

Concept Note and Agenda

‘Epidemiological Study Design Virtual Training 2021’

Background

During the past years, various epidemiological surveys have been designed in partnership between the Massey University EpiCentre, the New Zealand Ministry for Primary Industries, and the World Organisation for Animal Health (OIE). These surveys were planned together with the national veterinary services of Lao PDR and Myanmar, and successfully implemented under the New Zealand (NZ) funded Project ‘ASEAN Regional Strengthening FMD control in South East Asia’. Surveys included assessing the socio-economic impact of Foot and Mouth Disease (FMD), serological studies to estimate FMD incidence/prevalence, post-vaccination monitoring of the risk-based partial vaccination campaign and animal movements. Key information was obtained from these surveys which contributed to the preparation of risk based national FMD control strategies. They also evaluated and strengthened overall FMD control measures. Therefore, it is desirable to generate capacity and competence for survey design to enable partner countries to implement monitoring and evaluation activities without having to rely on external assistance. Thus, it will be extremely useful to share the knowledge, methodology, and lessons learned from these surveys with both endemic and FMD free SEACFMD member countries by way of training technical officers and associated professionals of partner countries in epidemiological study design. The activity will also help OIE review the approaches and methodologies practised in the South East Asian region and harmonize future joint investigations, projects not limited to FMD prevention and control but also other Transboundary Animal Disease (TAD’s) such as African Swine Fever (ASF) and Lumpy Skin Disease (LSD).

Building capacity in epidemiological study design is part of the training objective and programme developed and delivered by the EpiCentre, Massey University, and the OIE SRR-SEA under Output 3 of the NZ MFAT funded project ‘ASEAN REGIONAL, STRENGTHENING FOOT AND MOUTH DISEASE CONTROL IN SOUTH EAST ASIA’ and supported by the Australian funded Department of Agriculture and Water Resources (DAWE) Project, “ENHANCED CAPACITY OF COUNTRIES IN SOUTH-EAST ASIA TO DETECT, CONTROL AND PREVENT THE SPREAD OF PRIORITY TRANSBOUNDARY ANIMAL DISEASES.”

Objectives

The training aims to strengthen the capacity of veterinary services in the South East Asia region in designing and conducting various types of epidemiological surveys. The participants will learn about basic and advanced epidemiological study types and real-world applications in the region. In addition, participants will develop the skills to identify the strengths and limitations of the various epidemiological study designs considering the research question, the available time, and resources.

Methodology

Five virtual tutor-moderated workshops in study design will be delivered to participants from the Veterinary Services of SEACFMD member countries by a team of Massey University EpiCentre. The workshop will cover theoretical and practical aspects of epidemiological study design using examples from the latest research of the NZ MFAT funded program, i.e. baseline survey, animal movement survey and post-vaccination monitoring.

The content will be delivered using a flipped model, which means participants will do the basic learning before live webinar sessions. Participants will work through online learning modules and videos before entering the live webinar made available via Massey University's online learning Moodle platform (Stream). In addition, learning resources such as record presentations and self-study material will be provided. The online system will also provide access to forums that participants can discuss ideas and ask questions. Moreover, the webinar will also offer an opportunity for national technical experts to describe and share their experiences about surveys and studies they have undertaken or in which they have been involved in the past.

Proposed operational plan

- Online course module created in Moodle (Stream) with protected personal username and password will be accessible from 5 November 2021 up to six months after the course has finished on 10 December 2021.
- Three study design topics including self-learning videos with text and oral explanations, followed by online workshop sessions and case scenario exercises under the headings listed below.
 - a. Cross-sectional surveys
 - b. Questionnaire design
 - c. Case-control study
 - d. Country team scenario exercise 1
 - e. Country team scenario exercise 2

Timetable

Topics	Dates	Description
Introduction & cross-sectional studies	5 November 2021	Welcome to Stream, material available for review, video 1
	11 November 2021	1 st Zoom call at 9 am Bangkok time (GMT+7) Summary and case study/discussion
Questionnaire design	12 November 2021	Material available for review, video 2
	18 November 2021	2 nd Zoom call at 9 am Bangkok time (GMT+7) Summary and case study/discussion
Case-control studies	19 November 2021	Material available for review, video 3
	25 November 2021	3 rd Zoom call at 9 am Bangkok time (GMT+7) Summary and case study/discussion
Scenario exercise 1	26 November 2021	Assign case scenario 1 for country teams
	2 December 2021	4 th Zoom call at 9 am Bangkok time (GMT+7) Presentations by each country team and discussion
Scenario exercise 2	3 December 2021	Assign case scenario 2 for country teams
	10 December 2021	5 th Zoom call at 9 am Bangkok time (GMT+7) Presentations by each country team and discussion

Participants

The SEACFMD member countries (Brunei Darussalam, Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, the Philippines, Singapore, Thailand, and Vietnam) funded by the NZ FMD control project. Additionally, PNG and Timor Leste will be invited to the training programme under the Australian funded DAWE Project. **Each member countries are requested to nominate 3 participants.**

Target group

The Transboundary Animal Disease (TAD's) prevention and control managers, epidemiologist, veterinarians working with National Veterinary Services at central or provincial level engaged in designing, planning and implementation of epidemiological study designs to better understand the epidemiology of disease, risk factors of the disease and monitoring and evaluation activities.

Facilitators

1. Professor Emeritus Cord Heuer, EpiCentre, Massey University, New Zealand.
2. Associate Professor Naomi Cogger, EpiCentre, Massey University, New Zealand.

Coordinators

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