

IEIP Partners Brief



Global Disease Detection: What's in a Name?

A recent initiative known as Global Disease Detection (GDD) will help IEIP and partners expand their work, respond better to partners' public health goals, and foster synergy among IEIP, FETP, and other U.S. CDC overseas programs. GDD resources aim to enhance 1) epidemiologic and laboratory capabilities; 2) collaboration among CDC overseas programs, and between the programs and national/regional counterparts; and 3) outbreak response and preparedness through partnerships with Ministries of Health, WHO, and other organizations. GDD's emphasis on networking will promote the sharing of lessons learned among groups doing similar work in different areas of the world. What does GDD mean for IEIP and the Thailand country platform? (besides more initials to remember)? GDD will improve access to scientific expertise and resources at CDC. It will not change our program's core objectives of surveillance, research, outbreak response, and capacity building. Look for more about GDD in the future.

Human Cases of *Brucella Abortus*: A Thailand First

Thailand's first two human cases of *Brucella abortus* were confirmed in January, using the blood culture systems established by IEIP and the Sa Kaeo Provincial Health Office. IEIP microbiologists isolated the organisms; scientists at the Thai NIH and the National Animal Health Laboratory's Department of Livestock Development (DLD) corroborated the finding.

IEIP's senior epidemiologist joined the outbreak investigation, led by the Sa Kaeo Surveillance and Rapid Response Team (SRRT) and the Bureau of Epidemiology, FETP. The apparent sources of infection were raw beef eaten by the first patient and an aborted cow fetus that had been eaten uncooked by the second patient. The two patients were unrelated and lived in different districts. No additional cases were identified. Among 22 cattle belonging to the first patient, DLD found 3 cattle with evidence of past infection with *B. abortus*.



Detecting zoonotic diseases such as *Brucella* shows the value of the enhanced microbiology capacity in Sa Kaeo Province.

New Study to Examine Severe and Fatal Human Influenza Infections in Thailand

In Southeast Asia, human influenza virus infections are often considered to be mild and relatively uncommon. However, recent scientific data suggest a burden of disease similar to that of developed countries in the northern hemisphere. In Thailand during 2004-06, more than 11,000 suspected cases of human infection with avian influenza A/H5N1 were investigated. Of these, about 2,000 were actually laboratory confirmed human influenza infections, while 26 cases of bird flu were identified.

Data from these investigations afford a unique opportunity to explore the epidemiology of severe and fatal infections with human influenza viruses in Thailand. The new Influenza team at IEIP, headed by Dr. Mark Simmerman, is working closely with the Bureau of Epidemiology, the Thai NIH and the U.S CDC Influenza Division to conduct a retrospective study of severe and fatal human influenza infections. The results of the study should help inform the Thai MOPH on the burden of severe of human influenza infection and guide efforts to control this vaccine-preventable and treatable respiratory virus. The new team will coordinate IEIP's surveillance, research, and training activities related to both human and avian influenza.

SRRT's Maintain Momentum

Surveillance and Rapid Response Teams (SRRT) throughout Thailand got up to speed on hot issues and recent disease outbreaks at a national meeting in February. Over a dozen IEIP and FETP staffers joined the three-day event, which was supported by IEIP/GDD. Nearly 500 SRRT members, epidemiologists, and clinical experts immersed themselves in presentations about infectious diseases ranging from encephalitis to zoonoses, as well as responses to natural disasters. The meeting, held in Thailand's Phitsanulok province, also featured a tabletop exercise on responding to avian and pandemic influenza. A district meeting of SRRT personnel in Lopburi province, also funded by IEIP, was held to help create a model for avian and pandemic influenza response. IEIP assisted in training and facilitation at the meeting.



IEIP's Senior Epidemiologist, Dr. Somsak Thamthitawat, leads SRRT participants as they get a grip on how to respond to outbreaks anywhere, anytime.