pseudomallei in Thailand and to evaluate its importance as the causative agent of the disease, melioidosis.

**Description** Our previous studies determined that Ps. pseudomallei was present in the water and soil of southern and northeastern Thailand, and there was an association of serological activity of Thai people with the presence of the organism in the environs. However, no clinical cases of melioidosis in man and animals indigenous to Thailand have been found by us. We concluded that Ps. pseudomallei is saprophytic in soil and water although it must still be regarded as a potential pathogen.

**Progress** No research studies were done during the first three quarters of this year but the services of organism identification and serological testing were maintained. In the last quarter we decided to resume surveys of water and soil of other parts of Thailand—particularly in those areas where there are insurgency activities — and to begin case finding of melioidosis in Thai servicemen who had served in Vietnam.

1. Specimens examined

a. Seven cultures isolated from American servicemen in Vietnam were referred from the 406th Medical Laboratory, Tokyo, Japan. Six were confirmed as Ps. pseudomallei. Negative cultures for Ps. pseudomallei included a sputum specimen from a Thai serviceman who recently returned from Vietnam and an organism isolated from a Thai child with clinical meningitis.

b. Ninety three sera from various sources were tested for melioidosis antibody by the sensitized erythrocyte micro-hemagglutination technique. The four reactive specimens were from American servicemen serving in Vietnam.

c. Eighteen water and 19 soil samples obtained in eastern Thailand were inoculated intraperitoneally into hamsters to detect Ps. pseudomallei. No isolates were obtained.

**Summary** Six organisms isolated from American servicemen in Vietnam were confirmed as being Ps. pseudomallei and 4 of 93 referred sera were positive for melioidosis antibody. None of the 18 water and 19 soil samples tested were positive for Ps. pseudomallei.

- 1 On loan from Department of Health, Ministry of Public Health
- 2 Formerly Chief, Dept. of Bacteriology & Mycology, departed SMRL for Walter Reed Army Institute of Research, WRAMC on 10 Aug 67
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