

IEIP Brief

3rd Quarter, 2005

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An Update on Activities at the International Emerging Infections Program, Thailand



Department of Disease Control Director-General Thawat Suntrajarn, CDC Director Julie Gerberding, Public Health Minister Suchai Charoenratanakul, and HHS Secretary Mike Leavitt (from left) celebrate 25 years of collaboration.

The last few months have produced many changes, including the departure of Scott Dowell and the arrival of Leonard Peruski, laboratory section chief. Avian influenza continues to make headlines, most recently in Indonesia, where Mark Simmerman assisted the World Health Organization and the government of Indonesia in investigating some of the recent human cases. The Thai MOPH – U.S. CDC Collaboration welcomed the U.S. Secretary of Health and Human Services, Mike Leavitt, and CDC Director Julie Gerberding for a visit in early October that both celebrated the collaboration's 25th anniversary and further highlighted the importance of avian and pandemic influenza in the region. In addition to influenza activities, you will see from this report that many other exciting projects continue at IEIP. – *Sonja Olsen*

Training

Dr. Ann Moen, Deputy Chief of the Influenza Branch at NCID, joined IEIP Adjunct Director Dr. Khanchit Limpakarnjanarat in addressing a meeting of the Influenza Foundation of Thailand on August 18-19. This meeting, held in Khon Kaen, focused on strategies for moving influenza pandemic preparedness from plan to action. University of Michigan MPH candidate Darlene Bhavnani completed her IEIP internship reviewing medical records from outpatients enrolled with influenza-like illness to evaluate whether rapid influenza testing influenced outpatient management in Sa Kaeo hospitals. Although overall antibiotic use was high, her study showed a significant reduction in antibiotic prescriptions for patients identified as influenza positive.

Outbreak Response

This summer, IEIP's assistance was requested in three distinct outbreak investigations. In May, 8 of 47 residents of a Phitsanulok village developed neurological and gastrointestinal symptoms following an outbreak of food poisoning, suspected to be botulism. A cluster of influenza-like illnesses among family members resulted in one death during a July outbreak in Nakhon Pathom. Finally, serological surveys were conducted in August to evaluate the extent of a Brucellosis outbreak among goat and farm workers in Kanchanaburi. IEIP facilitated the transfer of specimens to Atlanta for confirmatory testing.

Surveillance

IEIP welcomes Sucharat Khunchairak, the new coordinator of cooperative efforts between the CDC and the Thai Bureau of Epidemiology. Since the inception of full laboratory operations in Sa Kaeo province in May, Thai clinicians have ordered about 200 blood cultures each month under the PneumoADIP-funded IEIP microbiology project, a laboratory capacity-building partnership that enhances the ongoing pneumonia surveillance system begun by IEIP in 2002. In the first three months of this project, 95 blood cultures yielded major pathogens of clinical significance (see *table, right*). Full laboratory operations in Nakhon Phanom are scheduled to begin in early October, adding to the wealth of data about the microbial causes of disease in Thailand obtained thus far, as well as improving patient care.

Research

In November, IEIP will launch a household survey in Nakhon Phanom to evaluate healthcare-seeking behavior of individuals who experience an episode of pneumonia or influenza-like illness. The findings will complement a 2003 survey in Sa Kaeo, helping to determine the proportion of pneumonia cases likely to be detected by IEIP's active surveillance system.

Pathogen	Initial Diagnosis				Total		
	Pneumonia ≤5y	>5y	Sepsis ≤5y	>5y			
<i>Staphylococcus aureus</i>		2		4	6		
<i>Streptococcus</i>							
<i>Streptococcus pneumoniae</i>			1		1		
Group A (<i>S. pyogenes</i> & others)			1	1	2		
Milleri Group			1		1		
Viridans Group	1		2	1	5		
<i>Haemophilus parainfluenzae</i>				1	1		
Enterobacteriaceae							
<i>Escherichia coli</i>		7	2	5	13	27	
<i>Enterobacter</i> species				1	1	2	
<i>Klebsiella pneumoniae</i>		1		1	1	3	
<i>Proteus mirabilis</i>		1				1	
Pseudomonads							
<i>Burkholderia pseudomallei</i>				2		2	
Others			1		2	3	
Salmonellae (non-typhoidal)	1			1	5	7	
Vibrionaceae							
<i>Vibrio vulnificus</i>				1		1	
<i>Aeromonas hydrophila</i>					1	1	
<i>Cryptococcus neoformans</i>					2	2	
Others	6	5	6	1	1	11	30
No growth	50	100	48	80	22	199	479
Total blood cultures	58	116	59	75	25	241	574

Notes: 1. Only the most clinically relevant pathogens are shown.
2. Of 574 completed blood cultures, 95 were positive (16.5%).