



Country Presentation

Maintenance of FMD free status and Progress of SEACFMD Campaign



Country name: Brunei Darussalam

Presenter: Ak. Zharief Ahzha, DVM

Position: Veterinary Officer

Affiliation: Animal Health and Disease Control Unit







- > Brunei Darussalam is free of FMD (WOAH recognised) without vaccination.
- ➤ In ensuring this, the Department of Agriculture and Agrifood (DoAA) via the Livestock Industry and Veterinary Services Division has implemented a monitoring program called 'Maintaining Freedom of Disease Surveillance Program for FMD'.
- This program consists of a whole nation surveillance of the disease through serological testing and clinical signs observation of ruminant population in Brunei Darussalam.







FMD disease monitoring program is actively collaborated with PPR, whereas for LSD, surveillance is done via observation of clinical signs in the ruminant population. This helps ensure that other important notifiable diseases within the animal population is monitored concurrently.

	No. of Population By Districts			Total	No of	
Species	Brunei Muara	Tutong	Belait	Temburong	Total Population	No. of Establishment
Buffalo	0	959	14	43	1,016	109
Cattle	52	102	53	107	314	30
Goat	1,051	842	1,537	129	3,559	90
Sheep	299	14	2,328	57	2,698	25
Deer	26	180	0	100	308	5

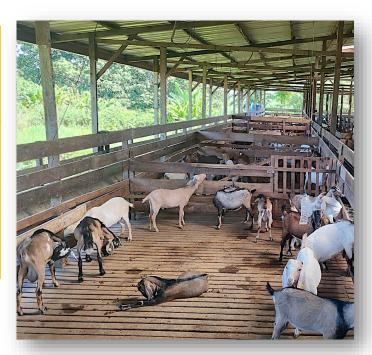


Table 1 – Statistical Data of Ruminant Population and Establishments in 2023

- These cattle establishments are mostly made up of holding yards / feedlots for slaughterhouses rearing mostly imported cattle. Buffaloes are mostly imported, and a small percentage are locally owned and bred by traditional farmers.
- > Goats and sheep are mostly reared intensively in raised stilt housings with the breeding herds are sourced from imports.
- > Deer farming is farmed more for recreational purposes with a small percentage for venison.





- > Following are the data of our active disease surveillance as of December 2023:
 - ❖ A total of **603** blood samples and **673** observation of clinical signs;
 - ❖ Over a total of **53 farms** visited.

Brunei Muara	Blood Sample Taken	Clinical Sign
Goat/Sheep	293	480
Large Ruminant	13	123
Deer	3	0
Total	309	603

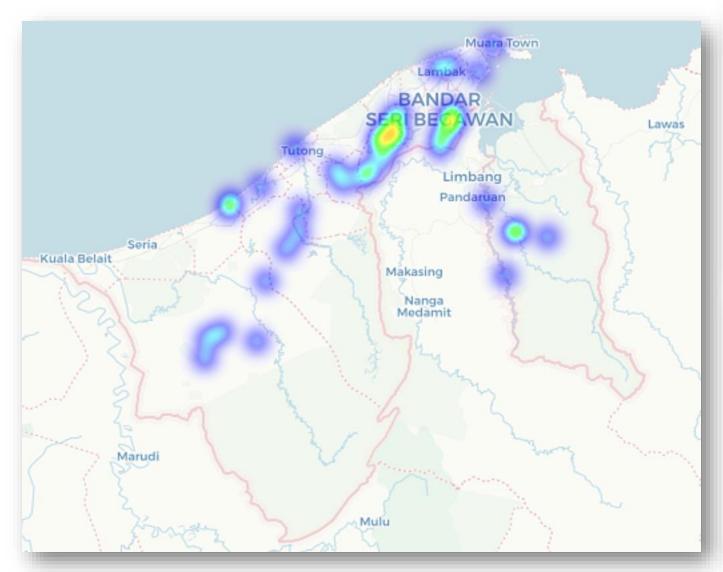
Belait	Blood Sample Taken	Clinical Sign
Goat/Sheep	112	0
Large Ruminant	0	0
Deer	0	0
Total	112	0

Tutong	Blood Sample Taken	Clinical Sign	
Goat/Sheep	92	0	
Large Ruminant	0	42	
Deer	0	0	
Total	92	42	

Temburong	Blood Sample Taken	Clinical Sign	
Goat/Sheep	90	0	
Large Ruminant	0	28	
Deer	0	0	
Total	90	28	









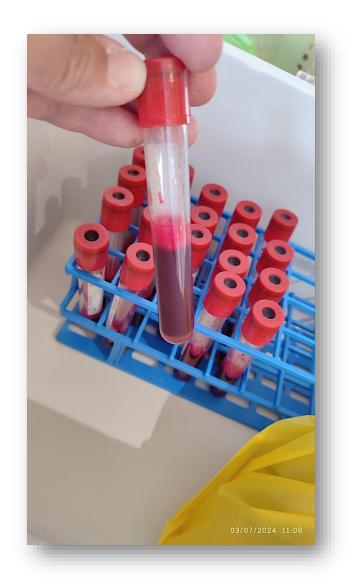






Lab Capacity (ISO/IEC:17025)

- Serology for NSP ELISA and RT-PCR for confirmatory testing.
- Facilities equipped with analyzer required for diagnostic testing eg. PCR, MiniON.







Importation and Border Control (Veterinary Import Conditions for live ruminants)

- Allow only importation of live ruminants from WOAH recognised countries that are FMD-free without vaccination.
- > 7 official entry points into Brunei Darussalam:
 - 4 via land (Labu, Ujung Jalan, Kuala Lurah and Sungai Tujoh)
 - 1 via airport (Brunei International Airport)
 - 2 via seaport (Muara Port and Serasa Ferry Terminal)
- On-site quarantine for newly imported live ruminants into Brunei Darussalam, minimum of 3 days before slaughter.
- > Transit of live ruminants from FMD affected areas are denied.
- Main risks and threat of FMD incursion is via live importation of ruminants into the country through illegal routes (smuggling).







Awareness Campaigns

- Awareness Programs that includes FMD clinical signs for livestock staff, para vets, farmers, relevant stakeholders and the public are being held at least officially 3 times in a year by the Livestock Industry and Veterinary Services Division, DoAA.
- Incorporation of FMD Infographics in official agricultural social media to reach wider audience to raise awareness for FMD.
- Language used in the materials are both in local malay and english.









General Overview

Chapter 254, Animal (Diseases and Quarantine) Act, 2021

- ➤ Includes disease notification requirements for listed notifiable diseases in animals which are mandatory to be reported (inclusive of FMD).
- ➤ Includes zoning, movement control, declaration of infected areas as well as disposal of diseased animal.

1. Simulation / Preparedness Exercises

- ➤ To maintain and continue multi-agency table-top exercises with relevant agencies for transboundary animal diseases (TADs):
- ❖ Action Plan 1 internal country disease preparedness;
- ❖ Action Plan 2 transboundary with neighboring regions.

3) Vaccine procurement and stocking mechanism.

> As part of disease preparedness in the case of incursion.







Multi-Agency Engagement

- FMD prevention, preparedness and disease response has been used as an example of a **notifiable disease under the animal health sector** to other ministries and agencies under the National Taskforce for Zoonotic Diseases.
- ➤ This engagement and dissemination of information helps the veterinary services explain the need of manpower and capacity building for other agencies at the border and control posts in the case of disease occurrence.
- This multi-agency engagement was first initiated since 2022 and is a collaborative platform primarily between Ministry of Health, Department of Agriculture and Agrifood and Ministry of Home Affairs. Other agencies are included based on their relevancy to the disease response action plans.

EXAMPLES OF ANIMAL DISEASE CONCERNS AND IMPORT REQUIREMENTS

Live Animal	Animal Disease Concern	Import Requirement	
Cats / dogs	Rabies	Country of export is officially from rabies for period of 2 years Rabies vaccination General vaccination Subjected to rabies antibody level blood test with results of at least 0.5 IU/ml Treatment against internal and external parasite. Examined within 48 hours prior to export and found to be free from any clinical signs of infectious or contagious diseases and are healthy and fit to travel	
Ornamental Birds	Avian Influenza	Country of export is officially from Avian Influenza Animals were kept isolated/quarantined for 21 days Subjected to diagnostic tests for H5 and H7 Avian Influenza with negative results Treatment against internal and external parasite. Examined within 48 hours prior to export and found to be free from any clinical signs of infectious or contagious diseases and are healthy and fit to travel	
Cattle / goats / sheep	FMD, BSE, Anthrax, Bluetongue	Country of export is officially free from Foot and Mouth Disease (FMD), Bovine Spongiform Encephalopathy (BSE), Anthrax, Bluetongue, etc. Examined within 48 hours prior to export and found to be free from any clinical signs of infectious or contagious diseases and are healthy and fit to travel	

NOTE:

- Please contact Animal Biosecurity Unit for the further details import requirement of the specific live animals and animal products.
- For those that have never been imported into the country, Import Risk Analysis is require prior to
 approval to import. And this process may take longer than 2 months to complete.

Documents require for inspection at border:

- Original and valid Import Permit issued by Department of Agriculture and Agrifood, Brunei Darussalam;
- ☐ Original and valid Veterinary Health Certificate issued by competent authority of the exporting country;
- ☐ Original vaccination records and/or laboratory test result (if require); and
- ☐ Original CITES Import Permit issued by Department of Agriculture and Agrifood, Brunei Darussalam (if applicable).





<u>TADs and Zoonoses Status Updates – Borneo Platform</u>

- ➤ Since 2017 (due to Rabies in Sarawak), Brunei Darussalam, Sarawak, Sabah and Kalimantan (West and East) has formed a platform both for the Animal (veterinary services) and also Human Health Sector (Disease Control Focals under Ministry of Health).
- ➤ Kawalan Penyakit Borneo (Borneo Disease Control) for the animal health sector meets virtually at least once or twice a year or when needed to update the current status of important notifiable diseases such as FMD, LSD, ASF, Rabies or other priority diseases within the region of Borneo.
- Most recent meeting was held virtually in February 2024 hosted by Brunei.



MAIN CHALLENGES AND RECOMMENDED SOLUTION





1) Limited Manpower and Expertise

Solution:

- ➤ To undergo continuous self-analysis and evaluation of the current veterinary services (WOAH PVS and the National Bridging Workshop (NBW)).
- > Structured training and competency programs for frontliners e.g. Livestock officers' veterinarians, para vets and staff at border control.

2) Lack of Awareness of FMD

Solution: Ongoing disease awareness campaigns, targeted seminars and one-to-one dialogues with farmers during disease surveillance (traditional farmers).

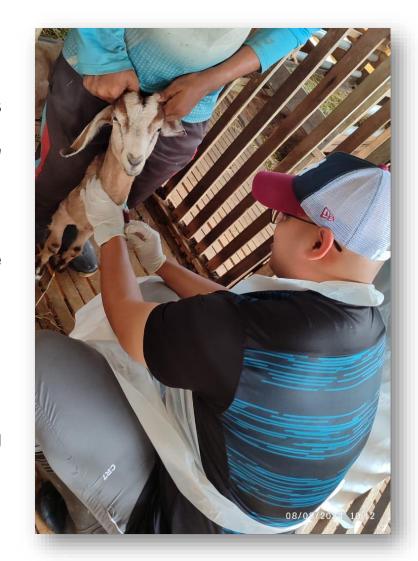
3) Emergency Response on Animal Disease needs to be updated.

Solution:

- Multi-institutional/agency response (inclusion of relevant institutions would add value).
- > Partner countries sharing their experiences during outbreaks (real life experiences).
- > Training-of-Trainers particularly in emergency disease response and conducting simulation exercises (multi-agency).

4) Surge Capacity

Solution – of SCAT tool in forecasting and planning capacity in labs.





Terima Kasih Thank You



