



Course outline for Annual International Training Course: AITC

Theme Public Health

1. Course Title

“Implementing the One Health Approach to Emerging Disease Management into Action:
Lessons learned from the COVID-19 pandemic”

2. Duration

3 weeks

3. Background

Emerging diseases are transmitted between humans and animals by a variety of routes including direct contact (rabies), the environment (anthrax), via food (campylobacter/salmonella/brucella/bovine tuberculosis), or through bites by arthropod vectors (malaria/leishmaniasis/Rift Valley fever). As we have recently seen with the Ebola and Zika outbreaks, in our interconnected world, an animal pathogen can catch a ride on the sole of a shoe, beneath a finger nail, or in respiratory passages, and travel from one remote corner of the globe to another in less than a day. Furthermore, zoonotic illness is not a small or insignificant problem; the majority of human pathogens are zoonotic (60%) and three-quarters of new and emerging pathogens are zoonotic from wildlife species.

The one health approach refers to the collaboration of multiple disciplines, sectors and groups working locally, nationally and globally to attain optimal health for people, animals and the environment. This conceptual framework on the concept of “community of practice” as it is supposed to drive collective action for one health stakeholders. Therefore, strengthening sustainably one health capacities also requires thinking about “the next generation and developing one health academic training program involving public health, veterinary public health and environmental health officers to develop a new culture of interdisciplinarity and systems thinking, involving social and environmental sciences in the community setting.

The ASEAN Institute for Health Development (AIHD) was established in 1982 as the ASEAN Training Centre for Primary Health Care Development. It was a joint effort of Mahidol University, the Ministry of Public Health and the Department of Technical and Economic Cooperation (DTEC, now TICA) of the Royal Thai Government, with strong support from the Japan International Cooperation Agency (JICA). AIHD is based on a forward looking and conceptually challenging perspective on human resource development which aims to support the global strategy of “Health for All” through the primary health care approach advocated by WHO, an approach which is valid not only for Thailand but also other

ASEAN countries. AIHD has three key missions, namely education and training, technical services, and research and development, focusing on participatory community-based health and related program management, with a special emphasis on facilitating the paradigm shift from a “service-oriented” approach to a “development” approach in order to promote “Health for All” through human capacity building and community empowerment.

Since the beginning of the COVID-19 pandemic, public health decision-makers has been called on to identify responses that are appropriate in intensity, duration, and scope. Early models focused on estimating fundamental quantities and projecting the speed at which generic interventions should be deployed to early spread. Thailand, the second country affected in the timelines of COVID-19 outbreak. At present (26th May 2020), the accumulated number of COVID-19 cases in Thailand is 3,045. Of this, the cases are the forensic practitioner working in Bangkok. Although patients may get the infection from workplace exposure or through spreading in the community, at the period of the occurrence of the case, the patients in Thailand are mostly imported cases and recording of local spreading in the community is limited. There is low chance of forensic medicine professionals coming into contact with infected patients, but they can have contact with biological samples and corpses. At present, there is no data on the exact number of COVID-19 contaminated corpses since it is not a routine practice to examine for COVID-19 in dead bodies in Thailand. Nevertheless, infection control and universal precautions are necessary. Forensic professionals have to wear protective devices including a protective suit, gloves, goggles, cap and mask. The disinfection procedure used in operation rooms might be applied in pathology/forensic units too. According to our best knowledge, Thailand is the top range in the world for COVID-19 infection and control.

The training program on implementing the one health approach to emerging disease management into action: Lessons learned from the COVID-19 pandemic” will be offered by ASEAN Institute for Health Development (AIHD), Mahidol University. It is the international three weeks intensive program with the development of implementation and managerial skills for medical and public health care professionals through virtual conference. The training consisted of three modules; **Module 1:** Fundamental skills of one health concept, **Module 2:** Infection prevention and control for COVID-19, **Modules 3:** Implementing the one health approach into action.

4. Course Objectives

At the end of the training course, the trainee should be able to:

1. Develop fundamental skills of one health concept and be able to recognize the use and value of the application for problem solving
2. Understand the relationship of varying disciplines to the problem they are investigating and will be able to interpret and represent information from their discipline and the community
3. Synthesize information from contributing disciplines and community sources and formulate integrated solutions through an interdisciplinary framework
4. Identify the implement plan to control the prevention and control of COVID 19 through one health concept

5. Course Outline

Module 1: Fundamental skills of one health concept			
Date	Topic	Period (min)	Method
16 Nov 2021	One health concepts and knowledge	60	Virtual Online Conference/discussion
17 Nov 2021	Ecosystem health and trans-disciplinary approach	60	
18 Nov 2021	Behavior change and public health	60	
19 Nov 2021	Policy, Advocacy and Regulation	60	
Module evaluation: post-test (70% score pass)			

Module 2: Infection prevention and control for COVID-19			
Date	Topic	Period (min)	Method
23 Nov 2021	Sciences for Corona-virus description, current situation	60	Virtual Online Conference/discussion
24 Nov 2021	Symptoms/clinical outcomes/treatment	60	
25 Nov 2021	Safety equipment and PPE	60	
26 Nov 2021	Critical preparedness, readiness and response actions	60	
Module evaluation: post-test (70% score pass)			

Module 3: Implementing the one health approach into action			
Date	Topic	Period (min)	Method
30 Nov 2021	Lessons learned from the COVID-19 pandemic in Thailand	60	Virtual Online Conference/discussion
1 Dec 2021	Lessons learned from the COVID-19 pandemic in Japan	60	
2 Dec 2021	Lessons learned from Asian liver fluke disease	60	
3 Dec 2021	Lessons learned from Southeast Asia	60	
Module evaluation: post-test (70% score pass)			

6. Number of participants

50-80 target participants could be from non-robust countries that are endemic or hot-spot countries for emerging disease.

7. Participants Criteria

All applicants should apply through online registration

Module 1-3

1. Lecture, researchers, government staff and master in the environmental, public health and Veterinary Science fields
2. Be able to attend entire course (Module 1-3) with a minimum of 70%
3. Complete evaluation of module 1-3 with a minimum of 70%

8. Invited Country

ASEAN and other countries

9. Training host

ASEAN Institute for Health and Development, Mahidol University, Salaya, Phutthamonthon, Nakhonpathom, Thailand.

10. Training Methods

Virtual Online Conference Platform

11. Expected outcomes

11.1 50-80 target participants of current one health workforce will be trained and cooperative.

11.2 One Health Core Competencies (system management, system thinking, collaboration and partnerships) and related technical skills of the trainers will be developed.

11.3 An interdisciplinary collaboration framework will be created and disseminate to different levels of audiences.

12. Evaluation plan

12.1 Participants will be evaluated their achievement by posttest each module

12.2 Participant will be requested to complete the assignment which determine their intention to apply the experience gain after complete the course

12.3 Participants will be conferred a certificate of completion if they could attend all modules, pass the evaluation and submit an assignment

13. Institution

-Course consultant

Assoc. Prof. Dr. Phudit Tejativaddhana

Director, ASEAN Institute for Health Development (AIHD), Mahidol University

- Executing Agency

Thailand International Cooperation Agency (TICA)

-Organizing Agency

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