

Surveys of Domestic and Sylvatic Animals for Rabies Virus Infections.

Principal Investigators: Robert L. Hickman, MAJ, VC
Kwanyuen Lawhaswasdi, D.V.M.
William A. Neill, SP5 E-5

Associate Investigators: Dennis O. Johnsen, MAJ, VC
James P. Slowey, SFC E-7

OBJECTIVE: The purpose of this study is to define sylvatic and domestic reservoirs of rabies virus infections in Thailand.

DESCRIPTION: The Fluorescent Rabies Antibody test is used to examine all specimens and is followed up by mouse inoculation tests when necessary. Surveillance of three groups of mammals (bats, rodents, and dogs) is being maintained. The bat studies are confined to a single population of two species from a cave in Saraburi province (More fully described under Ecological and Epidemiological Survey for Rabies virus in Cave Bat Populations). The rodent studies are conducted on animals collected from several provinces in Thailand by the Department of Entomology. Dog specimens are collected and submitted by the Bangkok Department of Public Health and individual Air Force and Army Veterinarians assigned throughout Thailand. Because of the relatively few dog specimens submitted, the absence of pertinent data on individual specimens, and the lack of any control over selection of specimens and feed back of information, most of these programs have been terminated as formal surveys. In their stead, two preliminary studies were initiated in an effort to generate more meaningful data. The first of these is a survey of dogs to be conducted by the Bangkok Department of Public Health in conjunction with the Department of Veterinary Medicine. The second is a survey of dogs to be conducted jointly by the Departments of Epidemiology and Veterinary Medicine.

PROGRESS: A total of 267 bats were examined without finding evidence of rabies virus. No rabies infections were diagnosed after examination of 210 rodents of a variety of species. Two of 20 "randomly selected" dogs from the Bangkok Municipal pound were found to be rabies positive. Insufficient information is available to adequately identify all of the remaining dogs that were submitted as survey specimens so the results of these examinations are included in the routine diagnostic report (Department of Veterinary Medicine Support Activities). Progress to date on the recently initiated dog surveys has been limited to obtaining clearance for undertaking the studies, selecting the geographical areas to be studied, and defining and collecting pre-survey data on the dog populations therein.

SUMMARY: Limited surveys of bats and rodents failed to substantiate previous findings of rabies virus infections in these two groups of animals. Dogs continue to be the principal known reservoir of rabies virus in Thailand, and studies have been initiated to learn more about the epidemiology of rabies virus in this host.