



The Emerging Threat of Arboviruses: What can ASEAN do to prepare for this epidemic?

25 January 2024

10am - 12pm (SGT) 9am - 11am (BKK/JKT)

- Commonly found arboviral infections in the region are Dengue, Chikungunya, Zika and Japanese Encephalitis.
- Wolbachia technology using replacement and suppression approaches showed reduction in number of Aedes mosquitoes in ID and SG, respectively.
- Surveillance (serum, genetic, environmental) programs are needed in ASEAN to stay abreast of arboviral infections.
- Specific diagnostics and effective antivirals and vaccines are needed to diagnose and treat/prevent arboviral infections.
- Collaboration and regular use of new technologies is key to stay prepared in the fight against arboviral infections.

Call to Action

- Potential areas for collaboration:
 - Genomic surveillance studies across the region that predict severity dengue based on genotype and serotype.
 - A non-invasive rule-out test for dengue from other bacterial infections and viruses.
- Develop better near patient diagnostics to rule out dengue early and diagnose acute zika during pregnancies
- Establish and sustain a collaborative surveillance network to share information on current dengue strains and surveillance data. Suggested platform: UNITEDengue
- Advocate to increase the age range including older adults in vaccine trials

Chair and Moderator

Prof Leo Yee-Sin

Senior Consultant, MOH, Senior Advisor, NHG, Singapore

Prof. Dr. Erni Juwita Nelwan

Head of Division of Tropical and Infectious Disease, Dept. of Internal Medicine at Faculty of Medicine, Universitas Indonesia/Cipto Mangunkusumo Hospital, Indonesia

Speakers and Panellist

Dr. Judith Wong

Microbiology and Molecular Epidemiology Division, EHI, NEA, Singapore

Assoc. Prof. Nasikarn Angkasekwina

Division of Infectious Diseases and Tropical Medicine, Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand

Dr. Chia Po Ying

Consultant, NCID, Singapore

Prof. Lisa Ng

Executive Director, A*STAR Infectious Diseases Labs, Singapore

Dr. Rontgene M. Solante

Chairman, Adult Infectious Diseases and Tropical Medicine, San Lazaro Hospital, Philippines

Highlights from the webinar

- Speakers from Indonesia, Philippines, Singapore and Thailand shared about their experiences and challenges in managing arboviruses in their respective countries:
 - Dengue**
 - Dengue is the most common and pressing arbovirus across the region.
 - There is a shift in prevalence and risk of dengue towards older adults in Singapore and Thailand (Dr Chia, Prof Nasikarn)
 - Low population immunity seen in sero-surveillance studies in Singapore
 - High case fatality rate of dengue in the Philippines arising from lack of healthcare seeking behaviour hence delay in treatment (Dr Solante)
 - Challenges in community acceptance and awareness of potential risks in rural areas (Prof Nelwan)
 - No dengue vaccine available for Philippines (Dr Solante)
 - Sanofi and Takeda vaccines are not available for older populations in the region (Dr Chia, Prof Nasikarn, Prof Nelwan)
 - Wolbachia is effective in managing mosquito populations in Singapore and Indonesia (Dr Wong, Prof Nelwan)
 - Chikungunya**
 - High incidence of chikungunya in the Philippines, having recently experienced an outbreak Oct 2023 (Dr Solante)
 - Emerging Arboviral Infections (Zika and JE)**
 - Zika virus infection during pregnancy is the most concerning. Misdiagnosis of Zika virus infection during pregnancy may raise the risk of fetal complication (Dr Nasikarn)
 - JE is an emerging threat in Indonesia, endemic in West Kalimantan and Bali areas (Prof Nelwan)
- 3 Zika virus-specific and 4 Dengue-specific epitopes have been identified and have been evaluated (Prof Ng)
- There is need for new diagnostics in simultaneous detection of different antigens and antibodies, a rule-out test for dengue from other viruses and bacterial infections (Prof Nasikarn, Prof Ng)
- There is need to improve clinical guidelines in management and detection of dengue in Philippines and Singapore (Dr Solante, Dr Chia)



225 Registrations



145 Attendees



10 Countries



99% From ASEAN



12 Questions raised

Watch the Webinar

https://youtu.be/eqNybORO_-E