



World Organisation  
for Animal Health



**16<sup>th</sup> Meeting of the Upper Mekong Working Group  
on Foot and Mouth Disease Zoning and Animal  
Movement Management Back-to-back Private Sector  
Consultative Committee meeting**

**Regional Situation Updates on  
FMD, Risks, and Initiatives**

***Bolortuya, P  
Animal health officer, SRR SEA***

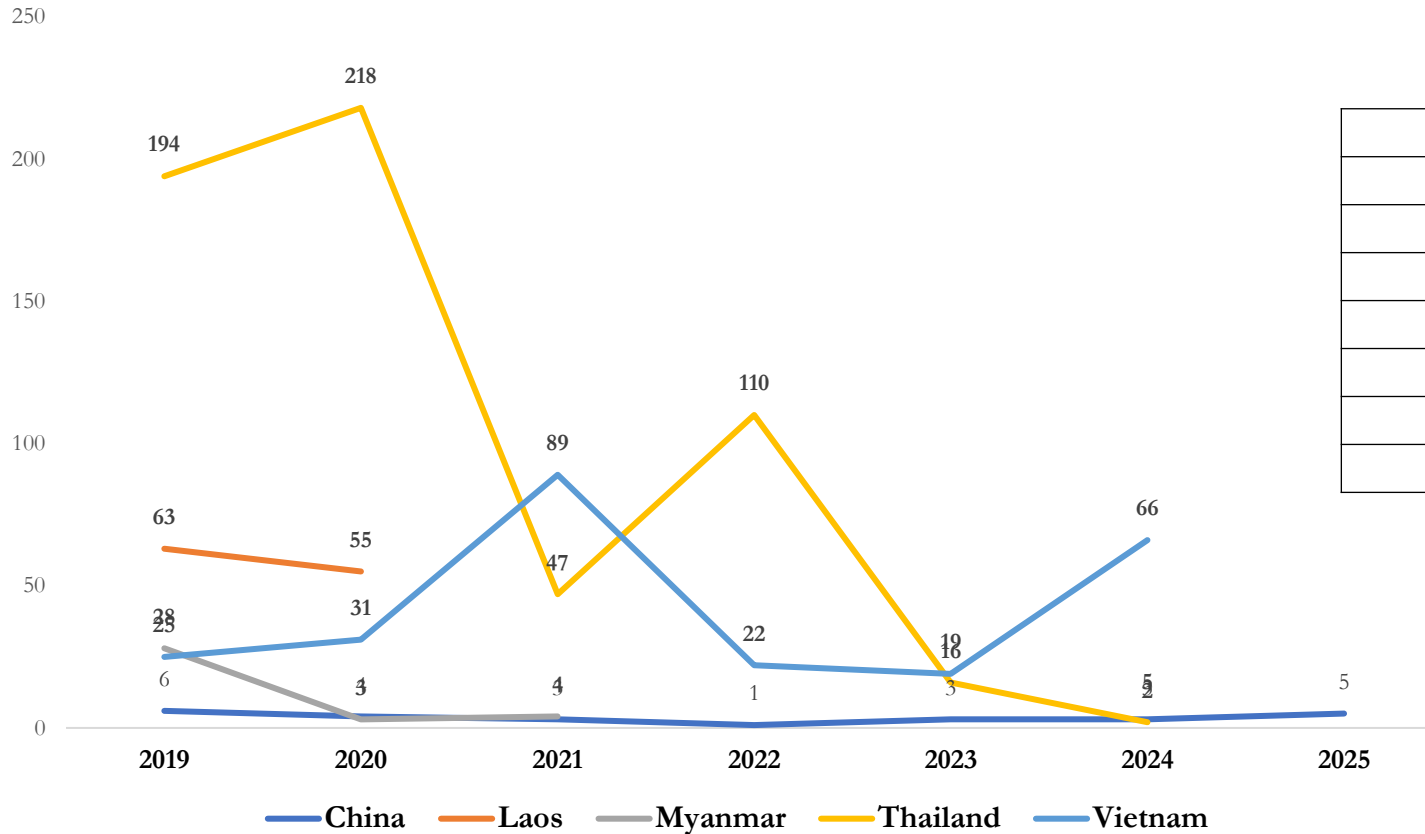


***7-10 April 2026,  
Chiang Rai, Thailand***



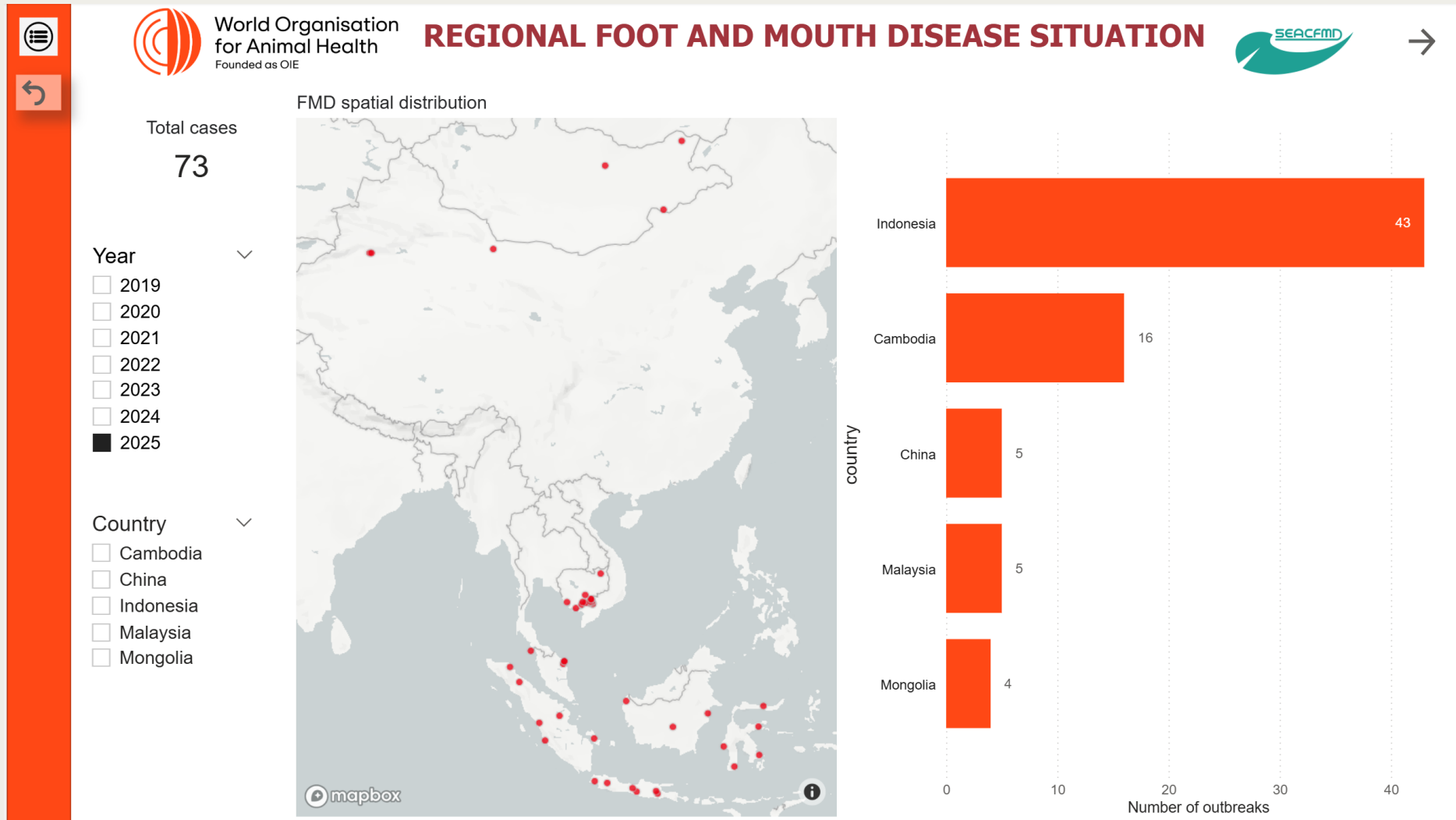
# FMD reports

FMD reported cases in Upper Mekong countries



	China	Laos	Myanmar	Thailand	Vietnam
2019	6	63	28	194	25
2020	4	55	3	218	31
2021	3		4	47	89
2022	1			110	22
2023	3			16	19
2024	3		5	2	66
2025	5				

# FMD reports in SEACFMD region in 2025



# Reported serotypes FMDV:

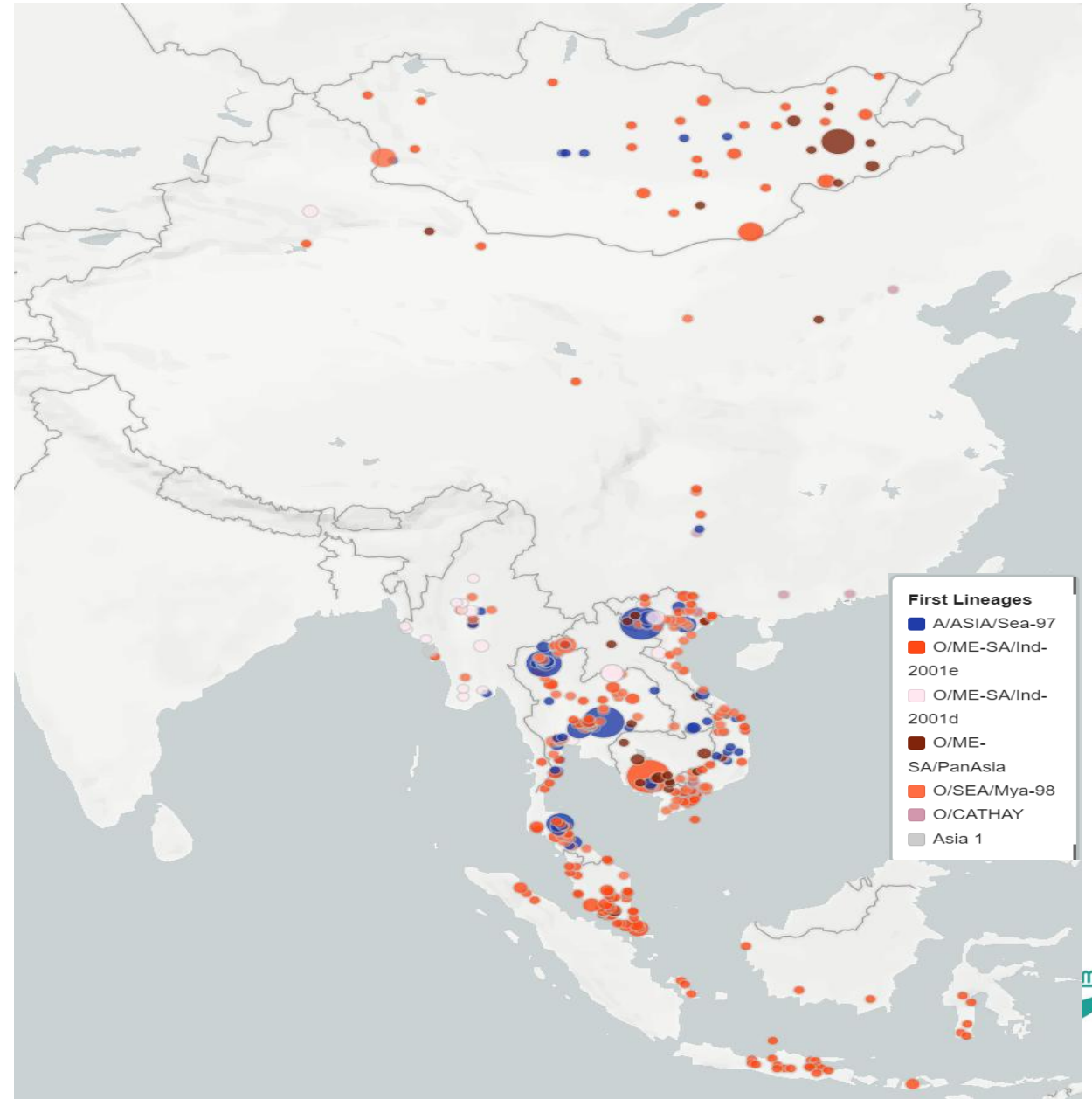
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## Serotype O:

- O/ME-SA/Ind2001e
- O/ME-SA/Ind2001d
- O/ME-SA/Pan Asia
- O/SEA/Mya-98
  
- O/Cathay (pig adapted)

## Serotype A/ASIA/Sea-97

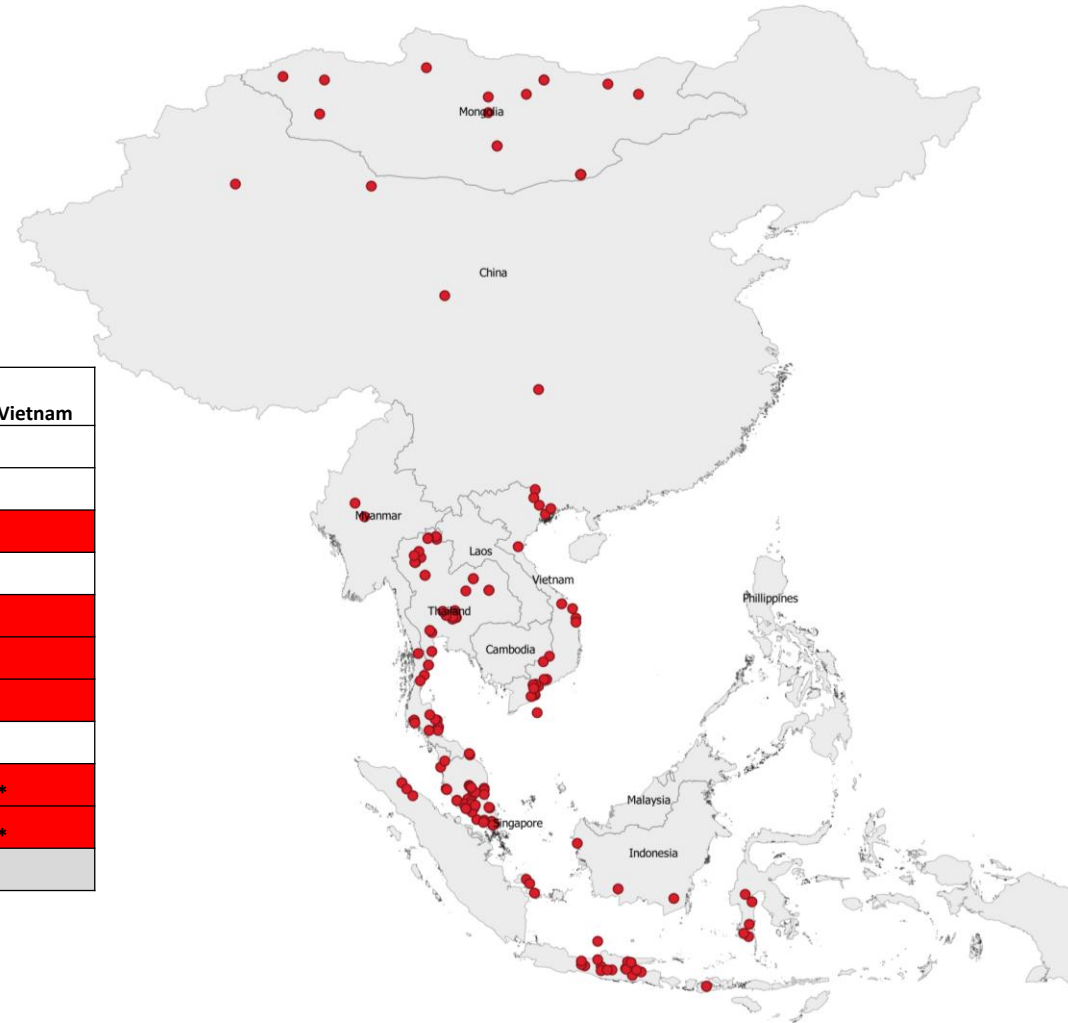
## Serotype Asia 1



# O/ME-SA/Ind2001e

Ind2001e

Year	Cambodia	China	Indonesia	Lao PDR	Malaysia	Mongolia	Myanmar	Thailand	Vietnam
2015									
2016									
2017	*						*		
2018	*						*		
2019		*							*
2020		*					*		*
2021	*						*		*
2022			*					*	
2023	*							*	*
2024	*	*			*		*	*	*
2025									



# O/ME-SA/Pan Asia



Year	Cambodia	China	Laos	Malaysia	Mongolia	Thailand	Vietnam
2015							
2016							
2017							
2018							
2019		*				*	
2020							
2023							
2024							
2025							

# Serotype A/ASIA/Sea-97

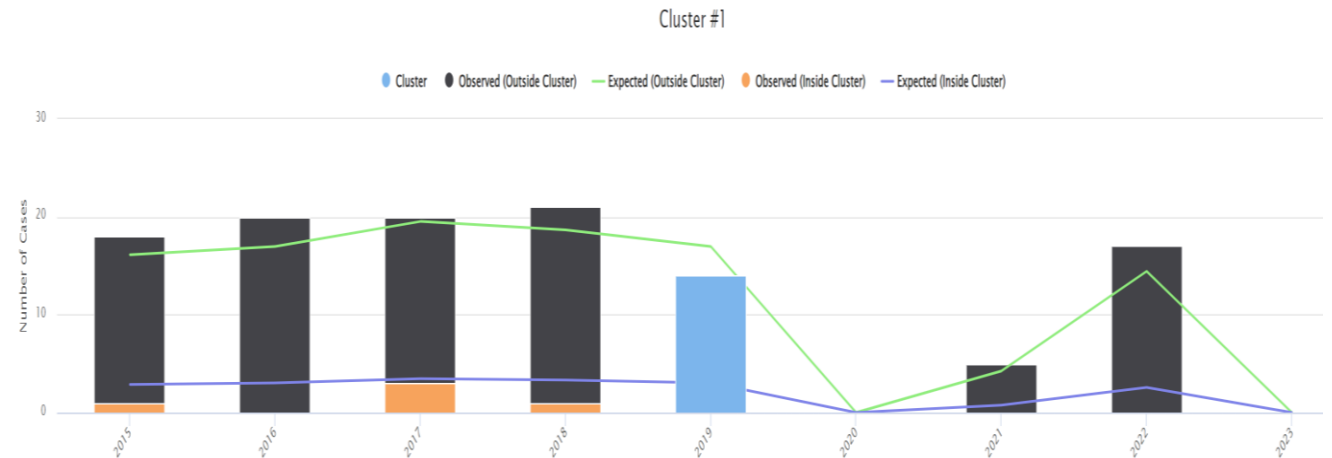
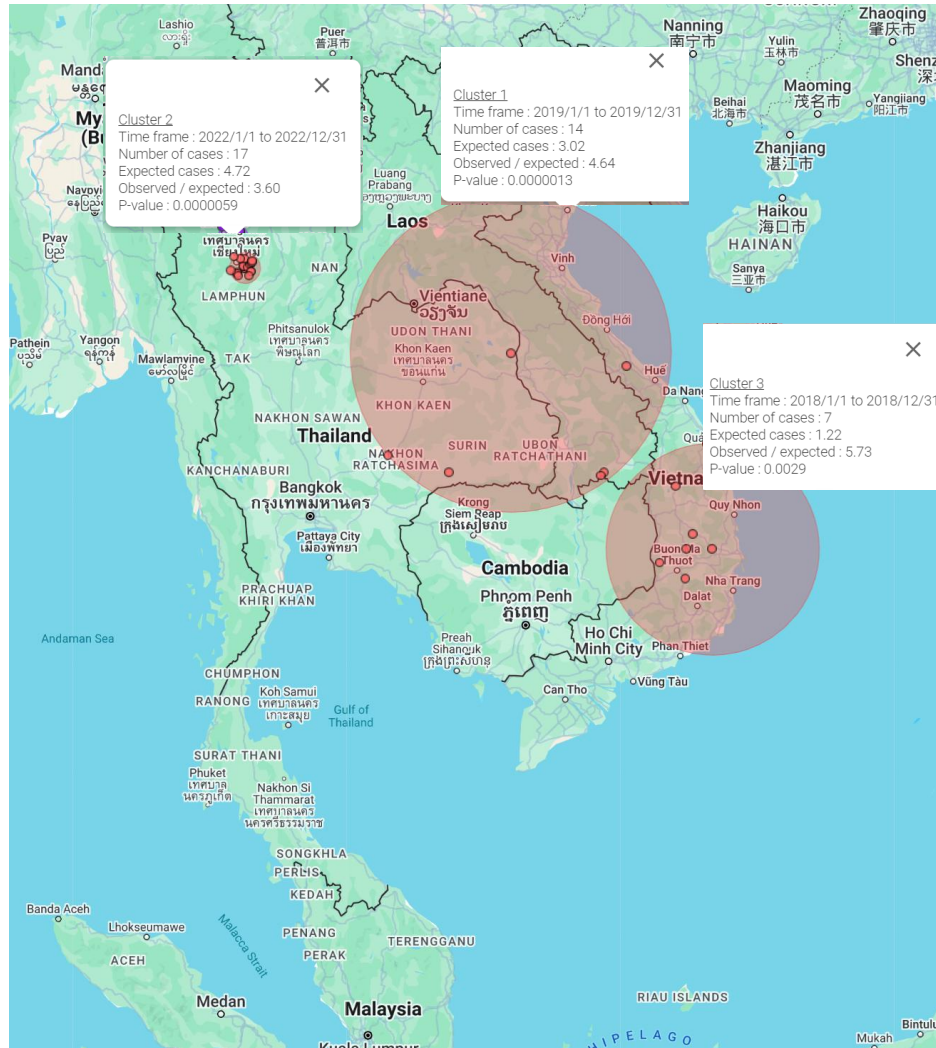


Report on FMDV A in Thailand in 2021  
Batch: WRLMEG/2022/00014

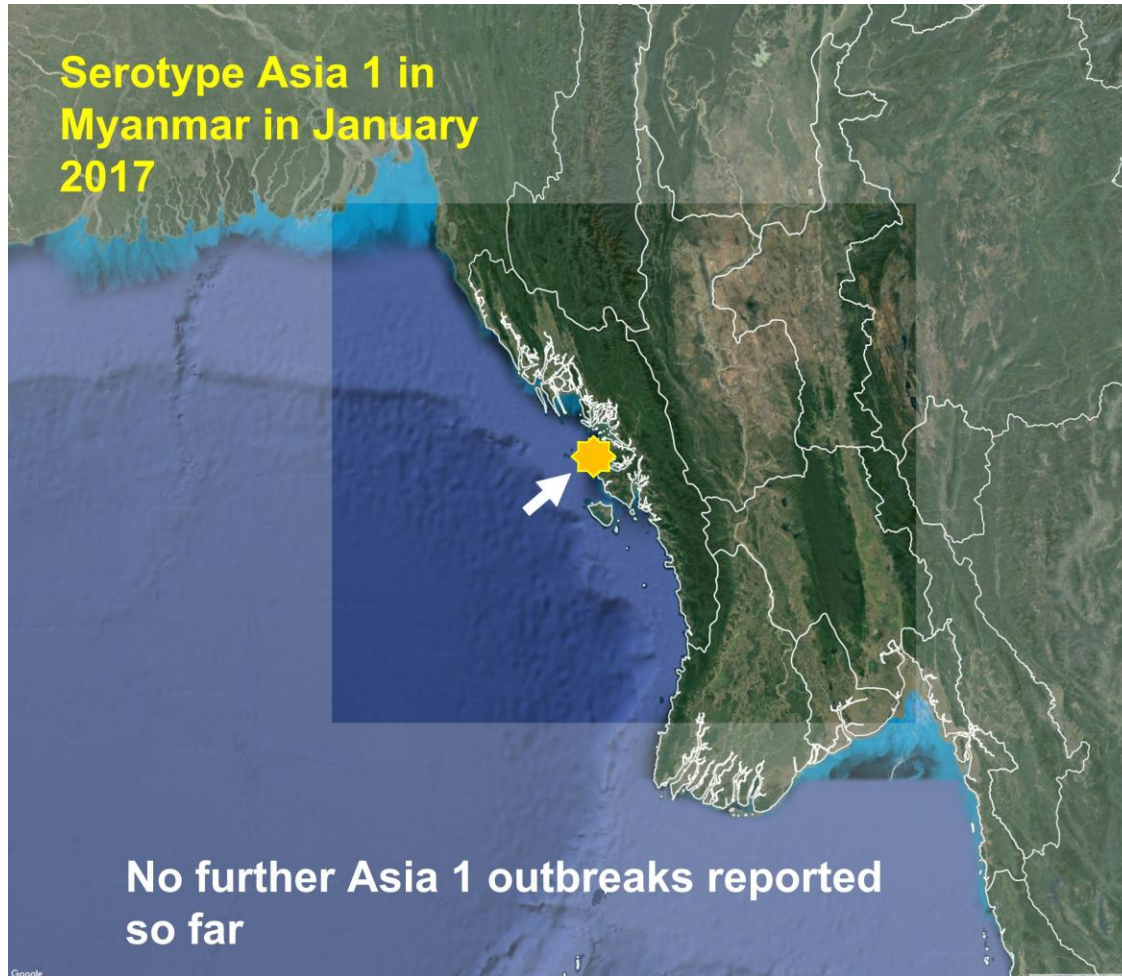


Year	Cambodia	China	Laos	Malaysia	Mongolia	Myanmar	Thailand	Vietnam
2015								
2016								
2017	*							
2018		*						
2019	*							
2020								
2021						*		
2022								
2023								
2024								
2025								

# Serotype A/ASIA/Sea-97



# Serotype Asia 1




Received: 4 May 2018 | Revised: 22 November 2018 | Accepted: 12 December 2018  
DOI: 10.1111/tbed.13112

SHORT COMMUNICATION

WILEY 

## Foot-and-mouth disease outbreaks due to an exotic serotype Asia 1 virus in Myanmar in 2017

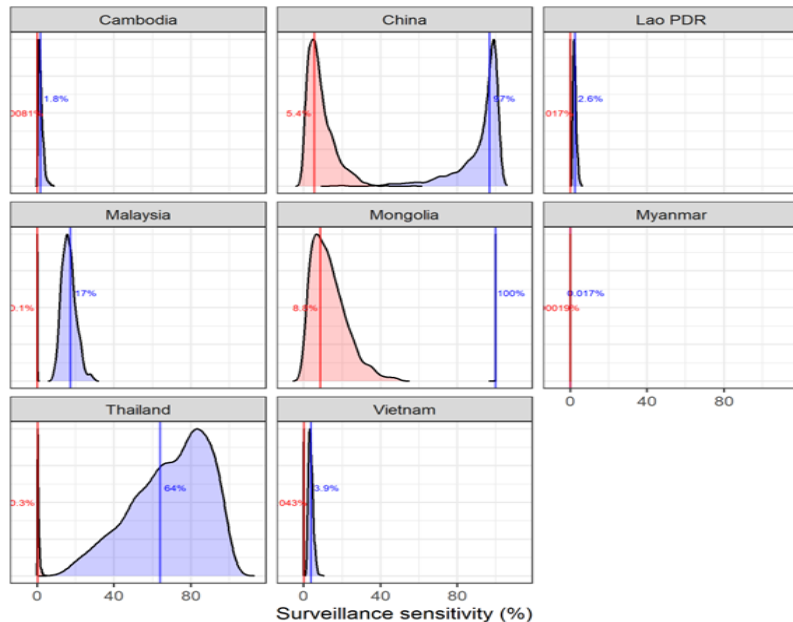
Lin Lin Bo<sup>1,\*</sup> | Khin Sander Lwin<sup>2,\*</sup> | Sahawatchara Ungvanijban<sup>3</sup> | Nick J. Knowles<sup>4</sup> |  
Jemma Wadsworth<sup>4</sup> | Donald P. King<sup>4</sup> | Ronello Abila<sup>5</sup> | Yu Qiu<sup>5</sup> 

# Asia 1 study



## Probability of freedom from foot-and-mouth disease virus serotype Asia 1 in Southeast Asia, China and Mongolia

Masako Wada <sup>a</sup>, Jun-Hee Han <sup>a</sup>, Bolortuya Purevsuren <sup>b</sup>, Karma Rinzin <sup>b</sup>, Ashish Sutar <sup>b</sup>, Ronello Abila <sup>b</sup>, Supatsak Subharat <sup>a</sup>



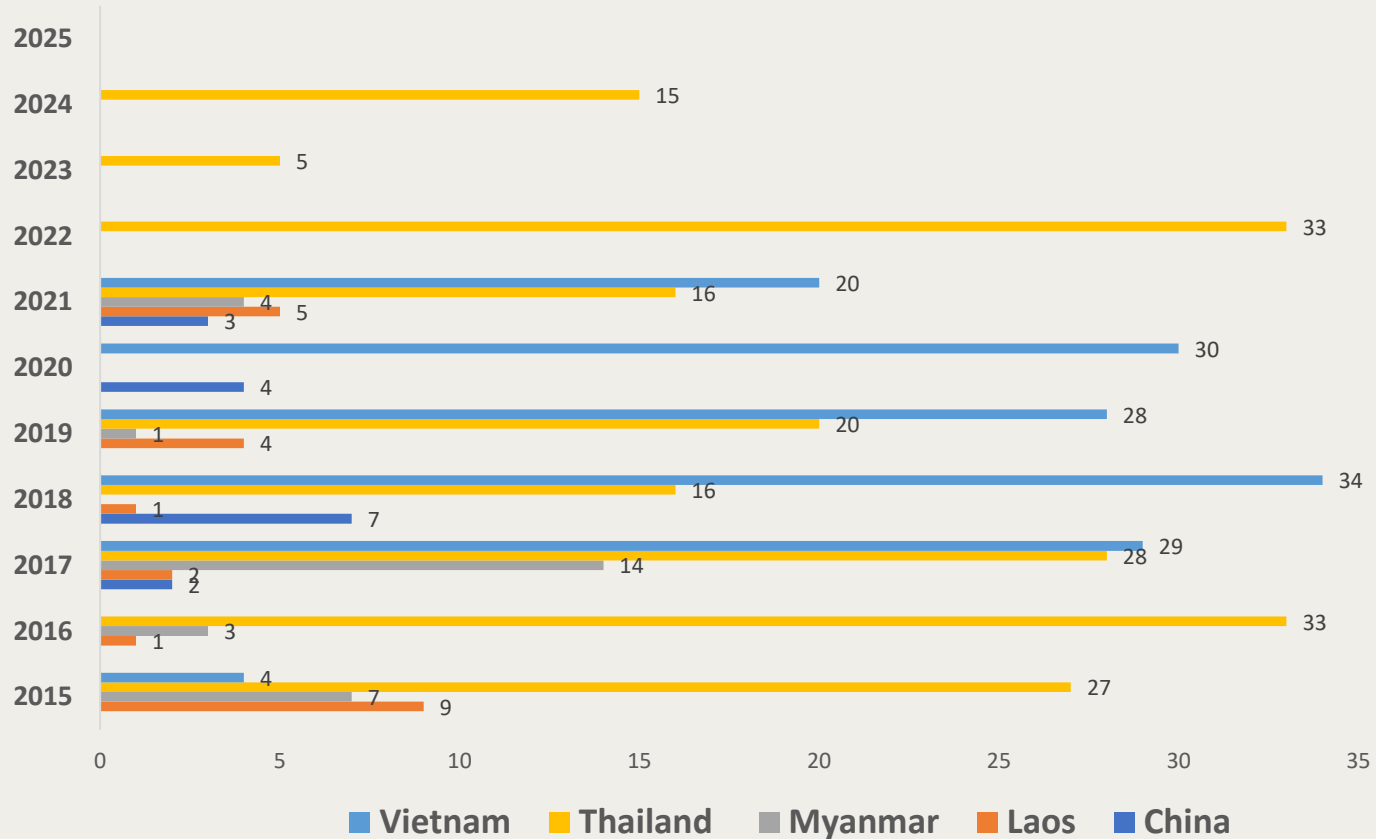
**Based on our scenario tree models, Mongolia and China demonstrated the highest surveillance sensitivity of approximately 100 % for FMD of any serotypes.**

FMD were circulating at the assumed annual incidence rate of 10% at the village level and 20% at the animal level

- Thailand: 71% capture rate
- Low capture countries (<4%):
  - Cambodia
  - Laos
  - Myanmar
  - Vietnam
- Interpretation:
  - High % = strong detection (cases likely captured)
  - Low % = weak detection (cases likely missed/unreported)

# Samples Tested at the WRLFMD

## Number of samples tested at WRLFMD

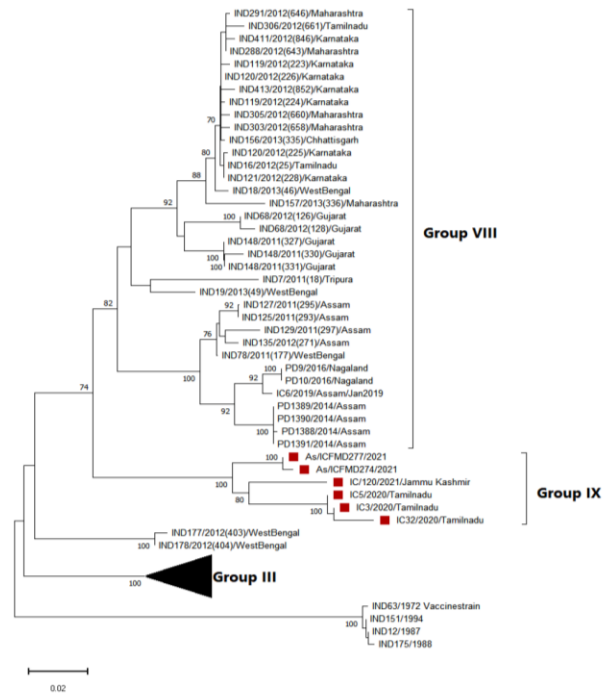


	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
China			2	7		4	3				
Laos	9	1	2	1	4		5				
Myanmar	7	3	14		1		4				
Thailand	27	33	28	16	20		16	33	5	15	
Vietnam	4		29	34	28	30	20				

# FMDV incursion risk

## Asia 1 still circulates in South Asia

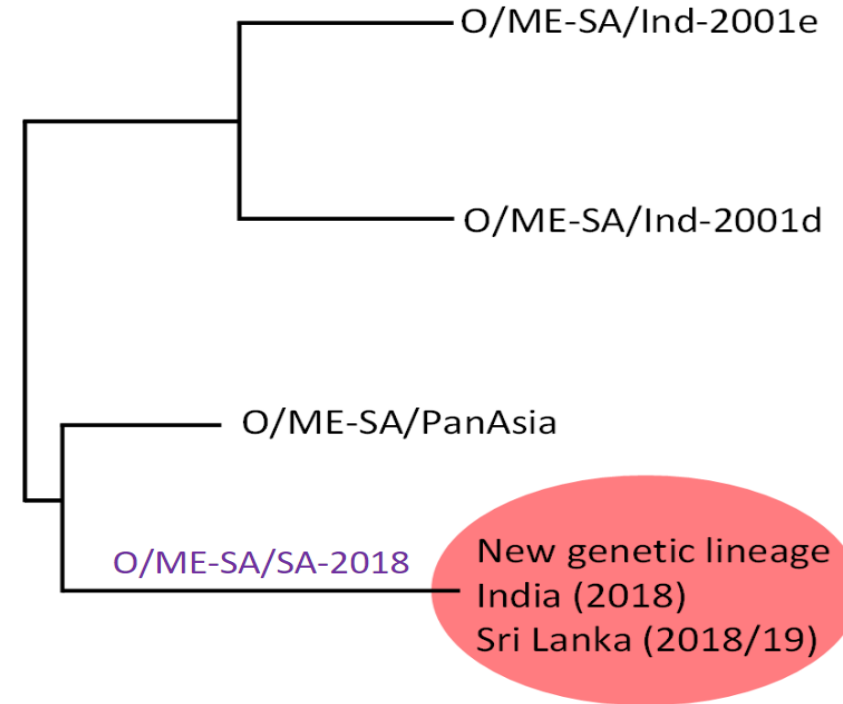
Asia 1 report in India (FAO/WOAH FMD LabNetwork meeting, 2022)



### Serotype Asia1 (2021-2022)

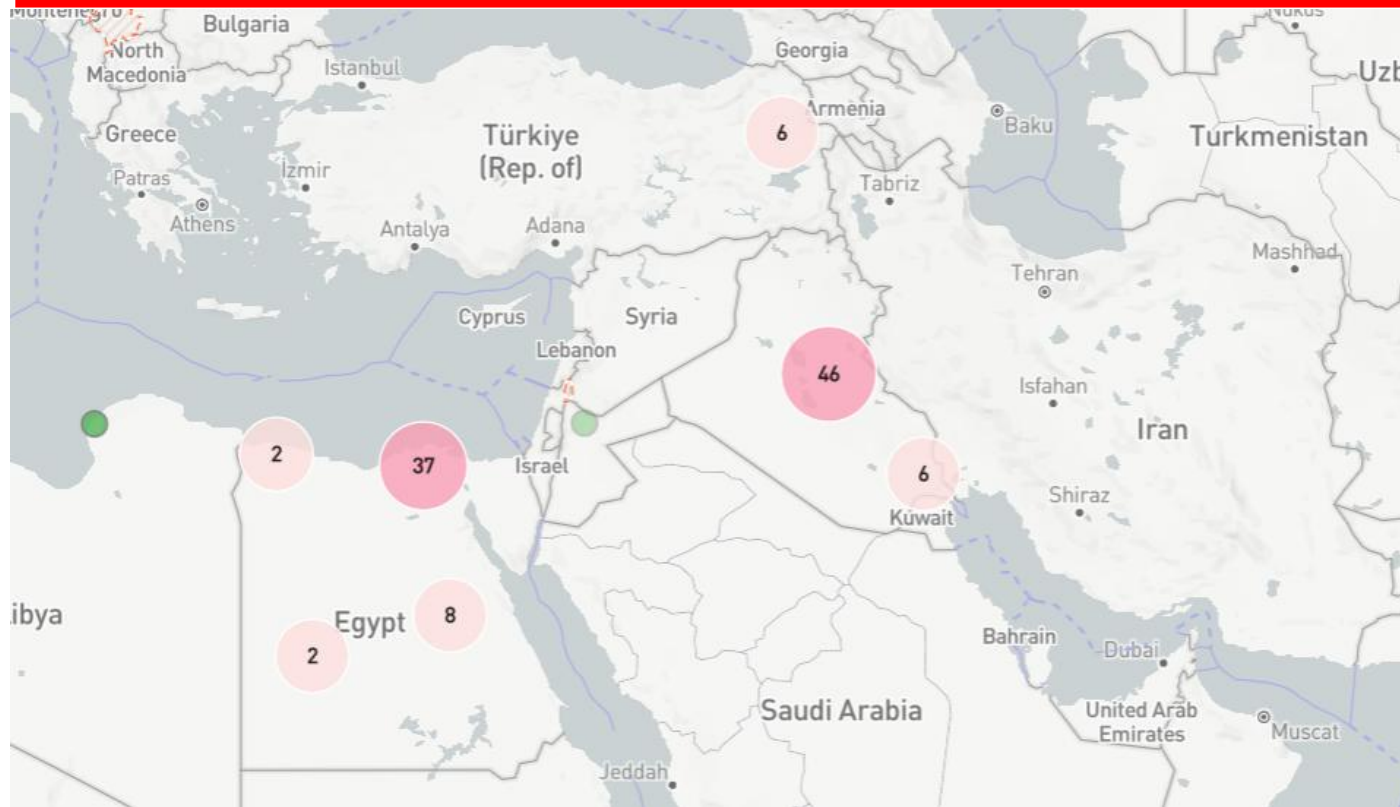
- ✓ Three FMDV serotype Asia1 isolate collected during 2021 from the state of Jammu & Kashmir clustered within Group-IX (BD-18) whose emergence has been described recently in January, 2018 in Bangladesh and in Tamilnadu during the month of January 2020
- ✓ The analysis indicates extended dominance of Group-IX in India.

## New genetic lineage is detected



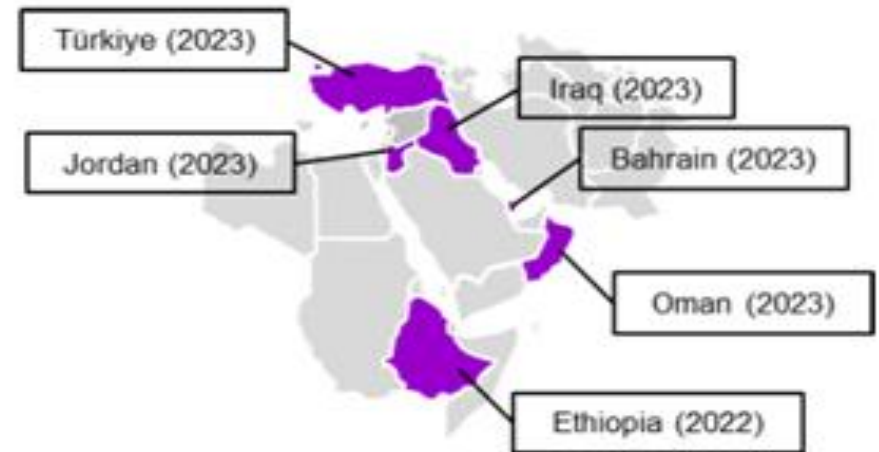
[www.pirbright.ac.uk](http://www.pirbright.ac.uk)

# FMDV SAT 2



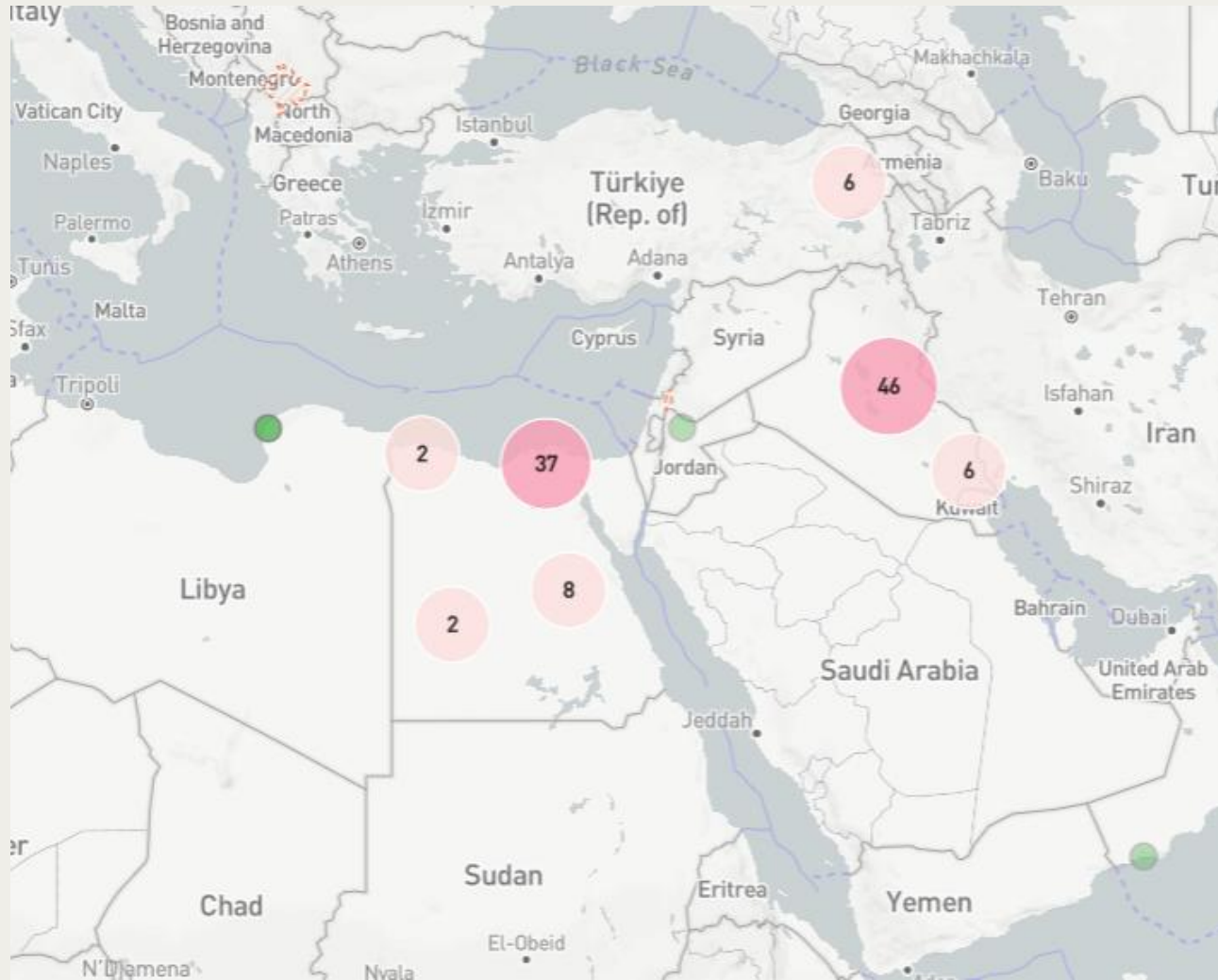
WAHIS (2025-2026)

## SAT2/XVI



The African buffalo is the natural host for the Southern African Territories (SAT) serotypes. Serotypes SAT 1 and SAT 2 can be found throughout Africa,

# FMDV SAT 1



## China reports 219 cases of foot-and-mouth disease in northwestern region

By Reuters

April 2, 2026 4:04 PM GMT+7 · Updated April 2, 2026



BEIJING, April 2 (Reuters) - The Chinese Ministry of Agriculture has reported outbreaks of foot-and-mouth disease in two herds of cattle in its northwestern province of Gansu and the Xinjiang Uyghur Autonomous Region.

Keep up with the latest medical breakthroughs and healthcare trends with the Reuters Health Rounds newsletter. Sign up [here](#).

- The government confirmed diagnosis of serotype SAT1 foot-and-mouth disease in 219 cattle in two herds of 6,229 total cattle on Saturday.
- The local governments in Xinjiang and Gansu implemented culling and disinfecting measures following the outbreaks.
- Industry analysts say this is the first time serotype SAT1 has entered China and current domestic vaccines offer no cross-protection against this strain.

Reporting by Daphne Zhang and Lewis Jackson Editing by Tomasz Janowski

Turkey, Egypt, Iran, Iraq, Azerbaijan, Cyprus, Georgia ?

# EPIDEMIC INTELLIGENCE



# WOAH epidemic intelligence activity – official and unofficial sources



World Organisation  
for Animal Health

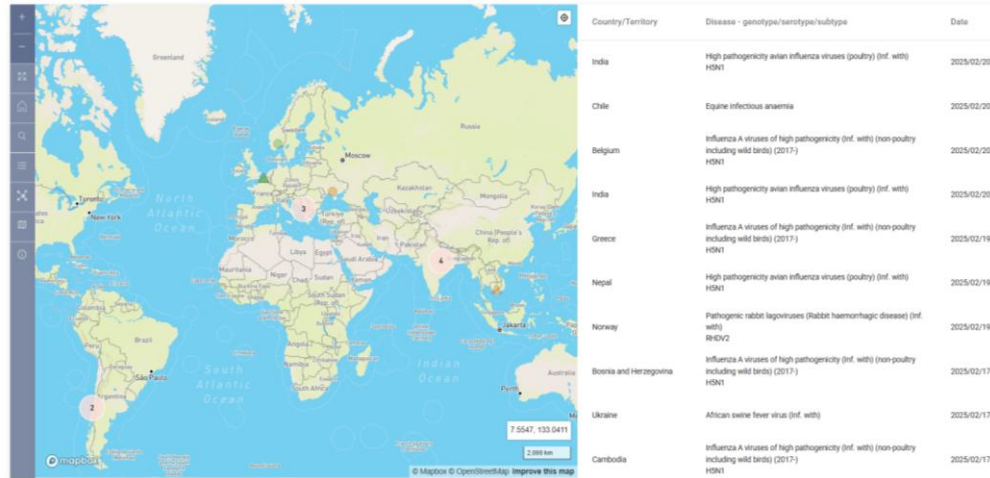
## WAHIS: World Animal Health Information System

WAHIS is the global animal health reference database of the World Organisation for Animal Health (WOAH). WAHIS data reflects the validated information since 2005 reported by the Veterinary Services from Member and non-Member Countries and Territories on terrestrial and aquatic Listed diseases in domestic animals and wildlife, as well as on emerging diseases and zoonoses.

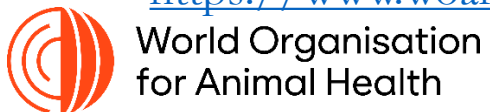
WAHIS includes interactive mapping tools and dashboards to support data consultation, visualization and extraction of officially validated animal health data.



### Latest animal disease events



<https://www.woah.org>



WOAH verifies with  
Members

**GLEWS** platform  
Global Early Warning and Response System for Major Animal Diseases, including Zoonoses

**EIOS** EPIDEMIC INTELLIGENCE FROM OPEN SOURCES

Reference laboratories  
(WOAH network)

Source  
Intelliriver Source  
**IBIS (Australia)**



# WAHIS- EARLY WARNING SYSTEM

Immédiate notification

Follow-up reports

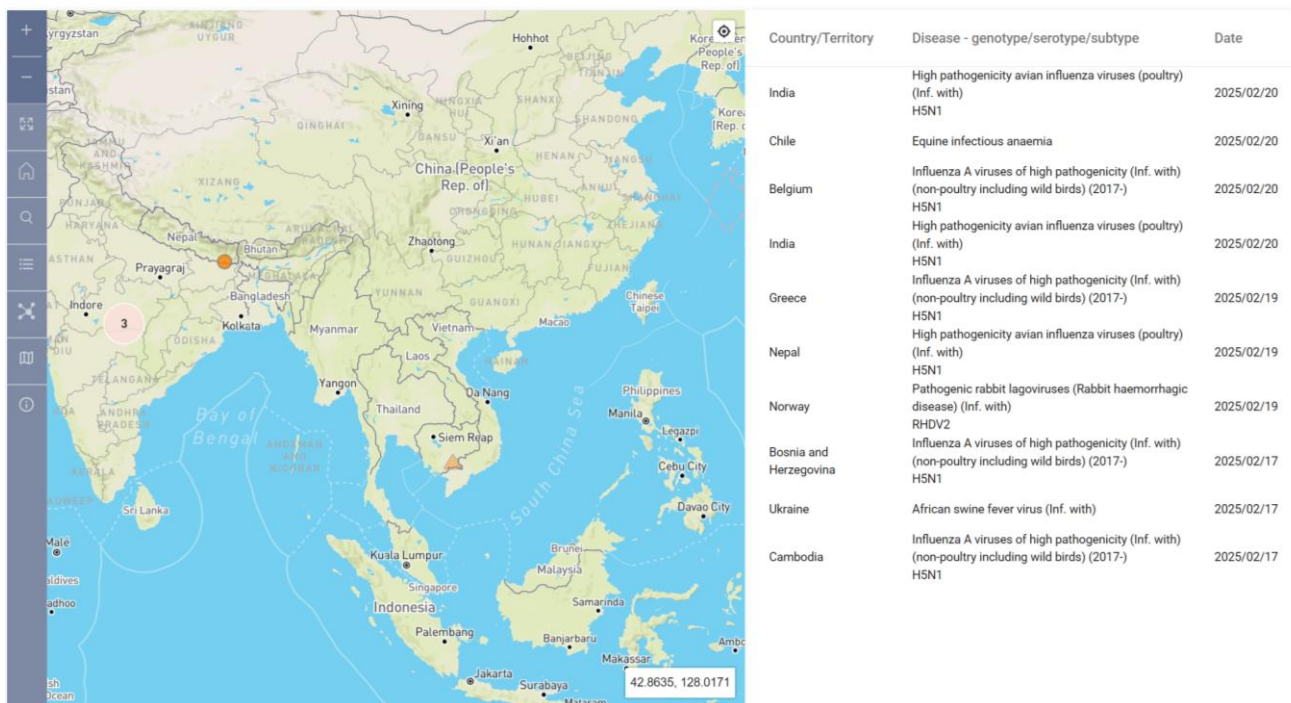
Final report

24h after confirmation (listed disease)

Weekly

All measures implemented

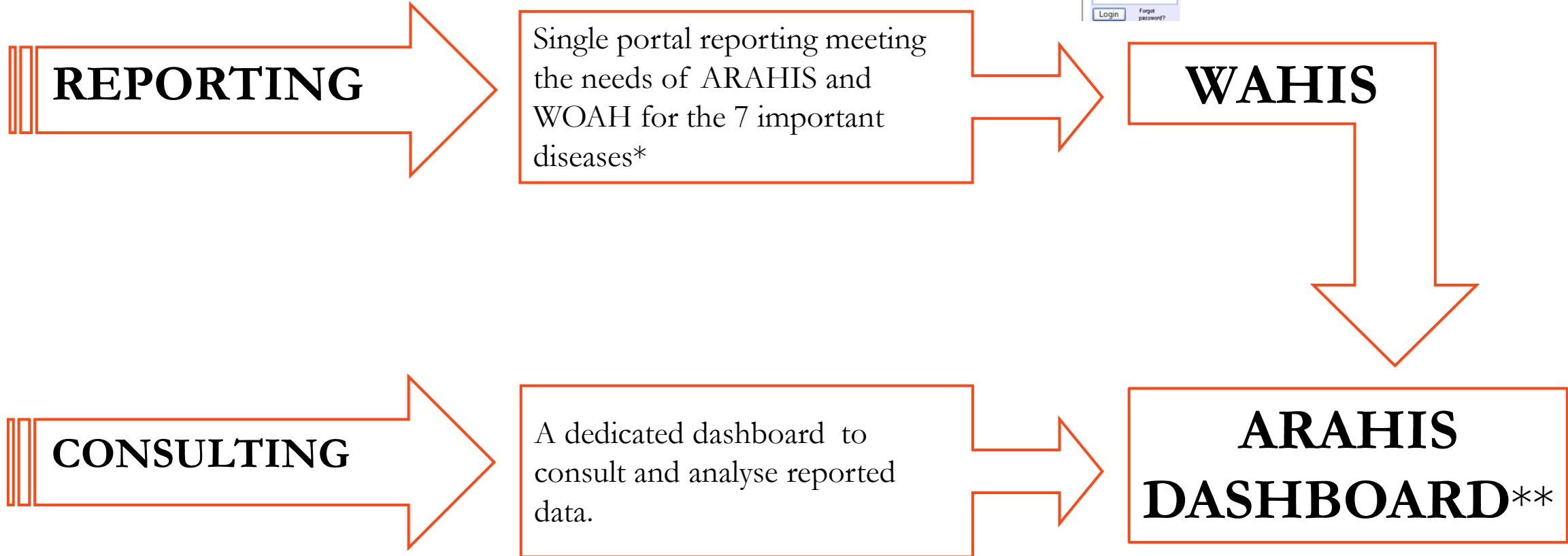
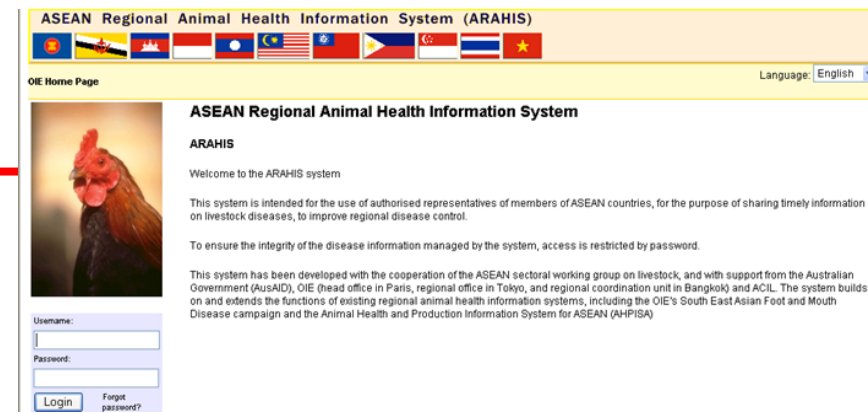
## Latest animal disease events



## Article 1.1.3.

- ✓ first occurrence of a listed disease in a country, a zone or a compartment;
- ✓ recurrence of an eradicated listed disease in a country, a zone or a compartment following the final report that declared the event ended;
- ✓ first occurrence of a new strain of a pathogenic agent of a listed disease in a country, a zone or a compartment;
- ✓ recurrence of an eradicated strain of a pathogenic agent of a listed disease in a country, a zone or a compartment following the final report that declared the event ended;
- ✓ a sudden and unexpected change in the distribution or increase in incidence or virulence of, or morbidity or mortality caused by, the pathogenic agent of a listed disease present within a country, a zone or a compartment;
- ✓ occurrence of a listed disease in an unusual host species;

# ARAHIS reporting for ASEAN countries



 World Organisation for Animal Health  
\* FMD, AI, CSF, Newcastle disease, rabies, ASF and LSD

\*\* Will be published on the website for ACCAHZ (not in WAHIS)



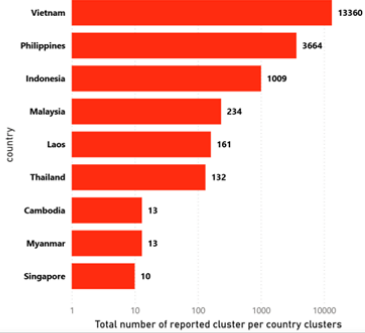
# DASHBOARDS



## AFRICAN SWINE FEVER SITUATION IN THE ASEAN



- Cambodia
- Indonesia
- Laos
- Malaysia
- Myanmar
- Philippines
- Singapore
- Thailand
- Vietnam



Year: 2019, 2020, 2021, 2022, 2023, 2024

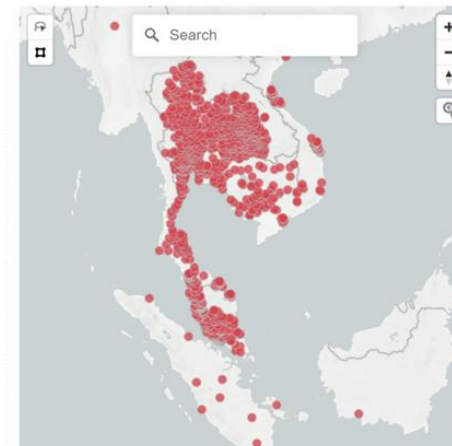
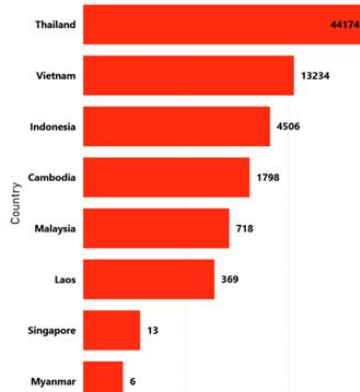
Source: World Animal Health Information System (WAHIS)



## LSD SITUATION IN THE ASEAN



- Cambodia
- Indonesia
- Laos
- Malaysia
- Myanmar
- Singapore
- Thailand
- Vietnam



Year: 2020, 2021, 2022, 2023, 2024

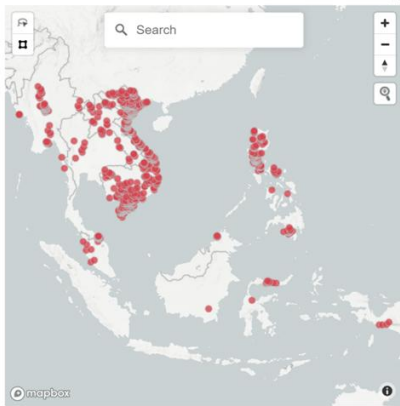
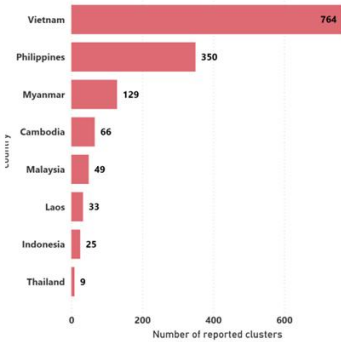


## HPAI SITUATION IN THE ASEAN



- Cambodia
- Indonesia
- Laos
- Malaysia
- Myanmar
- Philippines
- Thailand
- Vietnam

- H5
- H5N1
- H5N2
- H5N6
- H5N8



Year: 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025

Source: World Animal Health Information system (WAHIS)

### SOUTHEAST ASIA RABIES DASHBOARD

#### Sum of No.cases by Country

Indonesia	5099
Laos	52
Malaysia	384
Philippines	4843
Thailand	1100

#### Affected Species

Species	Sum of No.cases
Bovine	156
Bubaline	25
Canine	10026
Caprine	14
Equine	2
Feline	413
Multiple	2423
Porcine	15
Primate	1
Wild sp...	3

#### Cases by Year

Year	Cases
2017	1185
2018	2000
2019	1838
2020	1316
2021	1908
2022	3981
2023	1278

# The Project on Asia-Pacific in supporting early threat warning



Aim: to promote transparency in disease reporting and sharing.

Objective: to strengthen WOAHA's early warning systems in Asia and the Pacific region through intelligence-gathering, active search activity (rumour tracking), and information sharing.

## Active search activity:

- ✓ Established Active Search Team: Formed in 2002 at headquarters, with an expansion to the Asia and Pacific Region in 2024.
- ✓ Active search for unofficial news related to animal diseases
- ✓ Using Epidemic Intelligence from Open Sources (EIOS) platform for data collection and analysis.



# 4 ACTIVE SEARCH PROCEDURE APPLIED BY WOAH

## ACTIVE SEARCH TEAM ACTIVITY

Detection

Verification

Analysis

Dissemination



Twice a week, screening of the web for all listed and emerging diseases



Communicate with members to verify detected signals in their countries or territories.



The team analyses this data to identify potential disease event of interest and assess their risks

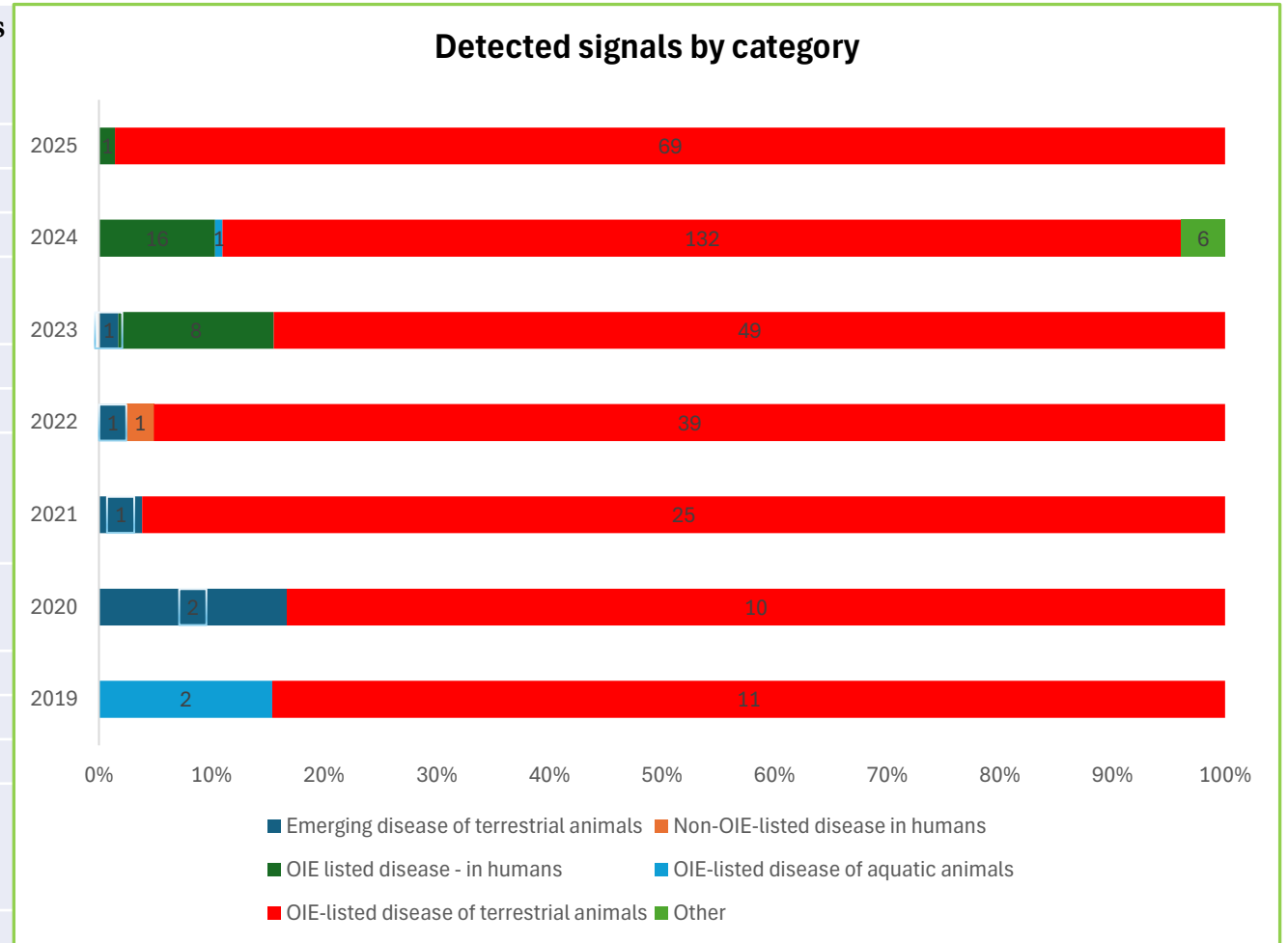


The team shares this information internally to raise awareness.

Monitor the submission of the official report to WAHIS (IN/FUR/SMR)

# Example: Detected signals in ASEAN Member States

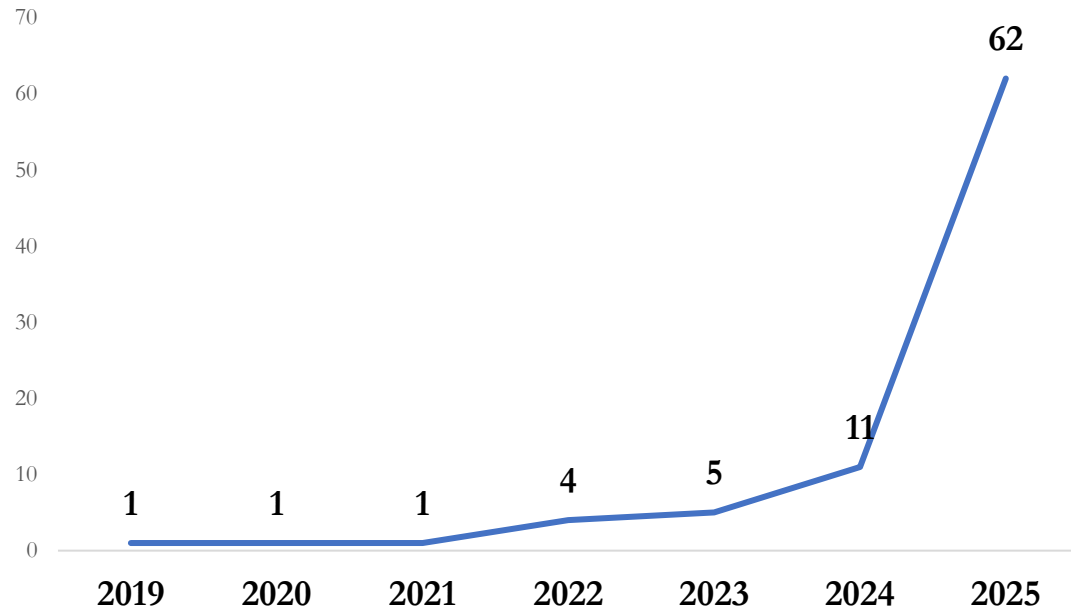
Signals detected by disease	Number of signals (2019-2025)
1 African swine fever	158
2 Foot and mouth disease	77
3 Rabies	38
4 Highly path. avian influenza (poultry)	32
5 Lumpy skin disease	26
6 Anthrax	8
7 Highly pathogenic influenza A viruses (infection with) (non-poultry including wild birds)	7
8 Unusual morbidity or mortality event (cause undetermined)	6
9 Newcastle disease	5
10 Brucellosis ( <i>Brucella abortus</i> )	3
11 Avian influenza_Human case	2
12 Infection with low pathogenic avian influenza viruses (all subtypes)	2
13 Infection with <i>Pasteurella</i> spp.	2
14 Japanese encephalitis	2



In total, there are 36 diseases with 394 signals

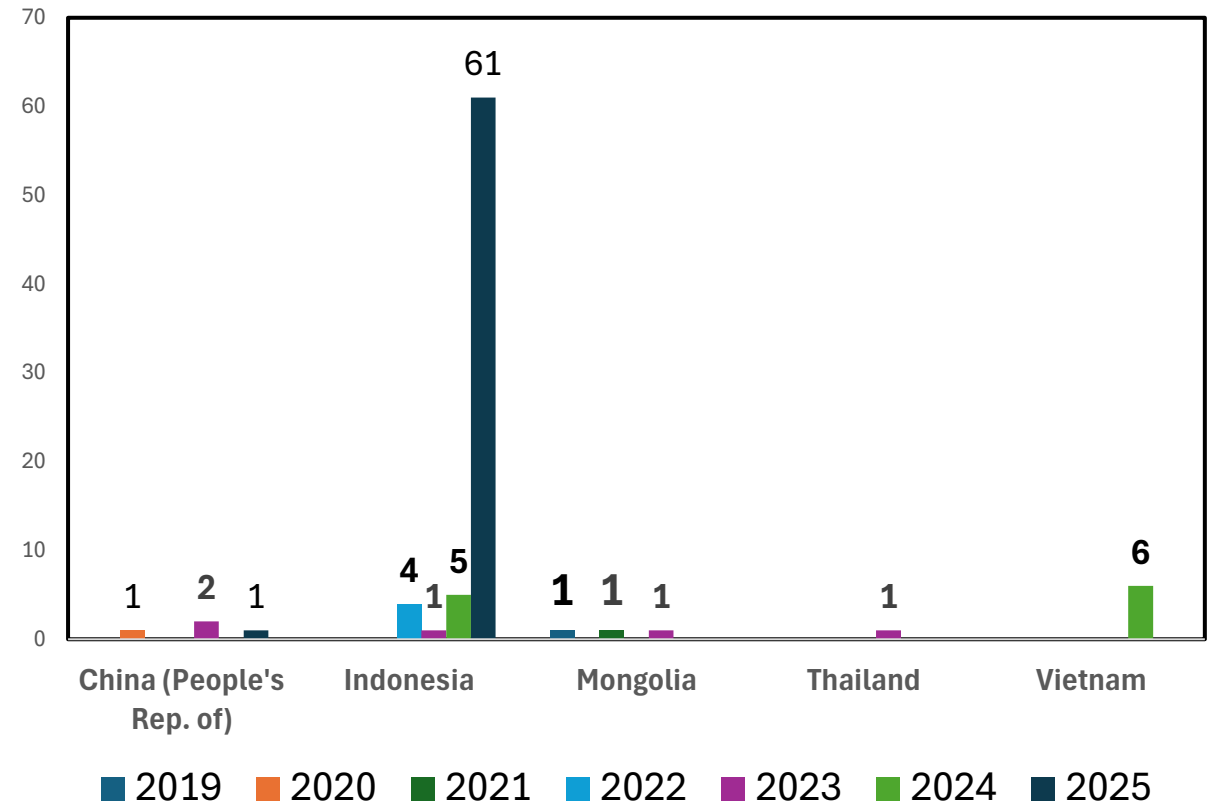
# Detected news in the SEACFMD region

FMD detected news by year



Source: WOAHA AST

FMD detected news by country

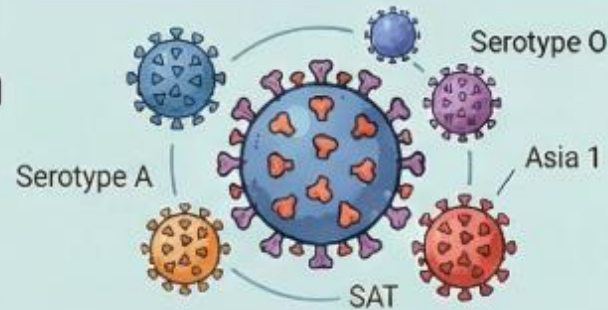


# Regional Landscape & FMD Challenges: The Upper Mekong Context

## SITUATIONAL CONTEXT

### Endemic Status with Multiple Strains

Multiple FMD strains actively circulating.



### Prevalence of Smallholder Systems

High levels of smallholder participation characterize regional production.



### Growing Regional Trade Pressure

Extensive cross-border animal movement creates significant pressure on disease containment.



## CRITICAL CONTROL CHALLENGES

### Weak Veterinary Infrastructure

Limited surveillance and technical infrastructure hinder effective regional disease monitoring.



### Poor Reporting & Inconsistent Vaccination

Inconsistent vaccination coverage and weak disease reporting delay response times.



### Unregulated Animal Movement

High volumes of unregulated movement complicate establishment of effective FMD zones.



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**Thank you for your attention**