



World Organisation  
for Animal Health  
Founded as OIE

# Lumpy skin disease (LSD)

## An update on LSD activities

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WOAH SRR SEA

Fourth LSD Coordination Meeting for South-East Asia  
28 – 29 November 2023, Bangkok, Thailand

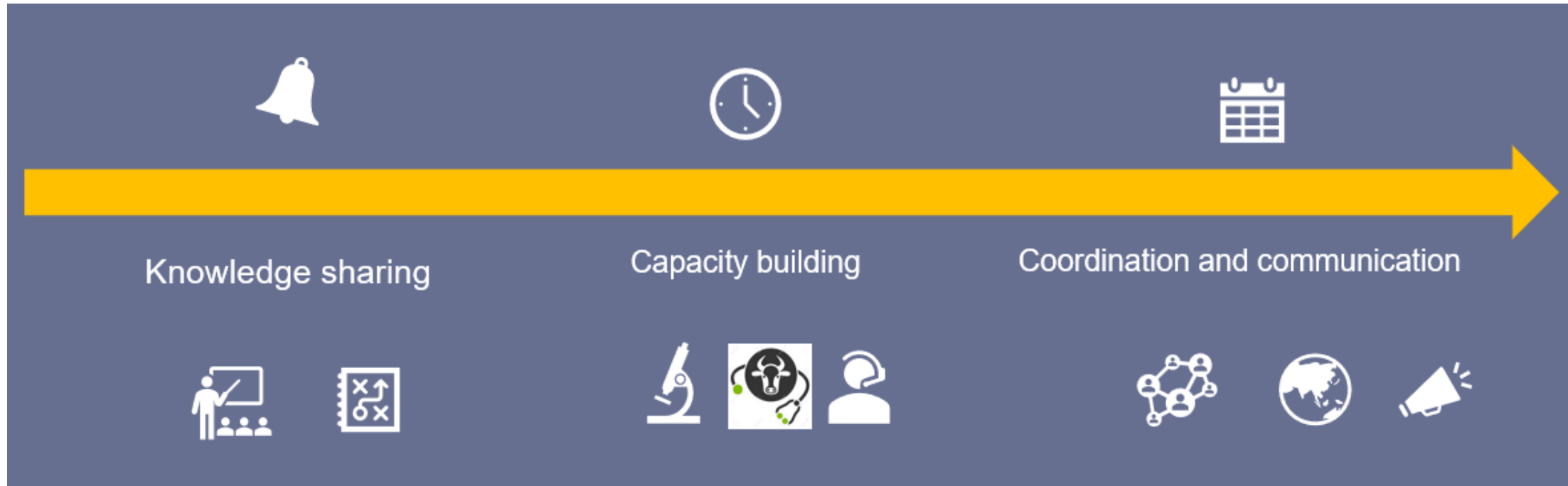
# PRESENTATION COVERS

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- WOAAH activity update
- ❑ Coordination activities
- ❑ Knowledge sharing
- ❑ Development of strategy
- ❑ Communication
- Activities from the other region
- Ongoing and planned activities



# Highlights of activities in response to LSD Outbreaks



## Webinars

- Emergency response
- Laboratory diagnosis
- General consultations
- Situation Updates

## Coordination Meeting and Communication

- First Coordination meeting – updates on LSD situation and preparedness
- Second LSD Coordination Meeting – LSD vaccination
- Third LSD Coordination Meeting – Communication
- FAQ - LSD and LSD vaccination
- Communication materials developed to support Members



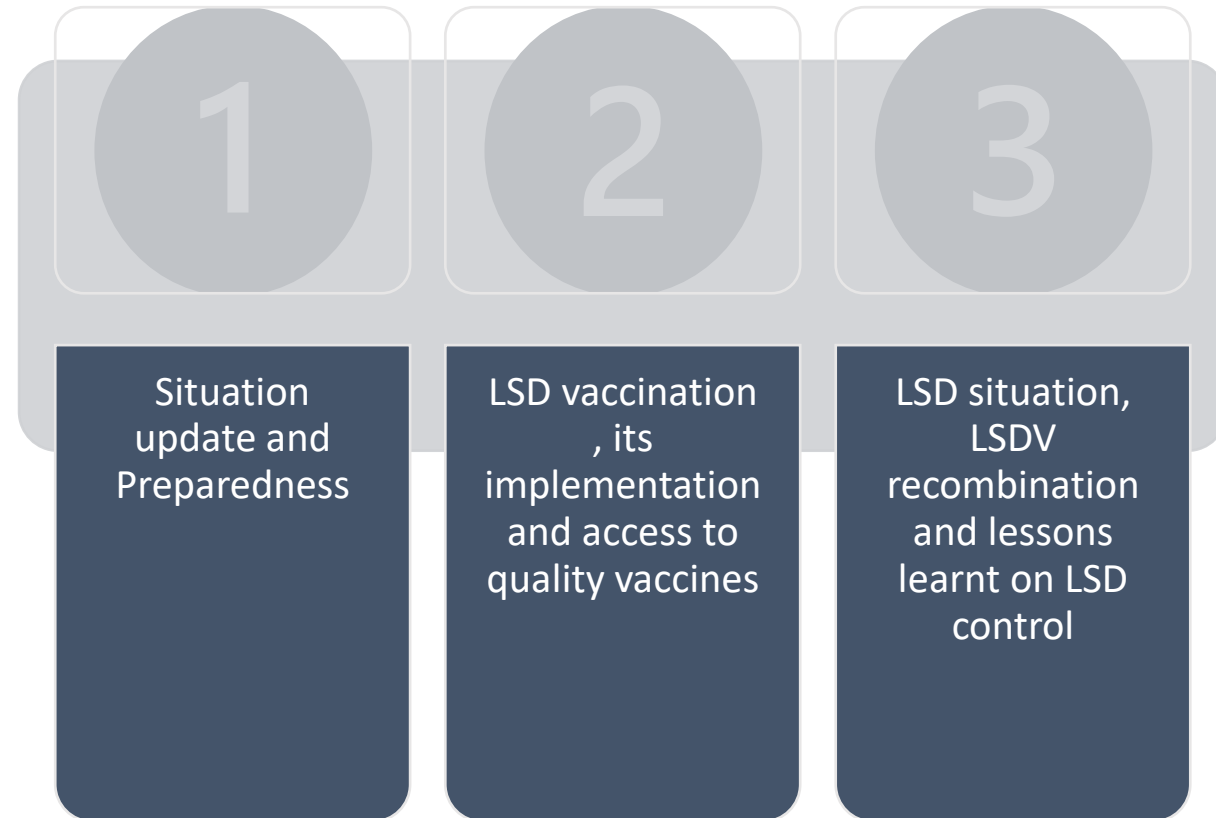
# WEBINAR SERIES by WOAHA RRAP

- 1 Emergency response [17 July 2020]
- 2 Laboratory diagnostics [24 Sep 2020]
- 3 General consultation [25 Sep 2020]
- 4 Regional situation update [21 Dec 2020]
- 5 Regional situation update [ 26 Aug 2021]

# COORDINATION MEETINGS

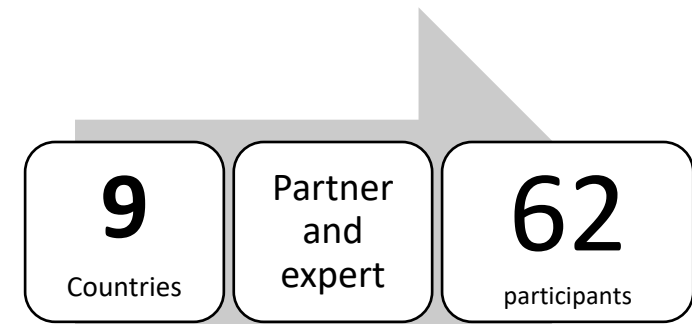
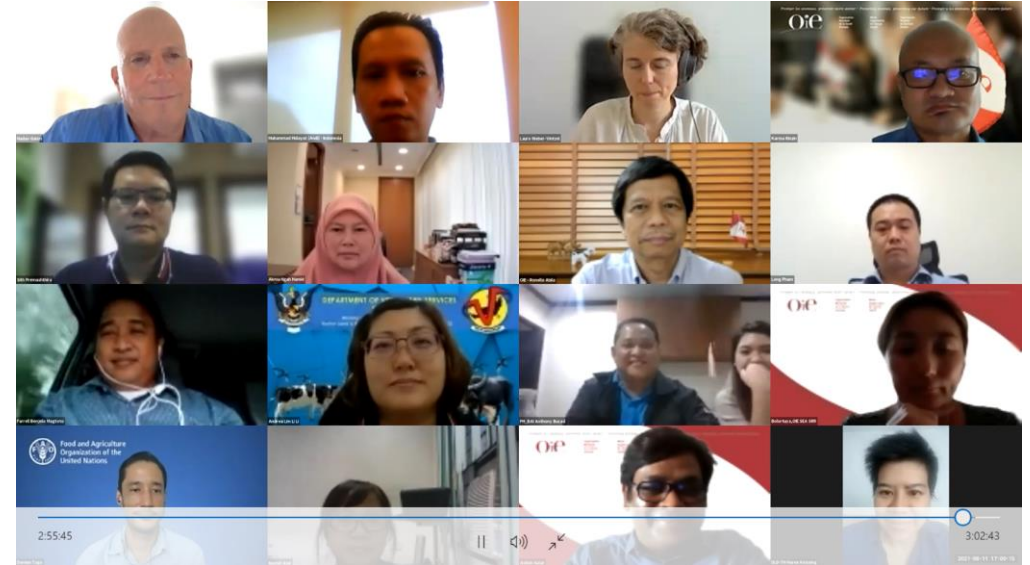
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- **First** Lumpy Skin Disease (LSD) coordination meeting in South-East Asia [Virtual, 11 June 2021]
- **Second** LSD coordination meeting for South-East Asia [Virtual, 16 Dec 2021]
- **Third** LSD coordination meeting for South-East Asia [Virtual, 16 Dec 2022]
- **Fourth** LSD coordination meeting for South-East Asia [ongoing]



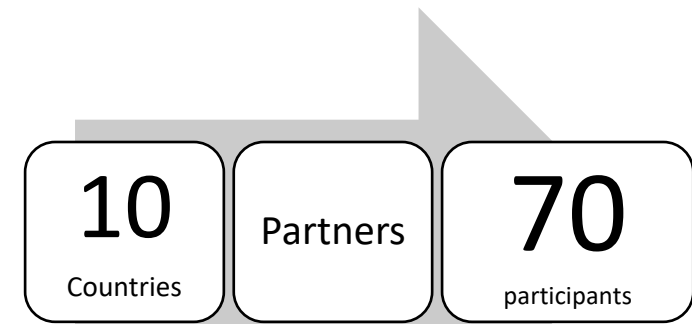
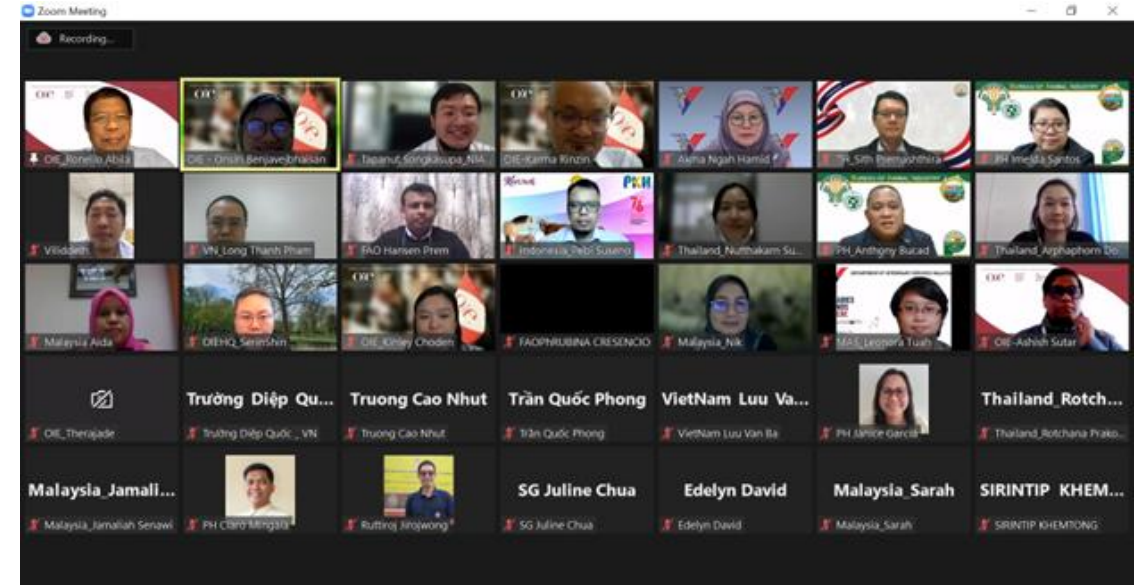
# FIRST LSD COORDINATION MEETING (11 Jun 2021)

- Provided updates on the LSD situation in South-East Asia region;
- Highlighted preparedness of the countries at risk of LSD incursion;
- Provide a platform for technical discussions on LSD prevention and control measures for their **practical implementation** in the field;
- Shared tools and resources made available by FAO and the WOAHA for LSD prevention and control.



# SECOND LSD COORDINATION MEETING (16 Dec 2021)

- Provided updates and share experiences in implementation of LSD vaccination by those countries implementing LSD vaccination.
- Provided update on the LSD Preventive Vaccination Plan by those countries at the risk of LSD incursion.
- Discussed on various issues related to LSD vaccination and in particular access to quality LSD vaccines.



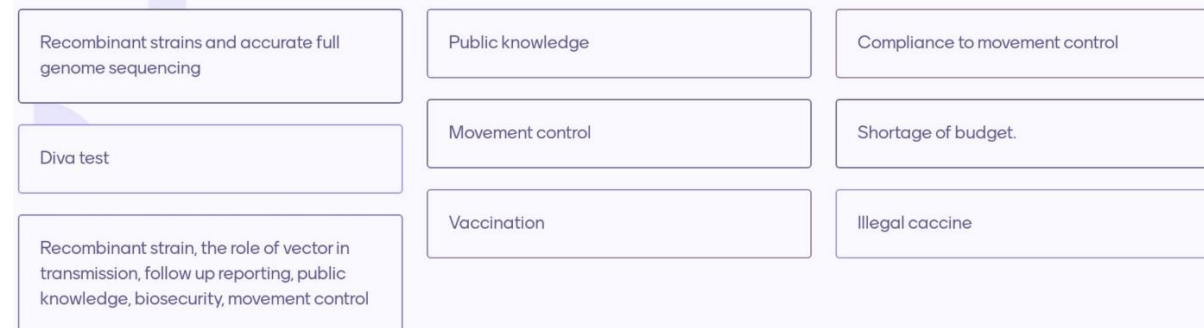
# THIRD LSD COORDINATION MEETING

(16 Dec 2022)

- Updated Members on the Global LSD situation with focus on the circulating recombinant LSDV strains in South-East Asia.
- Provided update on the current LSD situation in the affected countries;
- Shared experiences and lessons learnt on LSD diagnosis and vaccination and solution to address some of the challenges;
- Identified priority needs and actions to enhance LSD prevention and control in South-East Asia.

5. What are the main knowledge gaps you think needs to be addressed to better support prevention and control of LSD?

Mentimeter



7. In your country, what are main challenges in LSD Vaccination and other prevention and control measures?

Mentimeter



14

Countries

Partners  
and  
experts

82

participants



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# FREQUENTLY ASKED QUESTIONS ?

- [Frequently Asked Questions \(FAQ\) on LSD \[June 2022\]](#)
- [Q &A – Expert response to questions raised by the participants \[June 2021\]](#)
- [FAQ on LSD Vaccination \[Sept 2021\]](#)

## Frequently Asked Questions (FAQ) on lumpy skin disease (LSD)

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# Development of ASEAN Lumpy skin disease (LSD) Prevention and Control Strategy

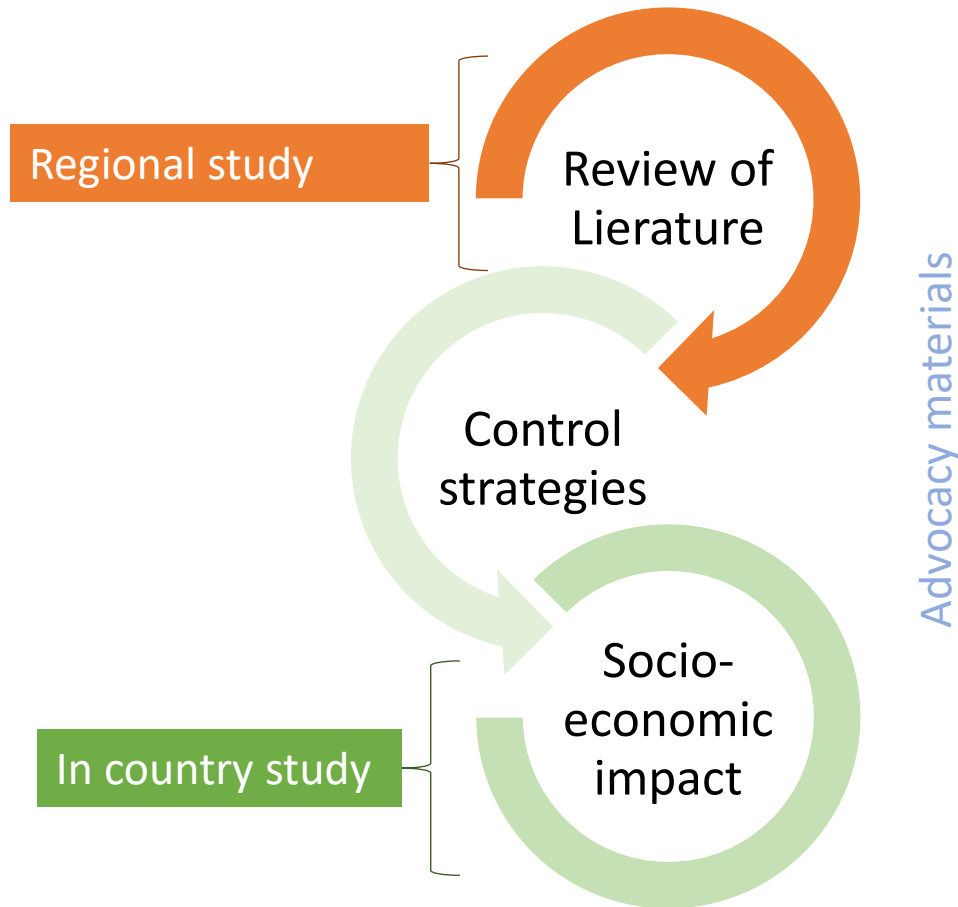
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- As with any other TADs, the LSD can effectively controlled when countries with a similar epidemiological situation work together in a coordinated manner to control the disease.
- The GF-TADs Strategy for 2021-2025 recommends development of strategies for priority TADs at regional and sub-regional level to address their priorities for the control and prevention of TADs.
- Considering the wide spread of LSD in South-East Asia (8 out of 10 countries affected) and importance of regional coordination for the effective control of LSD:
- The Second LSD Coordination and 30th ASWGL Meeting in June 2022 recommended development of ASEAN LSD Prevention and Control Strategy



# Study to assess the impact of LSD

WOAH launched call for proposal – Chiang Mai University is carrying out study to assess the impact of LSD in Asia



# LSD Communication Materials

Cattle owners, traders


## Lumpy skin disease a new threat to the region

Lumpy skin disease (LSD) is a viral disease of domestic cattle, water buffaloes and certain wild ruminants. Its incubation period is about 28 days but experimentally infected cattle may develop clinical signs as early as 6-8 days. This disease heavily impacts animal health and welfare and can lead to severe economic losses in affected farms.

**LSD has recently spread to and within Asia, posing a threat to your country.**


### How do animals get infected?

- Mainly by blood-feeding arthropod vectors.
- Through bringing in infected cattle from affected regions.



### When to suspect LSD?

- Ocular (eye) and nasal discharge – usually observed first.
- Decreased milk yield in lactating cattle.
- High fever that may exceed 41 °C or 106 °F.
- Enlarged subcutaneous and prefrontal lymph nodes (swelly palpable).
- Appearance of firm cutaneous nodules of 2-6 cm in diameter, particularly on the head, neck, limbs, udder, genitalia and perineum within 48 hours of onset of the fever.
- Number of nodules varies from few in mild cases, to multiple lesions in severely affected animals.



### What to do in case of LSD suspicion?

- Contact the Veterinary Services.
- Prevent further spread of the disease by asking the animal owners/keepers to:
  - Remove the suspected animals from the rest of the herd.
  - Separate the rest of the animals from neighbouring farms by avoiding communal grazing.
  - Stop cattle movement from the farm.
  - Limit visitors to essential services.
- Carry out clinical examinations on the rest of the animals, in order to identify the disease at very early stages.
- Provide supportive treatment to affected animals to reduce the fever, maintain hydration and prevent secondary bacterial infections.
- A vaccine exists to protect the cattle. **Contact the Veterinary Services for more information on the vaccine.**

**For more information:**  
OIE regional webpage on LSD: <https://www.oie.int/en/faq/lumpy-skin-disease/>




## Lumpy skin disease a threat to the region

### Lumpy skin disease (LSD)

- LSD is a viral disease of domestic cattle, water buffaloes and certain wild ruminants.
- Incubation period of LSD is 28 days but experimentally infected cattle may develop clinical signs as early as 6-8 days.
- It heavily impacts animal health and welfare and can lead to severe economic losses in affected farms.
- LSD has recently spread to and within Asia, posing a threat to your country.

### How do animals get infected?

- Mainly by blood-feeding arthropod vectors (mosquitoes, biting flies and ticks).
- Through bringing in infected cattle from affected regions.



### For more information

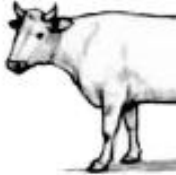
OIE regional webpage on LSD: <https://www.oie.int/en/faq/lumpy-skin-disease/>

FAO, 2017, Lumpy skin disease fact sheet – A manual for veterinarians. <https://www.fao.org/CT/335002/04/>

Check the latest information on the website of LSD in the region:

- Consult the OIE WPMR portal: [www.oie.int/wahis/wahis2/vetbasic/collection/index.asp](http://www.oie.int/wahis/wahis2/vetbasic/collection/index.asp)
- Subscribe to OIE WPMR alerts: [www.oie.int/wahis/wahis2/vetbasic/collection/index.asp](http://www.oie.int/wahis/wahis2/vetbasic/collection/index.asp)


**Contact us:**  
OIE Asia and Pacific in cooperation with OIE South East Asia or equivalent IRI



### How can you protect your country from LSD?


#### When to suspect LSD?

- Initial signs:
  - Ocular (eye) and nasal discharge – usually observed first.
  - Decreased milk yield in lactating cattle.
  - High fever that may exceed 41 °C or 106 °F.
  - Enlarged subcutaneous and prefrontal lymph nodes (swelly palpable).
- Appearance of highly elevated skin, nodular skin lesions of 2-6 cm in diameter:
  - Cutaneous nodules particularly on the head, neck, limbs, udder, genitalia and perineum within 48 hours of onset of fever.
  - The number of lesions varies from a few in mild cases, to multiple lesions covering the entire body in severely affected animals.



#### What to do in case of LSD suspicion?

- Contact the Veterinary Services.
- Prevent further spread of the disease by asking the animal owners/keepers to:
  - Remove the suspected animals from the rest of the herd.
  - Separate the rest of the animals from neighbouring farms by avoiding communal grazing.
  - Stop cattle movement from the farm.
  - Limit visitors to essential services.
- Carry out clinical examinations on the rest of the animals, in order to identify the disease at very early stages.
- Provide supportive treatment to affected animals to reduce the fever, maintain hydration and prevent secondary bacterial infections.
- A vaccine exists to protect the cattle. **Contact the Veterinary Services for more information on the vaccine.**




## Protecting your animals from Lumpy skin disease

Lumpy skin disease (LSD) affects cattle and water buffalo. It is currently spreading in Asia affecting animal health and welfare, livelihoods, and food security.

**LSD poses a threat to your animals.**

### How your animals can get infected?

- Mainly by biting insects such as mosquitoes, stable flies and ticks.
- By moving infected cattle from an area where the disease is present.



### When to suspect LSD?

- Discharge from eyes and nose.
- High fever.
- Decreased milk yield in lactating cows.
- Appearance of firm raised skin nodules, usually noticed first on head and neck.
- Number of nodules varies from few in mild cases to many covering the entire body in severe cases.



### What to do in case of LSD suspicion?

- Notify immediately to the local veterinarians or official Veterinary Services.
- Separate suspected case(s) from the rest of the herd.
- Monitor the health of animals everyday in order to identify sick animals.
- Stop cattle movement from the farm.
- Seek advice from vets and paravets to provide supportive treatment.

### How to prevent and control LSD in your farm?

- Only buy healthy animals from trusted sources.
- Keep farm/ sheds free from breeding sites for insects such as standing water and dung.
- Only allow visitors to your farm for essential services.
- A vaccine exists to protect your animals. **Contact your local vet or paravet or official Veterinary Services for information on the vaccine.**

**For more information:**  
OIE regional webpage on LSD: <https://www.oie.int/en/faq/lumpy-skin-disease/>



Target audience : Animal health workers

# Activities in other WOAHA regions for LSD

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## Europe region:

- Set up Standing Group of Experts for LSD in 2016
  - Regularly exchange information on LSD situation and control measures
  - Review of national control strategies by experts -> view to build science-based and harmonized regional control strategy
  - Collaboration on lab diagnostics
  - Collaborate on awareness raising campaigns

## Key recommendations at Feb 2023 meeting:

- Mass vaccination with homologous vaccines should be considered in affected countries, and cessation undertaken in a coordinated manner, with active and passive surveillance
- Quality of vaccine should be aligned with the requirements of the WOAHA Terrestrial Manual
- Independent quality control of vaccine should be carried out, in collaboration with LSD Reference laboratory
- Characterization of new strains of the LSD virus should be done, including vaccine-related strains, in close collaboration with LSD Reference laboratories.

# Activities in other WOAAH regions for LSD

## TADs Coordination Meeting for SAARC

- Paro, Bhutan, 8-12 May 2023



- Focused on PPR, FMD and LSD
- Day 2 of the meeting was dedicated to LSD related matters
- Cross-border network strengthened
- Implementation of coordinated and effective vaccination programmes in South Asia
  - Safe, effective, accessible and affordable vaccines

# Activities in other WOAHA regions for LSD

## East Asia CVO/Contact Persons Meeting on PPR and LSD

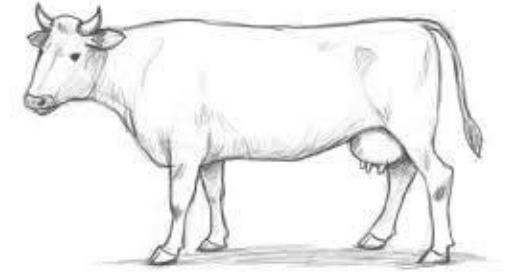
- Qingdao, China, 24-26 July 2023



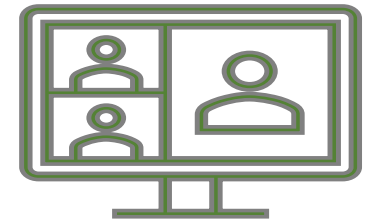
- Discussion on:
  - Global and regional situations of PPR and LSD
  - Members' experience in disease control
  - East Asia priority activities
- Strengthened and enhanced:
  - Epidemiology & Laboratory Network
  - Regional PPR & LSD laboratories collaboration mechanisms among members in the region
  - Capacity for prevention and control of PPR & LSD in East Asia

# Ongoing and Planned Activities

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- Advocacy and awareness
  - Advocacy to Policy makers - Policy brief for the decision makers
    - Ongoing for FMD which will be adapted for other LSD
    - Outputs of study to assess the impact of LSD
  - Infographics and videos on the use on LSD vaccination and use of quality vaccines – Ongoing
- Development of ASEAN LSD Prevention and Control Strategy in line with 30th ASWGL Meeting recommendations and GFTADs Strategy 2021 – 2025
  - Seek endorsement of 32<sup>nd</sup> ASWGL Meeting and other ASEAN Bodies
  - Support implementation of ASEN LSD Strategy
- 5<sup>th</sup> LSD coordination meeting 2024







# THANK YOU

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Acknowledgement : Drs Karma Rinzin, Charmaine Chng, Bolortuya Purevsuren and Peng Li

4<sup>th</sup> LSD Coordination Meeting  
28 – 29 November 2023, Bangkok, Thailand