

# IEIP Partners Brief

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## IEIP Begins 5<sup>th</sup> Year of Pneumonia Surveillance

A recent publication in the *International Journal of Infectious Diseases* highlights two key findings from data collected during the first year of IEIP's active population-based pneumonia surveillance: 1) Pneumonia incidence is almost three times higher than previous estimates from passive surveillance, and 2) Pneumonia incidence appears to vary by season, which counters conventional wisdom that respiratory diseases in tropical climates remain relatively stable throughout the year. The findings, reported by Dr. Sonja Olsen and co-authors from IEIP, the Bureau of Epidemiology, and the Sa Kaeo Provincial Health Office, are supported by three subsequent years of data in both Sa Kaeo and Nakhon Phanom. IEIP has conducted active, population-based pneumonia surveillance for over four years in Sa Kaeo, and over three years in Nakhon Phanom.

## International Tropical Medicine Meeting Features IEIP Scientists

IEIP is proud to have had three presentations at the 55<sup>th</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene, held in Atlanta from 12-16 November 2006. At her first international meeting outside Thailand, Khun Saithip Sutthirattana, an IEIP research coordinator, gave an oral presentation entitled "Rickettsioses in Rural Thailand: Clinical Discriminators and Risk Factors." The presentation used data from IEIP's Febrile Illness Study (2003-05), a prospective study designed to determine etiologies of febrile illnesses in Northern Thailand. Khun Possawat Jomrakate, IEIP microbiologist in Sa Kaeo, presented a poster describing "Microbial Etiologies of Disseminated Pneumonia and Sepsis in Sa Kaeo Province, Thailand." Dr. Len Peruski, IEIP Laboratory Chief, gave an oral presentation entitled "Characterization of *Streptococcus pneumoniae* Isolated from Disseminated Disease in Rural Thailand." The latter two presentations summarized data from automated blood culture systems in Sa Kaeo implemented by IEIP with the support of PneumoADIP (the Pneumococcal Vaccines Accelerated Development and Introduction Plan at Johns Hopkins University).

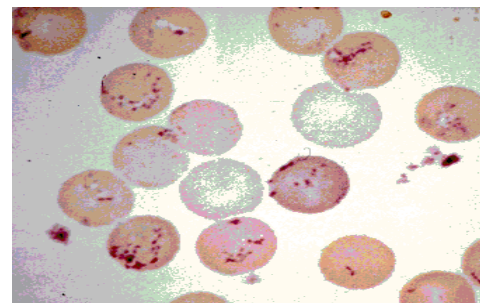


IEIP Research Coordinator Saithip Sutthirattana presented at an international tropical medicine conference in Atlanta

## Novel Pathogens Discovered and New Species Named

Investigations supported by IEIP and FETP, working closely with partners from the Thai Bureau of Epidemiology, Thai NIH, and CDC's Atlanta laboratories, led to the identification in 2006 of two novel pathogens and the first report of a recently discovered respiratory virus in Southeast Asia. Specimens collected during FETP's investigation of a third reported case of

autochthonous visceral leishmaniasis in Phang-Nga Province yielded a *Leishmania* strain shown by genetic sequencing to be distinct from any previously identified species. Genetic analysis also identified a novel species of the bacteria *Bartonella* in blood from at least three patients enrolled in the Febrile Illness Study. A new real-time PCR assay developed at CDC identified human bocavirus, a parvovirus first described by Swedish researchers in 2005, in nasopharyngeal specimens collected during IEIP's ongoing Respiratory Pathogen Study. Almost 5% of patients hospitalized with severe pneumonia in rural Thailand, mostly young children, tested positive for bocavirus as compared to 1% of healthy controls.



*Bartonella tamii*, proposed name for this new species to honor the late Tamara Fiske, first director of the study that led to its identification.

## Avian Influenza Tabletop Exercise Energizes Senior Scientists

In November, the Thai Bureau of Epidemiology (BOE) conducted a tabletop exercise on responding to avian and pandemic influenza. IEIP participated as observers and sponsors. About 70 BOE staff members divided into nine task forces responsible for different response activities: command, coordination, scientific advising, case verification, case investigation, data analysis, IT support, logistics, and public relations. Four scenarios were discussed, including one involving human-to-human transmission, the hallmark of an influenza pandemic. Each scenario was followed by intensive discussion to review current protocols and identify planning gaps. A second exercise is planned for the Thai Surveillance and Rapid Response Team Network Meeting in February, which will include IEIP clinical, epidemiological, nursing, and laboratory staff.