



Avian Influenza surveillance network in displaced populations

Faculty of Tropical Medicine
Mahidol University, Bangkok Thailand
&
US CDC Avian Influenza Surveillance Network

Shoklo Malaria Research Unit

- SMRU provides health care to the refugee and migrant population along the Thai-Burma border since 20 years



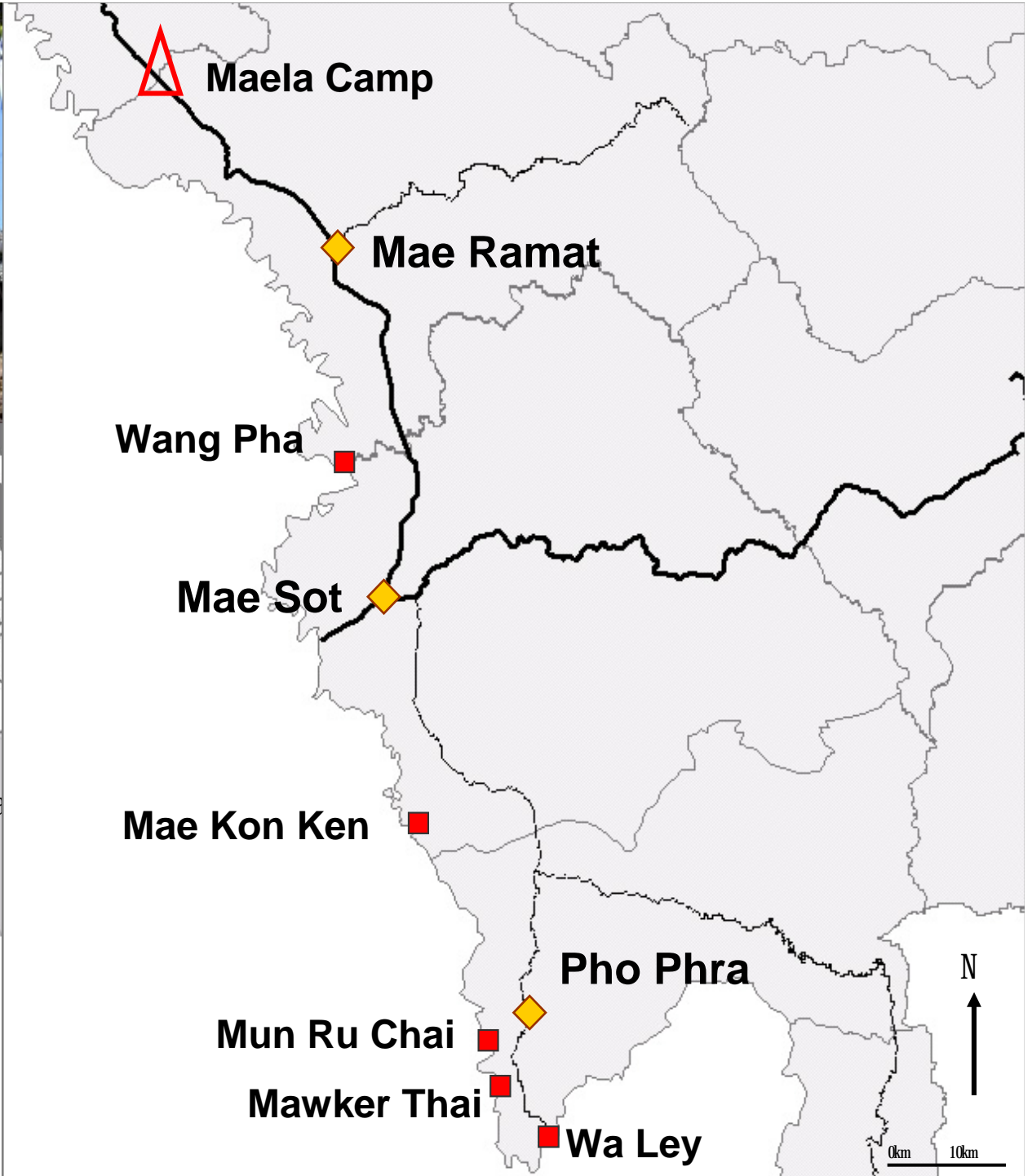
- Malaria Research

- treatment of malaria
 - malaria in pregnancy

- Antenatal care

- Office and Laboratory in Mae Sot
- Clinics in Maela camp, Mawker Tai, Mun Ru Chai, Wang Pha and Mae Kon Ken





Objectives

- Epidemiology of Respiratory Infections
 - Data collection
 - Etiology of R.I

- Surveillance of Avian Influenza
 - Case definition
 - Laboratory diagnostic of H5NI

Epidemiology of ARI

- Passive surveillance system for ARI:
 - recording of respiratory infections based on common definitions
 - report monthly on a common reporting sheet
 - stratify by age, sex, and severity (IPD vs OPD)
 - crude indication of trends only

Epidemiology of ARI

- Etiology of R.I:
 - cross-sectional surveys of patients with ARI presenting to the medical facility (OPD and IPD)
 - coordinated by SMRU staff (in collaboration with NGO staff)
 - Start in Mae La camp
 - 4 times per year to detect seasonal variation
 - each survey will be for approximately one week
 - ~ 300 samples per visit
- Antibiotic Resistance:
 - *Streptococcus pneumoniae*

Epidemiology of ARI

- Distribution of results:
 - Data (Epidemiology of R.I) will be collected, compiled, analyzed and uploaded in a web-page accessible to all partners (www.smru-ai.com)
 - Shared with CCSDPT HIS

AI Surveillance

- Suspected AI H5N1 cases:

- Use Thai MOPH case definitions

DLD suggest $\geq 5\%$ poultry die off as threshold for animal investigation: we propose to use the same threshold for human case definition

- SMRU will perform preliminary testing
- SMRU will inform MOPH if a specimen tests PCR positive for H5N1
- SMRU will be responsible for sending clinical material for confirmatory tests at the Thai reference lab

AI Surveillance

- Laboratory Work

SMRU will have the capacity to make lab preliminary testing of H5N1 using PCR. Confirmation test will be done by MOPH.

The result of SMRU testing of H5N1 will only be communicated to MOPH.



AI Surveillance

Virology laboratory

testing clinical specimens using CDC real time PCR assays

- nasopharyngeal aspirate +/- throat swab
- test for influenza A/B (sub-type A – H1/3/5/7/9) and also test for RSV (in children <5y)

Bacteriology laboratory

capable of processing wide variety of clinical specimens

- sputum (older children and adults)
- nasopharyngeal swab (all age) – to define carriage and antimicrobial sensitivity patterns



<http://www.shoklo-unit.com>