



World Organisation
for Animal Health
Founded in 1924

Challenges in Surveillance and Reporting in the SEACFMD Region

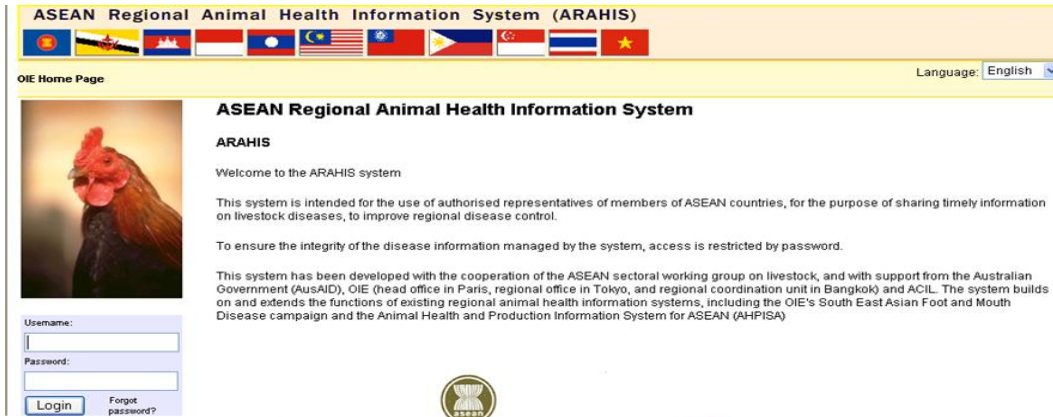
Bolortuya P WOAHSRRSEA

Outline

Reporting and surveillance

- ARAHIS
- WAHIS performance
- EIOS
- Laboratory capacity/Sample submission

Reporting line



- The system is outdated, with frequent access failures and no verification or validation functionalities, impacting its usability and reliability.
- Members only report FMD and lack diverse reporting sources. The system is incompatible with other systems and requires updates for better integration.
- There are no backup plans for system failures, and the unavailability of system code makes maintenance or updates impossible.

MEMORANDUM OF UNDERSTANDING BETWEEN MEMBERS OF THE ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN) AND THE WORLD ORGANISATION FOR ANIMAL HEALTH (OIE)

The Governments of Brunei Darussalam, the Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Republic of the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand and the Socialist Republic of Viet Nam, Member States of the Association of Southeast Asian Nations ("ASEAN"), hereinafter referred to individually as "ASEAN Member State" or collectively as "ASEAN Member States".

and

The World Organisation for Animal Health, with headquarters at 12 rue de Prony, 75017 Paris, France, hereinafter referred to as "the OIE", duly represented by its Director General, Dr. Bernard Vallat.

RECOGNISING that the OIE has developed the World Animal Health Information System (WAHIS), an on-line information system for the submission and reporting of official animal disease information by OIE member countries to the OIE;

NOTING that a number of regional organisations have already established regional animal disease reporting systems and therefore recognising the need to avoid duplication and

MEMORANDUM OF UNDERSTANDING BETWEEN THE ASSOCIATION OF SOUTHEAST ASIAN NATIONS AND THE WORLD ORGANISATION FOR ANIMAL HEALTH ON TECHNICAL COOPERATION

The Association of Southeast Asian Nations (ASEAN) and the World Organisation for Animal Health (OIE) (hereinafter individually referred to as the "Participant" and collectively as the "Participants");

CONSIDERING that most of the ASEAN Member States have significant livestock populations and the livelihoods of more than half of the population of ASEAN depend directly or indirectly on livestock production;

ACKNOWLEDGING that the OIE is an intergovernmental organisation recognised by the World Trade Organization as a reference organisation for international standards concerning the sanitary safety of international trade of animals and products of animal origin and zoonoses, and is in charge of improving animal health, veterinary public health, and animal welfare worldwide, as well as transparency of the global animal disease situation;

REALISING that it is within the mutual interest of ASEAN and OIE to enhance their cooperation in further developing the livestock sector of the ASEAN region through strategic actions in strengthening of veterinary services, preventing and controlling of animal diseases and zoonoses, and facilitating trade in animal and animal products;

ARAHIS+WAHIS INTEGRATION PROJECT

100 If the ASEAN countries report in WAHIS IN/FUR module, the information will be published:

- On the WAHIS public interface
- On the WAHIS Events Management page
- On the WOAH official website (banner)

Would it be acceptable for the ASEAN countries?



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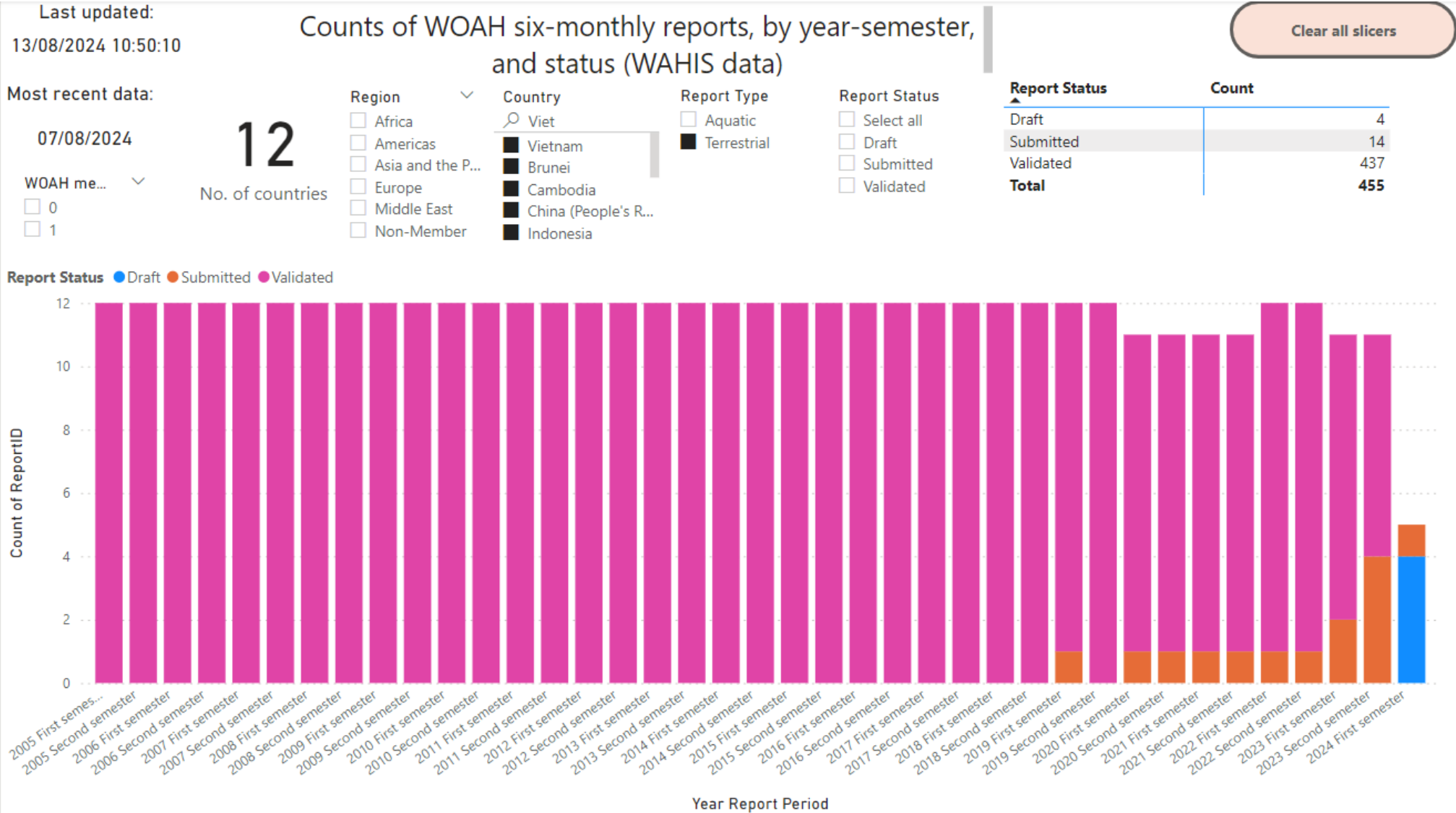
FMD Reporting ARAHIS (2019-2023)

Assess historical presence of FMD at the smallest administrative levels such as village/ commune etc (for the last 1 year, 2 to 3 years and 5 years)

- The level of administrative units varies by country
- Local names can be challenging to harmonize with shapefiles for mapping purposes
- May be discrepancies in the understanding of epidemiological units

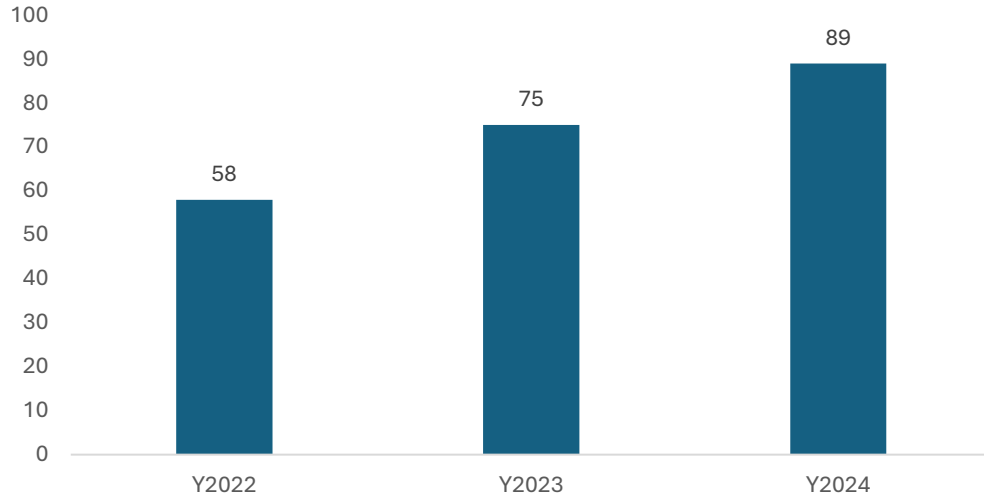
Country	Administration level (Wikipedia)	2019	2020	2021	2022	2023
Cambodia	Level 1 Province (autonomous minicipality lit,khét,))					
	Level 2 Section/City/District (khând,krông,srök)				N/A	
	Level 3 Commune/Quarter (sângkéat,khũm)				N/A	
	Level 4 Village (phum)	epi-unit Name	epi-unit Name	epi-unit Name	N/A	epi-unit Name
China	(Autonomous/Minicopalities/Special Administrative					
	Level 2 Prefecture (Leagues)					
	Level 3 County (District/Country-Level city)					
	Level 4 Township (Subdistricts/townships/towns)	Farm	Farm/Food Company			
Indonesia	Level 1 Provinces (provinsi or daerah istimewa)					
	(kota)Metropolitan (metropolitan)				N/A	
	kemantren)				N/A	
	Level 4 Rural or urban villages (desa or kelurahan)				N/A	N/A
Lao PDR	Level 1 Prefecture/Province nakhon louang, khoueng			No FMD reported	No FMD reported	No FMD reported
	Level 2 District mueang					
	Level 3 Village baan					
	Level 4 Epi-Unit name		epi-unit name			
Malaysia	Level 1 State/Federal territories					
	Level 2 District /Division (daerah)					
	Level 3 Subdistrict (daerah kecil)					
	Level 4 Township (mukim)		epi-unit name	epi-unit name	epi-unit name	farm
Mongolia	Level 1 Aimag	No FMD reported	No FMD reported	N/A		No FMD reported
	Level 2 Soum					
	Level 3 Bag					
	Level 4 Khot ail			epi-unit name	epi-unit name	
Myanmar	Level 1 State/Region				No FMD reported	No FMD reported
	Level 2 District			N/A		
	Level 3 Township			N/A		
	Level 4 Villages	epi-unit Name	epi-unit Name	N/A		
Thailand	Level 1 Province					
	Level 2 District					
	Level 3 Subdistrict					
	Level 4 Villages		epi-unit name	epi-unit name	epi-unit name	epi-unit name
Vietnam	Level 1 Miniciplity/Province (Tỉnh)					
	Level 2 District					
	Level 3 Ward/Commune					
	Level 4 Village	commune	epi-unit name	epi-unit name	epi-unit name	epi-unit name

Reporting WAHIS

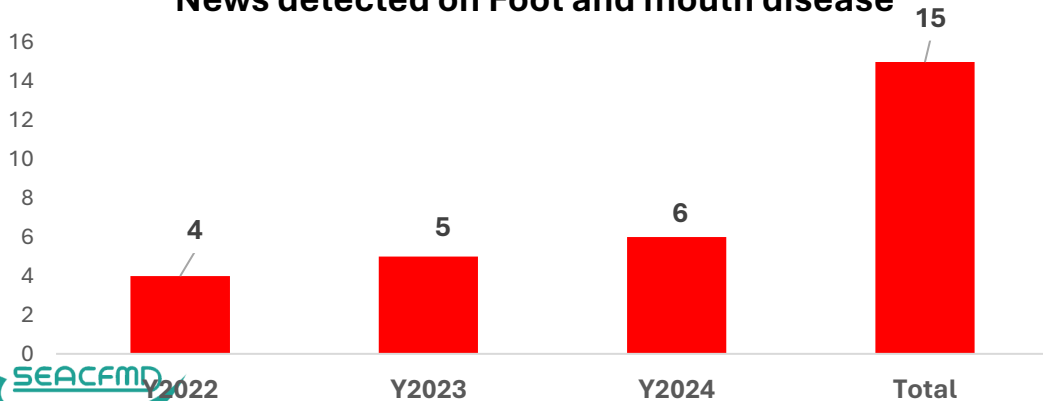


EIOS signals (AST -AP)

Detected news (n=222)

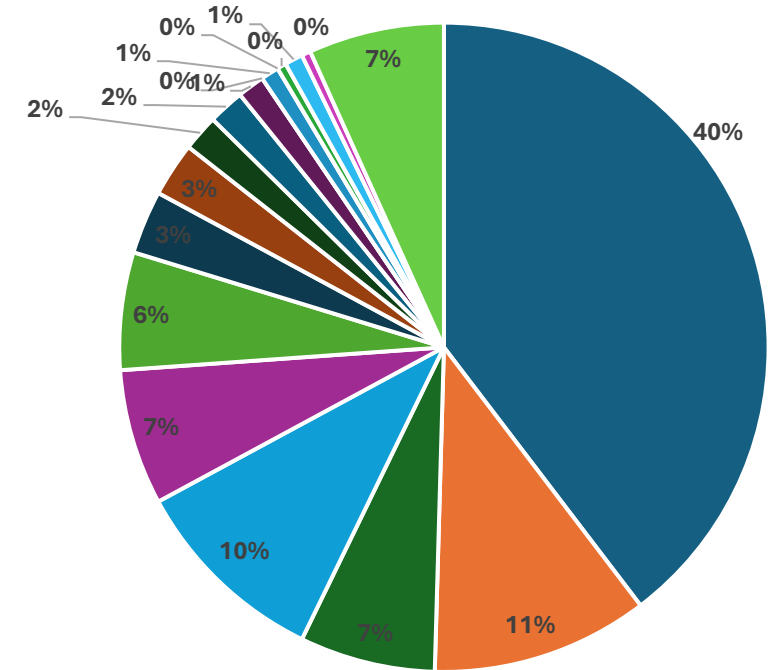


News detected on Foot and mouth disease



- African swine fever
- Highly path. avian influenza (poultry)
- Lumpy skin disease
- Rabies
- Foot and mouth disease
- Highly pathogenic influenza A viruses (infection with) (non-poultry including wild birds)
- Anthrax
- Low pathogenic avian influenza (poultry)
- Unusual morbidity or mortality event (cause undetermined)

News detected by diseases

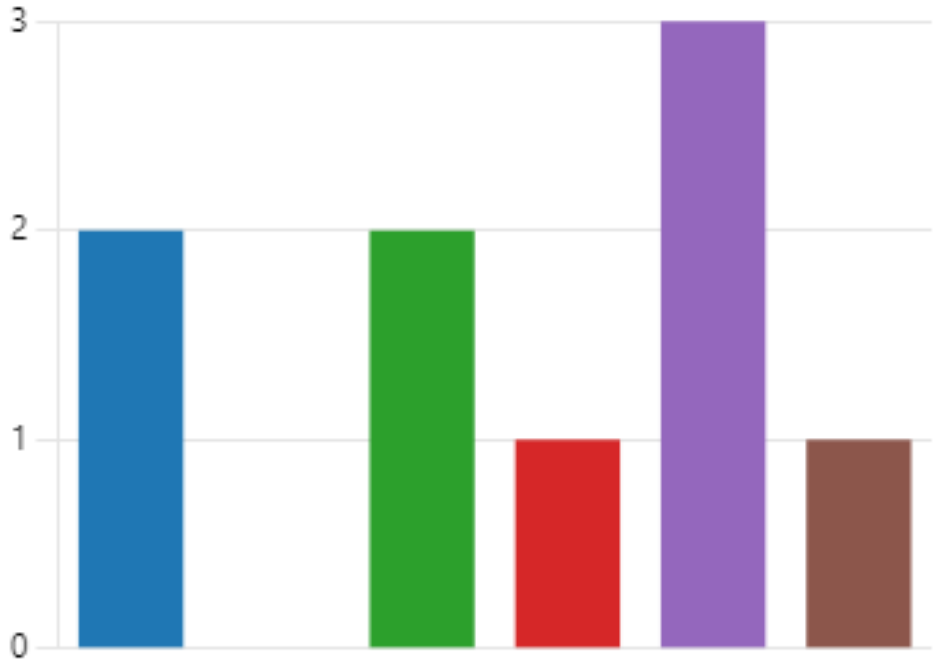
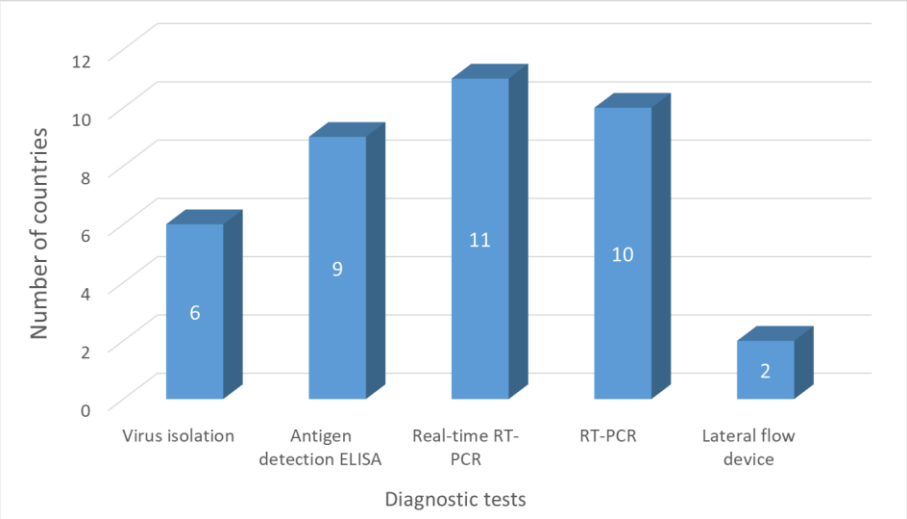


Antigen detection ELISA – 9 Countries

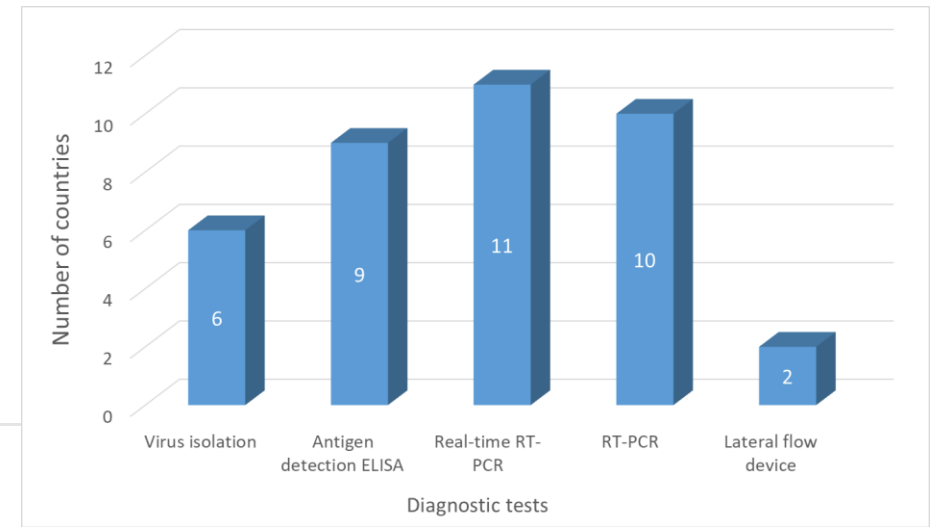
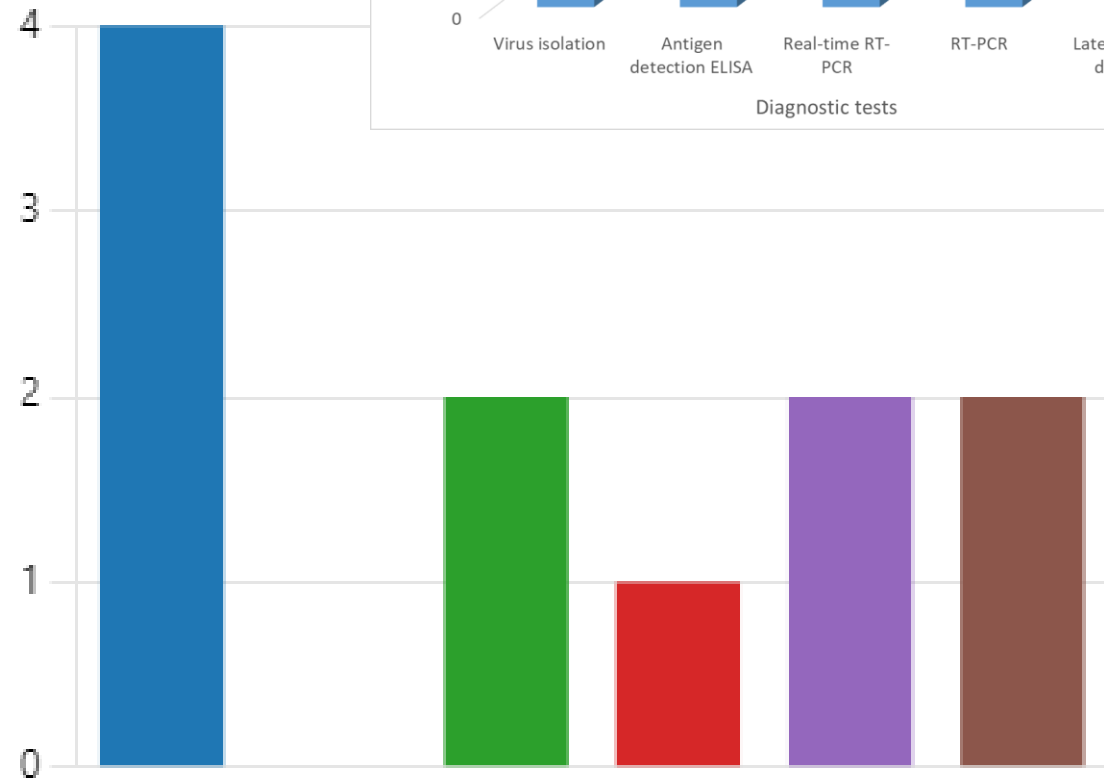
10. How frequently do you conduct Antigen detection ELISA?

[More Details](#)

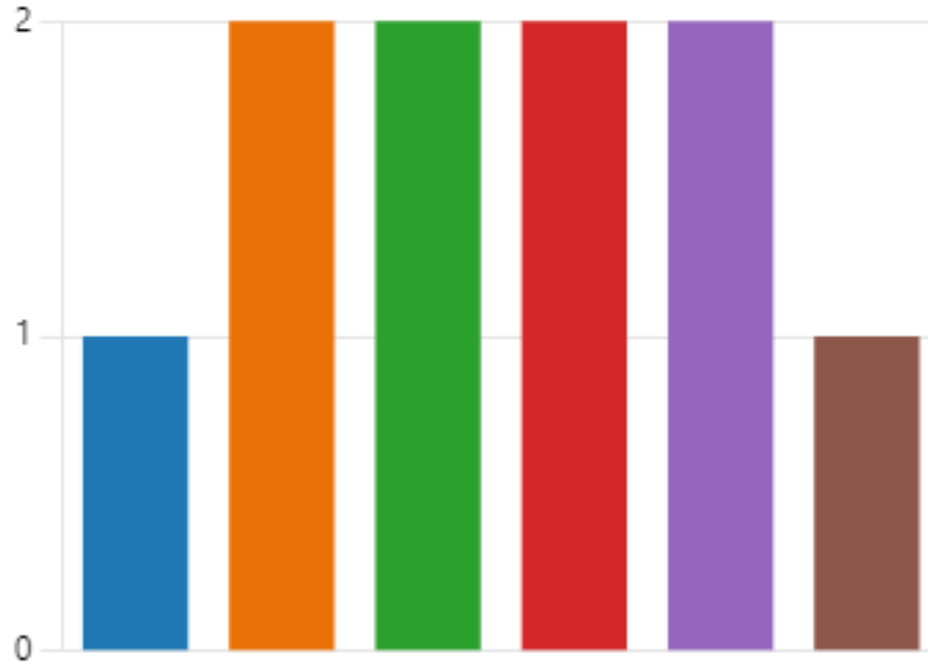
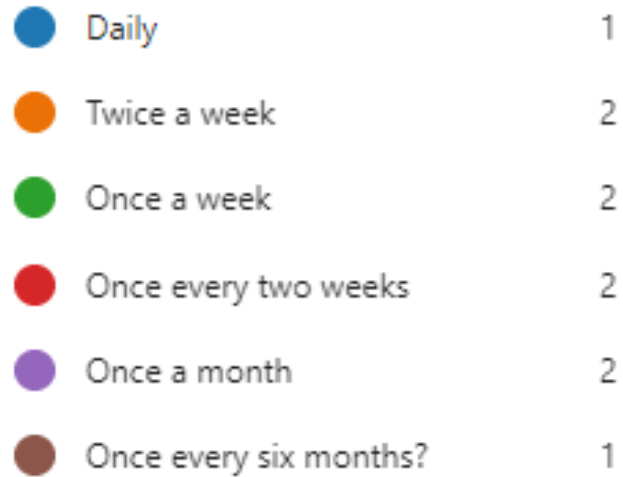
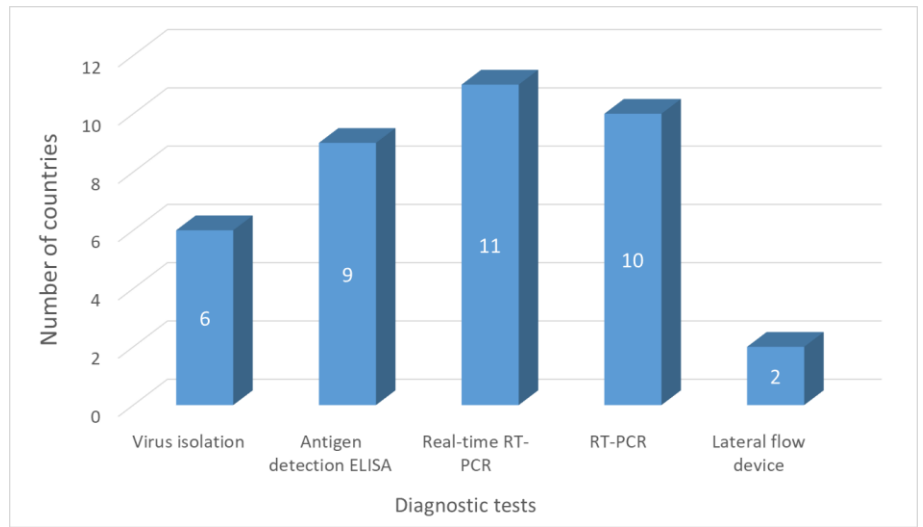
- Daily 2
- Twice a week 0
- Once a week 2
- Once every two weeks 1
- Once a month 3
- Once every six months 1



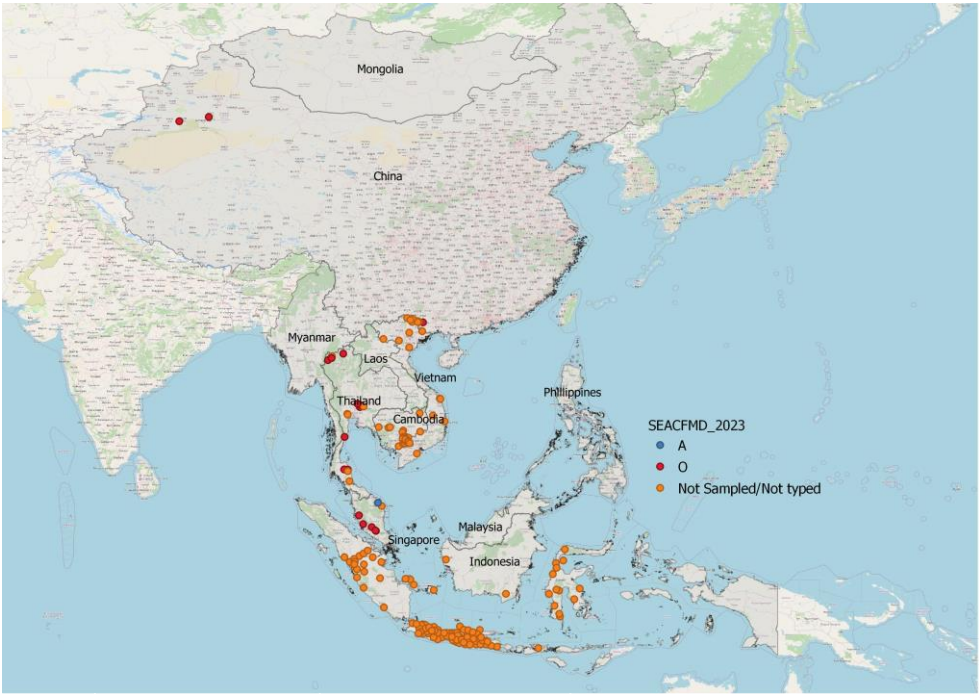
Real-time RT-PCR – 11 Countries



RT-PCR – 10 Countries

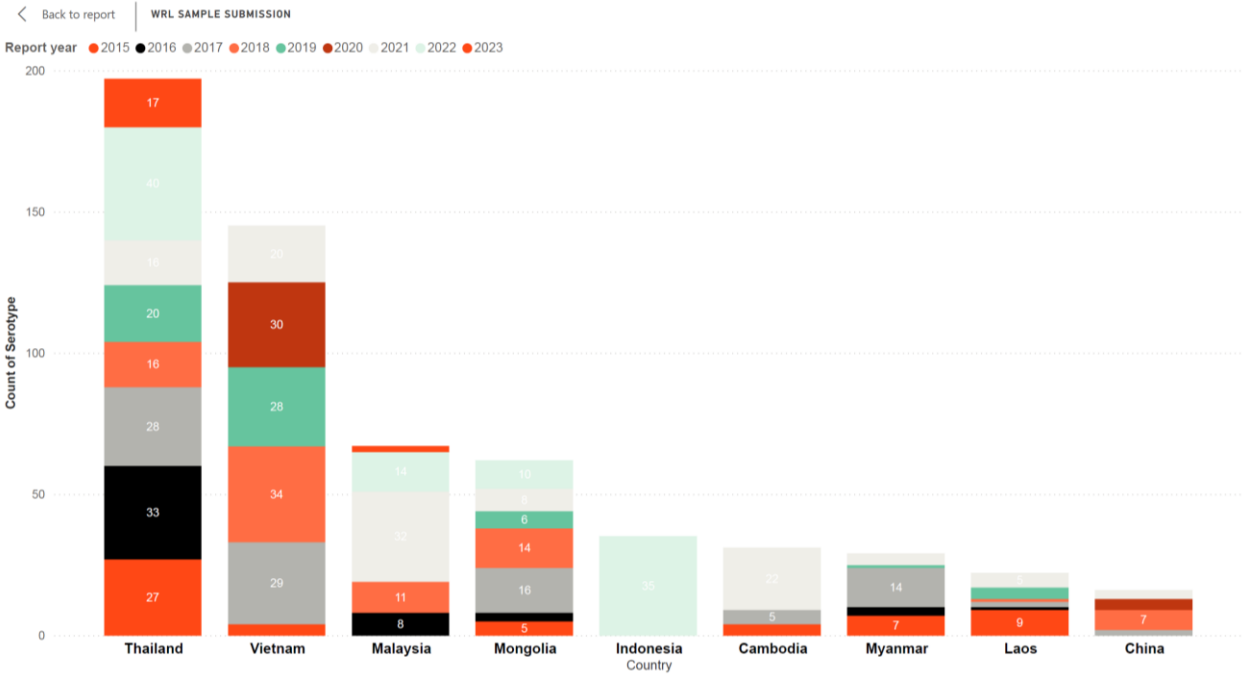


Sample collection/Typing and submission



Year	Number of FMD outbreaks reported	Number of FMD outbreaks with full investigation	Proportion (%) of reported outbreaks with full investigation, including virus characterization
2020	556	188	33.8
2021	306	155	50.7
2022	199	134	67.3
2023	202	19	9.4
Total	1263	496	39.3

Confirmed cases by WRLFMD (2015-2023)



Have not fully recovered after COVID-19



ACTIVE SURVEILLANCE DATA COLLECTION

Develop improved ways to quantify the burden of FMD infection across the whole region including structured sero-surveillance between Members to give a crude estimation of prevalence (including existing sero-surveillance reports)



Collecting active surveillance data to estimate prevalence and determine further actions

N	Year	Administration level 1 NAME (use shared file name)	Administration level 2 NAME (use shared file name)	Administration level 3 NAME (use shared file name)	Administration level 4 NAME (use shared file name)	Latitude (location of sample collected or can be centroid)	Longitude location of sample collected or can be centroid)	Type of samples (by each)	date of sample collection	Number of Samples tested	Name of test 1	Result (Neg/Pos)	Name of test 2
2	2021	Cambodia	Name	Name	Name			tissue	15-May-23	2			
3	2021	Cambodia	Name	Name	Name			tissue	16-May-23	1			
4	2021	Cambodia	Name	Name	Name			vesicular fluid	17-May-23	2			
5	2021	Cambodia	Name	Name	Name			vesicular fluid	18-May-23	1			
6	2021	Cambodia	Name	Name	Name			vesicular fluid	19-May-23	5			
7	2021	Cambodia	Name	Name	Name			swab	20-May-23	6			
8	2021	Cambodia	Name	Name	Name			swab	21-May-23	1			
9	2021	Cambodia	Name	Name	Name			swab	22-May-23	1			
10	2021	Cambodia	Name	Name	Name			blood	23-May-23	1			
11	2021	Cambodia	Name	Name	Name			blood	24-May-23	1			
12	2021	Cambodia	Name	Name	Name			blood	25-May-23	1			
13	2021	Cambodia	Name	Name	Name			blood	26-May-23	1			
14	2021	Cambodia	Name	Name	Name			blood	27-May-23	1			
15	2021	Cambodia	Name	Name	Name			blood	28-May-23	1			
16	2021	Cambodia	Name	Name	Name			blood	29-May-23	1			
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42	2023												
43	2023												
44	2023												





Thank you for your attention

Plenary discussion question

How can we improve timely sharing of information and epidemic intelligence activities?

How can we improve active surveillance/sample submission by Member countries to the Reference laboratories?

What preparations are necessary for a potential incursion of an exotic strain?

How can we improve access to quality FMD vaccine?

