



World Organisation
for Animal Health
Founded as OIE

Lumpy skin disease (LSD)

An update on LSD situation and its control

Country name: Viet Nam

Name of Presenter: Pham Thanh Long

Position: Veterinary officer

Affiliation: Department of Animal Health

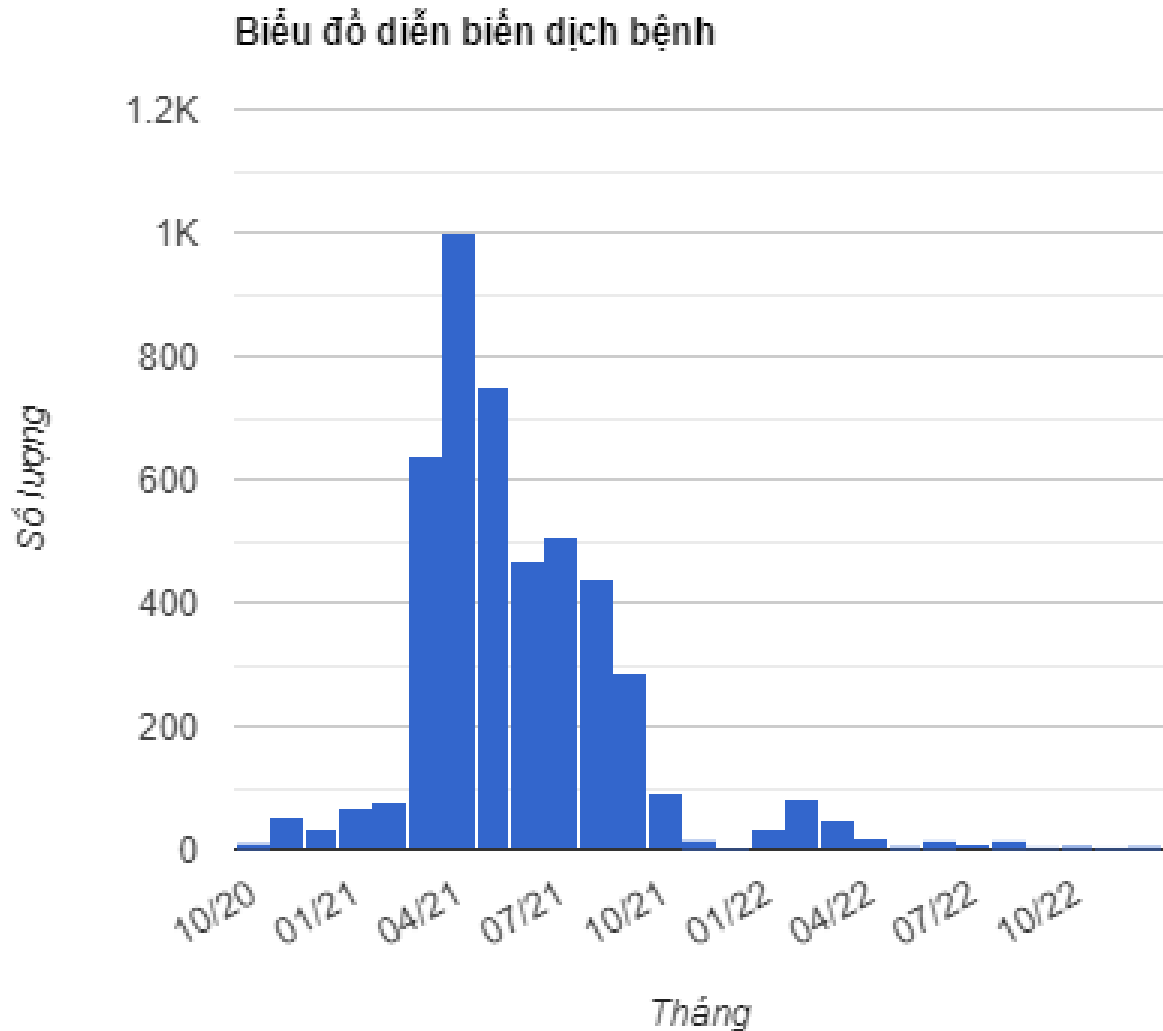
Virtual LSD Update Meeting for South-East Asia
16 December 2022, 2.00 to 4.30 PM (Bangkok time)

LSD Situation

Outbreak Updates (to 8 April, 2022)

Date of first report	13 October 2020
Date of report to WOAHO/OIE	01 November 2020
Total Number of Province affected out of total province	55 out of 63 provinces/cities
Number of farm affected	N/A
Number of animals affected (Cattle/ Buffalo)	211,266
Number of deaths (Cattle/ Buffalo)	29,667
Virus type (confirmed by which Laboratory)	Chinese LSD strains
Total number of outbreaks:	4,712
Total number of outbreaks resolved:	4,706
Ongoing outbreaks:	6

LSD Situation



- Vietnamese LSD strains shared 100% at both nucleotide & amino acid identity when compared with Chinese LSD strains.
- The analysis of EEV glycoprotein LSDV126 gene of the Vietnamese LSD samples show a similarity with Neethling virus strains and an identity with Chinese & Russian LSD strains.

Control Measures - Vaccination

- Vaccination began end of February 2021
- In 2021: VN imported & used 9 million doses of LSD vaccines
- In 2022: VN imported 450,000 doses

Vaccine type	Composition	Advantages	Disadvantages	JOVAC trade names
Homologues	Neethling strain	<ul style="list-style-type: none"> • High efficacy • Good neutralizing antibody response • Good DHI in 2-3 weeks post vaccination & protect for live 	<ul style="list-style-type: none"> • Produce clinical skin reaction • Reduce milk yield for 2-4 weeks period 	Lumpyshield-N®
Heterologous	Gorgan strain	<ul style="list-style-type: none"> • High efficacy • Good neutralizing Ab response • DHI higher than Neethling and within 2 weeks • Protect for live 	<ul style="list-style-type: none"> • No clinical reaction • No effect on milk yield 	Lumpyshield-G®
Heterologous	RM65 strain	<ul style="list-style-type: none"> • High efficacy • Good neutralizing antibody response • Good DHI in 2-3 weeks post vaccination • Protect for live 	<ul style="list-style-type: none"> • Produce clinical skin reaction • Reduce milk yield for 1 month period 	Jovivac Strong®

Control Measures – Others

National LSD Control Program, period 2022-2030

1. Vaccination
2. Apply biosecurity, disinfection & sterilization in animal stocking
3. Disease surveillance (passive & active surveillance)
4. Animal quarantine, transport control, slaughter control & veterinary hygiene inspection
5. Outbreak handling; managing and taking care of sick animals
6. Strengthen diagnostic and testing capacity
7. Develop disease-free compartments and zones
8. Studies on epidemiological characteristics of LSD, research & production of LSD vaccines
9. Communication of LSD
10. International cooperation to strengthen the capacity of prevention and control of diseases
11. Develop support policies for LSD prevention & control

Main challenges

- Cross-border control for livestock
- Domestic movement control
- LSD vaccines are imported
- Small-scale farms
- Free grazing
- Disease reporting

Way Forward to control LSD

- Strengthen disease detection
- Vaccinate in infected & high-risk areas (>80% vaccine coverage)
- Control illegal movement
- Collaborate & coordinate with WOA, FAO and other countries