



FMD outbreak investigation and response in endemic setting: THAILAND

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Outline: FMD outbreak investigation and response in endemic setting: THAILAND

- FMD situation in Thailand in brief
- FMD outbreak investigations
- FMD outbreak response

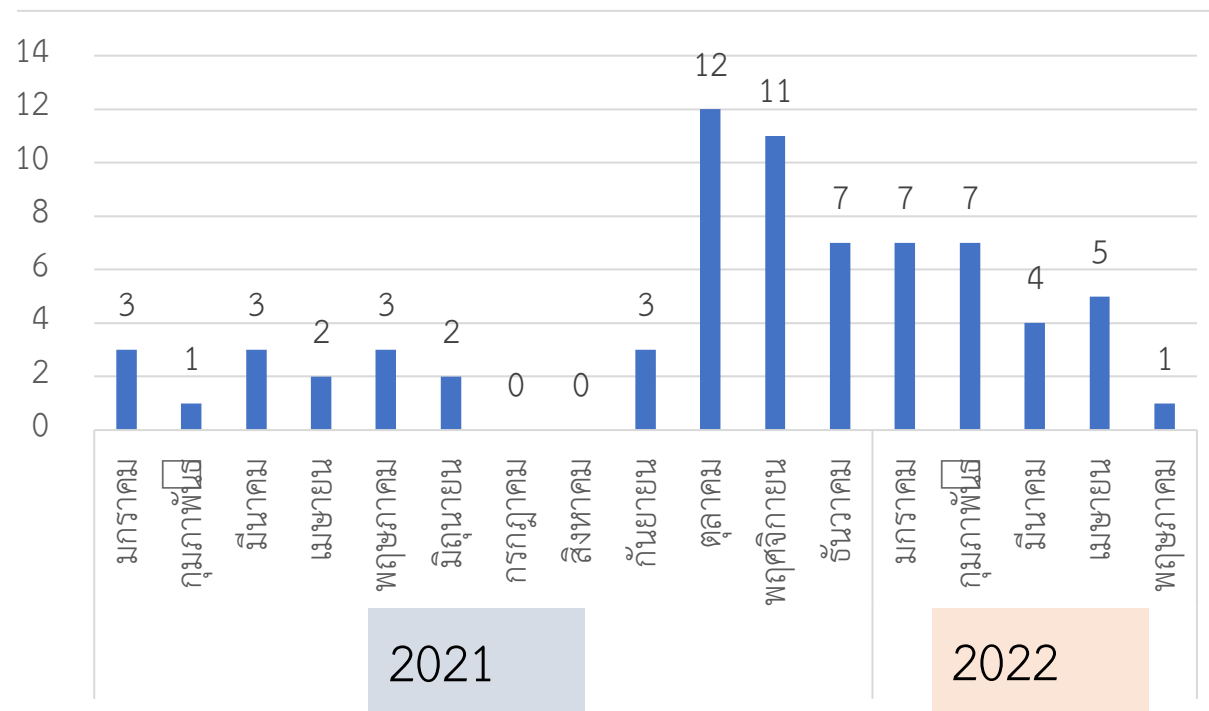
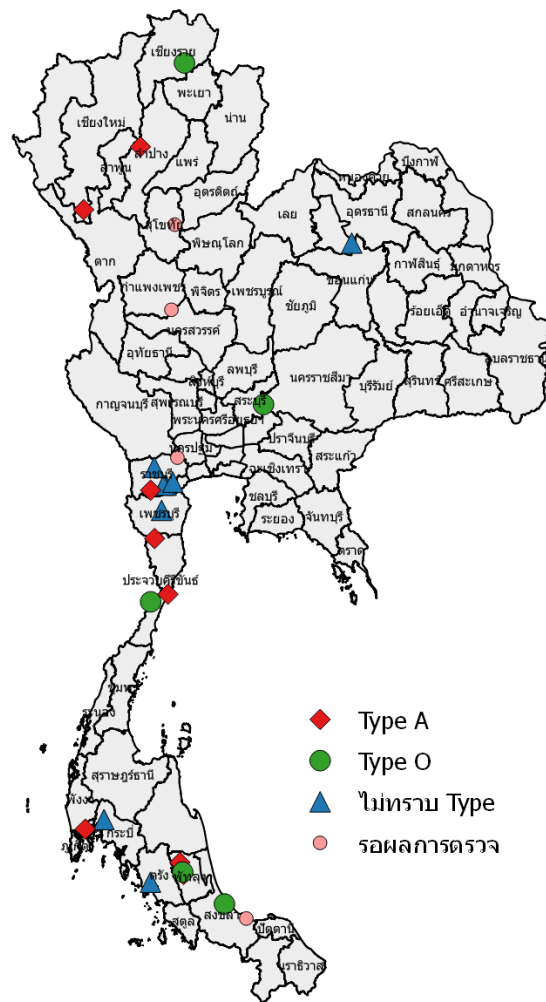
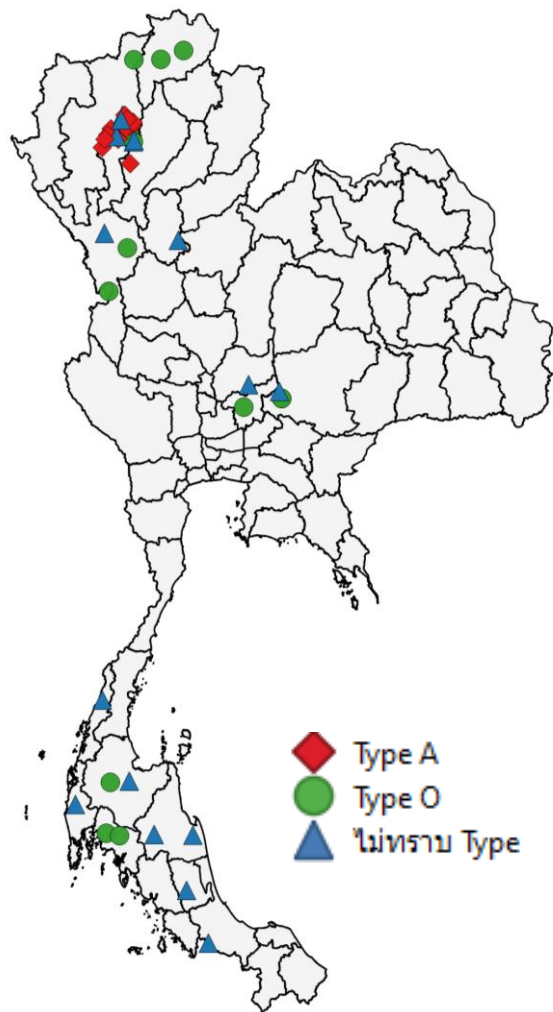
FMD situation in Thailand in brief

Year	Situation	Serotypes
2021	47 outbreaks in 18 provinces <u>By Production types</u> <ul style="list-style-type: none">- Beef cattle 29 outbreaks- Dairy cattle 17 outbreaks- Buffalo 1 outbreaks	<ul style="list-style-type: none">- type O 14 outbreaks- type A 12 outbreaks- Not typed 20 outbreaks- Not samples 1 outbreak
2022 (Jan-May)	25 outbreaks in 13 provinces <u>By Production types</u> <ul style="list-style-type: none">- Beef cattle 12 outbreaks- Dairy cattle 12 outbreaks- Buffalo 1 outbreaks	<ul style="list-style-type: none">- type O 5 outbreaks- type A 8 outbreaks- Not typed 8 outbreaks- Pending the result 4 outbreaks

FMD Situation: As of May 2022

2021

2022



FMD outbreak investigations

- **General epidemiological outbreak investigation:**

- Disease investigations are generally conducted by the authorities every time an incident occurs.
- Enter the DR2 form through the E-Smart Surveillance
- Within 72 hours

- **Specific or special outbreak investigation:**

- When an unusual event occurs e.g. unusual time, unusual place, and unusual virus strain, etc.
- Led by regional livestock office team
- Follow the steps of epidemiological outbreak investigation e.g.
 - Active case finding to determine the magnitude of outbreak
 - Descriptive study to explain time, place, animal, first case, index case, etc.
 - Analytical study to identify risk factors e.g. vaccination, animal movement, etc.
- The activity needs well trained epidemiologists to conduct.
 - PI graduated the 2nd module of FETPV or comparable courses

Example findings from outbreak investigation

- FMD vaccination
 - Does not comply with the department's protocol.
 - Sometimes it is linked to the attitude problems of farmers.
- Movement
 - Frequency of movement in/out of animals, feed and materials
- Farming and disease prevention systems
 - Possibility of exposure to other animals out of their farm
- Farm management
 - Source of roughage from hi risk area

FMD Control Measures

Law enforcement: Animal Epidemics Act, B.E. 2558 (2015)

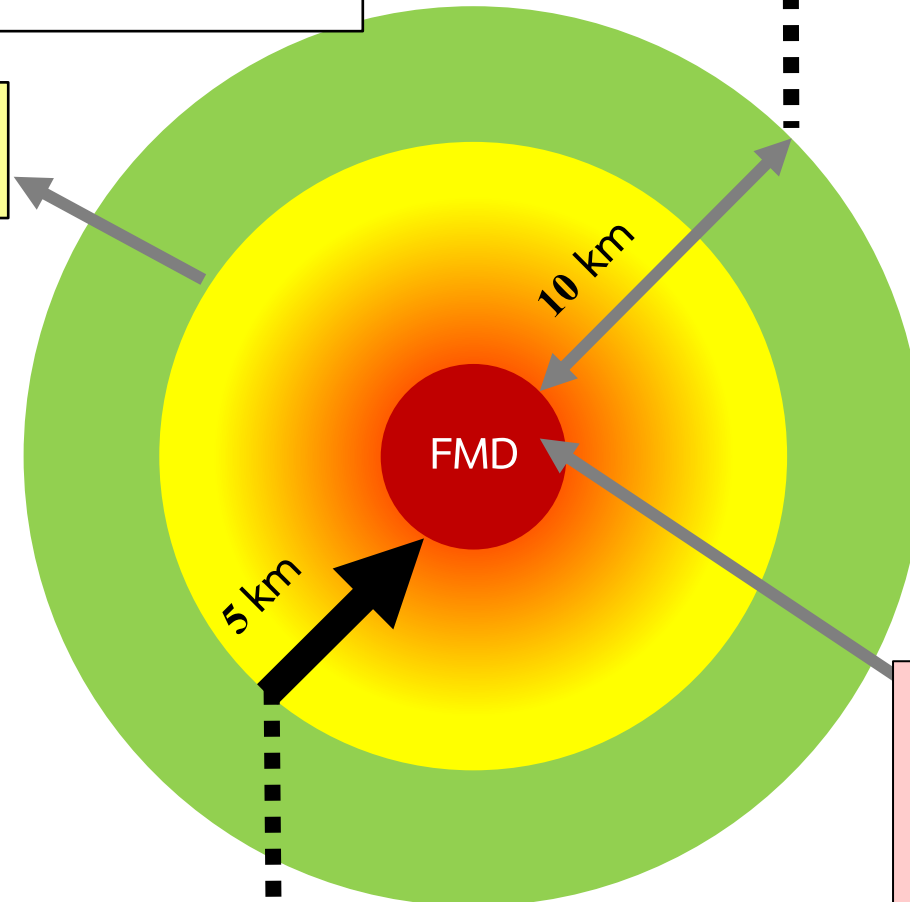
- FMD → Notifiable disease
- Temporary epidemic zone (Only the designated zone 5 km radius within a province) announced by local veterinary authority for at least 30 days

- Animal Movement control and disinfection check point



Clinical Surveillance (Passive and active) & Raising awareness

- Disinfection of risk area
- Improvement of farm biosecurity
- Warning & Promote collaboration between livestock networks/cooperatives



- Sample Collection → RRL
- Quarantine and treatment of sick animals
- Strict biosecurity measures

- Ring Vaccination
- Animal movement restriction

Examples of using data from investigations to adjust disease control processes

- Strengthen awareness campaign to increase FMD vaccine coverage
- Seed vaccine selection
- Extension of movement restriction: time, area
- Importation ban
- Strengthen biosecurity in farms

Thank You

