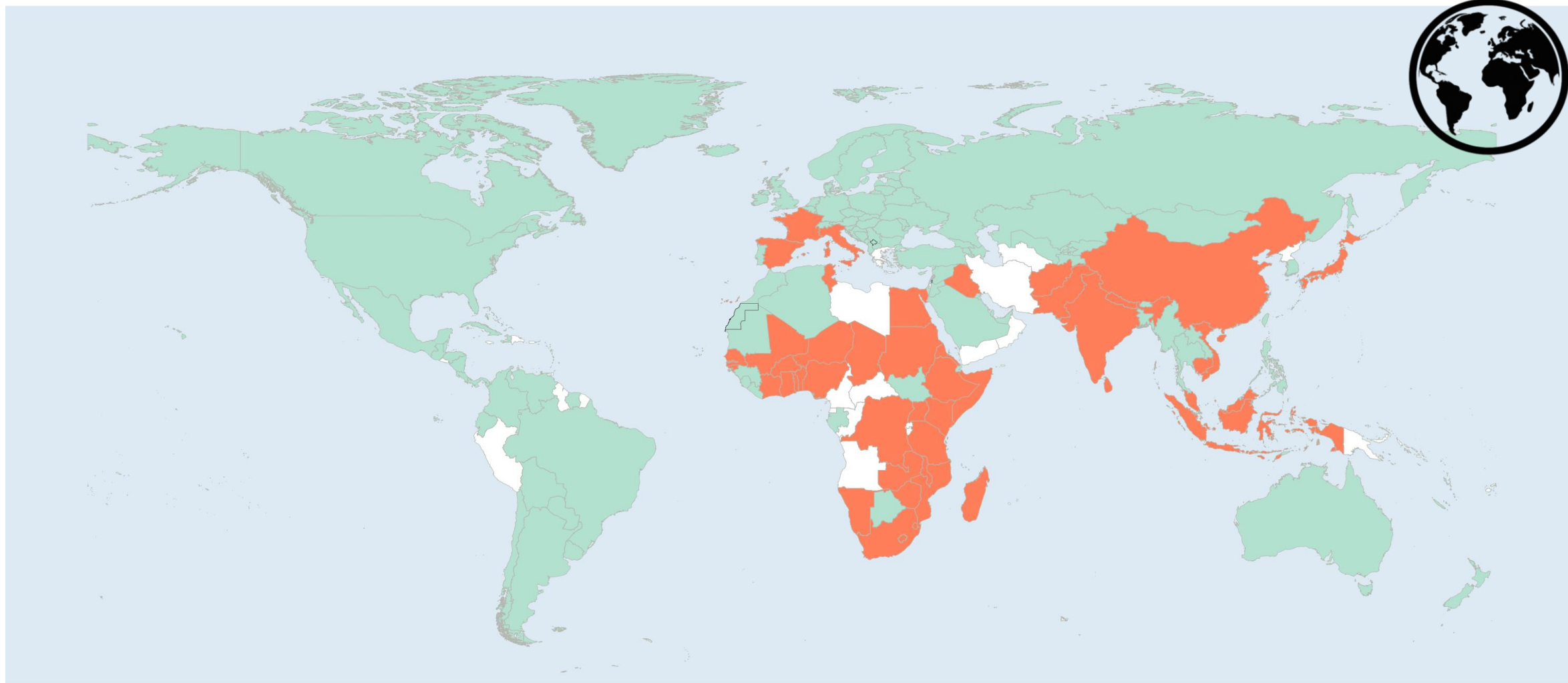


WOAH's Regional Activities on Lumpy Skin Disease (LSD)

Genta Kawai

Regional Veterinary Officer

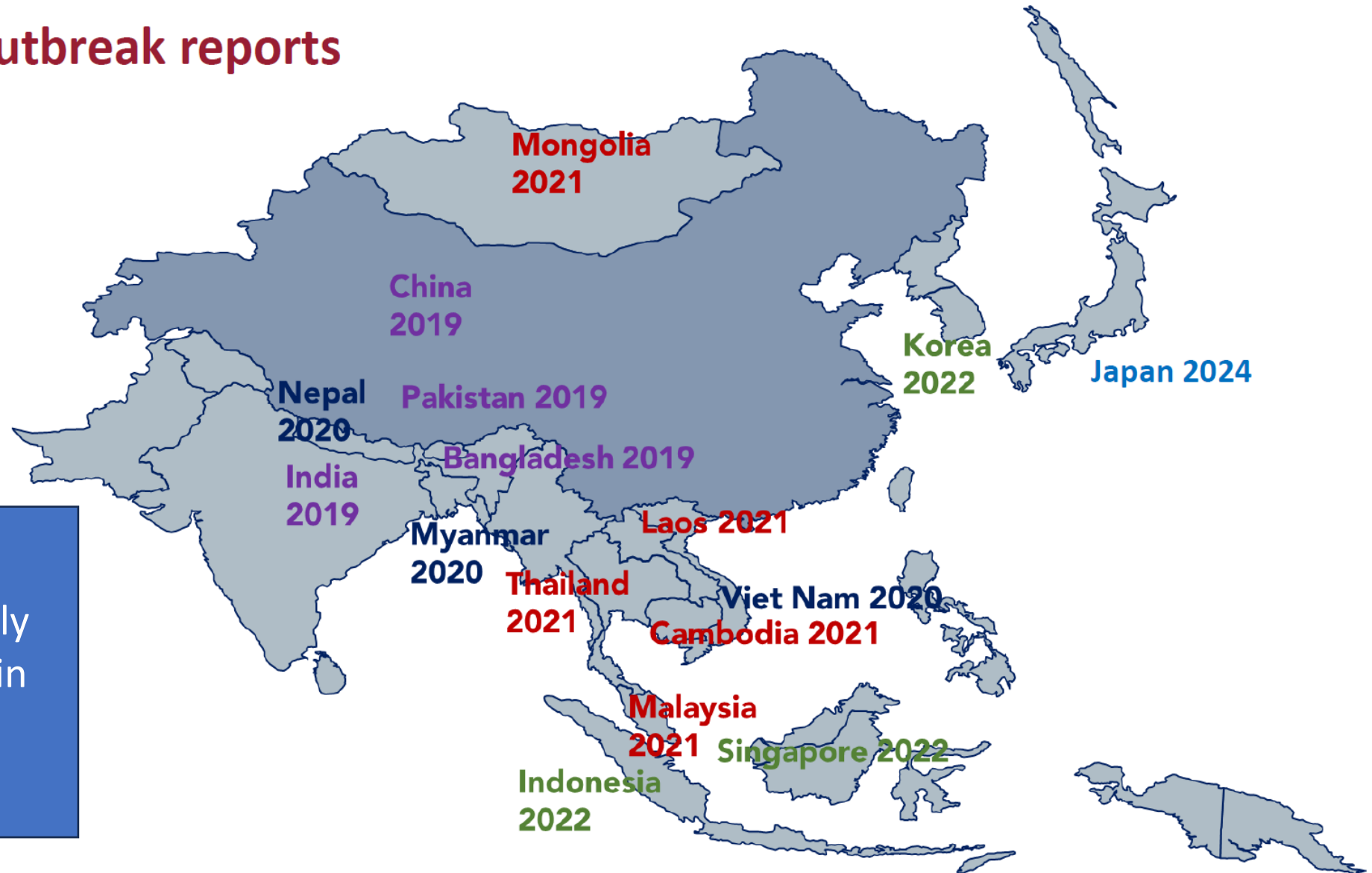
WOAH Regional Capacity Training on Priority Animal
Disease Control and Prevention in Asia and the Pacific
14-18 September 2026
Qingdao, China





Background

LSD outbreak reports



Twenty Members officially reported LSD since 2019 in Asia and the Pacific



WOAH Standards on Lumpy Skin Disease



Manual of Diagnostic Tests and Vaccines for Terrestrial Animals

CHAPTER 3.4.12. Lumpy skin disease

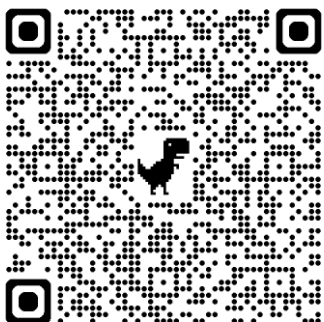
Terrestrial Animal Health Code

CHAPTER 11.9. Infection with lumpy skin disease virus



- Test methods available for the diagnosis of LSD, and the different purpose

Access Terrestrial Manual Chapter 3.4.12:



B. DIAGNOSTIC TECHNIQUES

Table 1. Test methods available for the diagnosis of LSD and their purpose

Method	Purpose					
	Population freedom from infection	Individual animal freedom from infection prior to movement	Contribute to eradication policies	Confirmation of clinical cases	Prevalence of infection – surveillance	Immune status in individual animals or populations post-vaccination
Detection of the agent						
Virus isolation	+	++	+	+++	+	–
PCR	++	+++	++	+++	+	–
TEM	–	–	–	+	–	–
Detection of immune response						
VNT	++	++	++	++	++	++
IFAT	+	+	+	+	+	+
ELISA	++	++	++	++	++	++

Key: +++ = recommended for this purpose; ++ recommended but has limitations;

+ = suitable in very limited circumstances; – = not appropriate for this purpose.

PCR = polymerase chain reaction; TEM = Transmission electron microscopy; VNT = virus neutralisation test;

IFAT = indirect fluorescent antibody test; ELISA = enzyme-linked immunosorbent assay.

- Horizontal provisions
 - Chapter [1.1.8](#) Principles of veterinary vaccine production,
 - Chapter [2.3.3](#) Minimum requirements for the organisation and management of a vaccine manufacturing facility
 - Chapter [2.3.4](#) Minimum requirements for the production and quality control of vaccine, and other regulatory documentation.
- Chapter 3.4.12.
 - Revised Section C on vaccines recently adopted in 2024
 - Covers requirements for LSD vaccine candidates, including safety and efficacy and post-market surveillance
 - PCR assays have been designed to differentiate between Neethling-based LSDV strains and wild-type LSDV strains from cluster 1.2. /!¥ differentiation not possible with recombinant or wild type cluster 1.1. strains



Definition of infection/
infestation, its occurrence
and specific
epidemiological
considerations

Notifiable disease for
WOAH Members

Caution with
recombinant strains

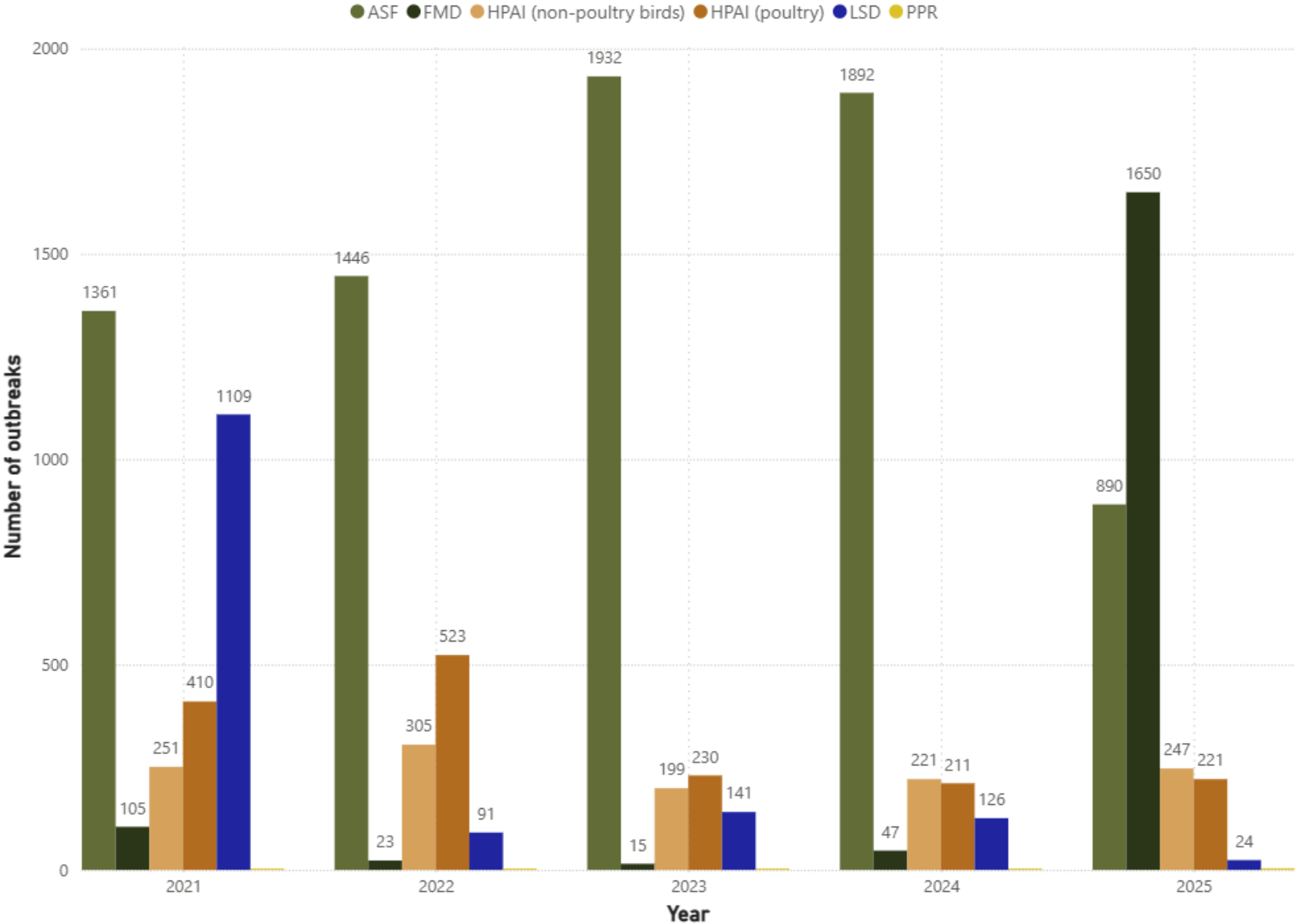
Access Terrestrial Code
Chapter 11.9.

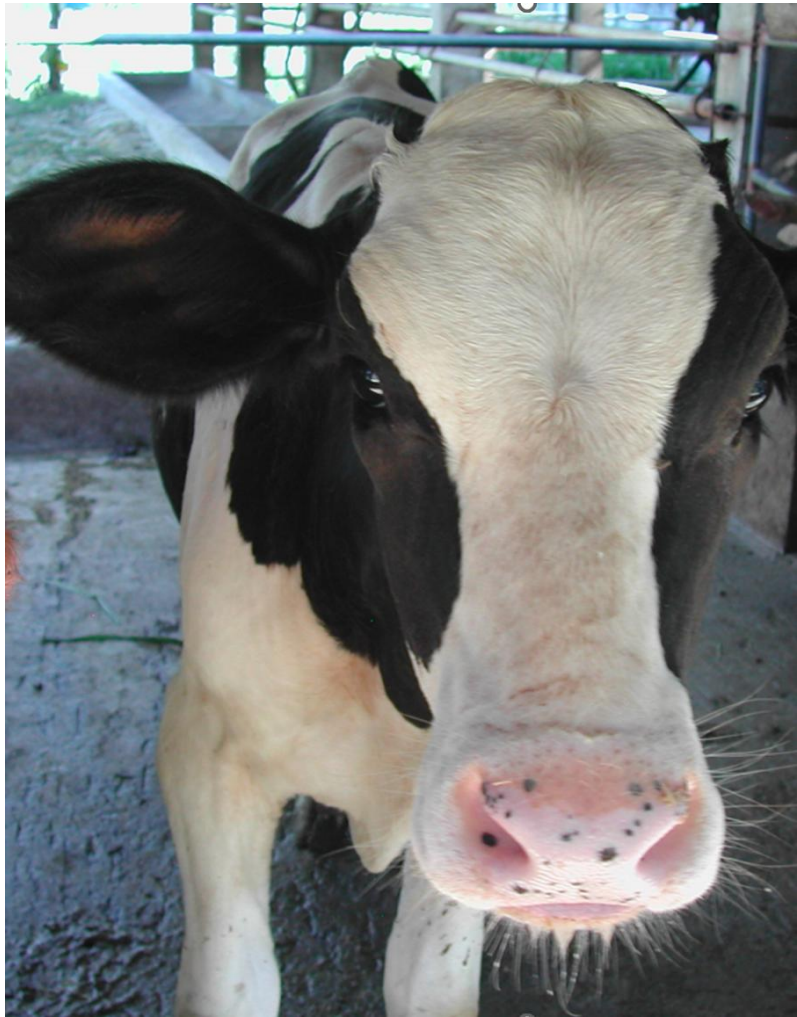


- Lumpy skin disease (LSD) susceptible animals are **bovines** (*Bos indicus* and *B. taurus*) and **water buffaloes** (*Bubalus bubalis*) and certain wild ruminants. [new consideration: yaks, mithuns]
- Definition of the occurrence of infection with LSDV:
 - Isolation LSDV
 - antigen or nucleic acid specific to LSDV, excluding vaccine strains + **context**
 - antibodies specific to LSDV + **context**
- For the purposes of the Terrestrial Code, the incubation period for LSD shall be 28 days.
- Standards for diagnostic tests and vaccines are described in the Terrestrial Manual.



New outbreaks reported by Asia-Pacific Members for five priority diseases





Regional Activities in Asia and the Pacific Region



LSD Communication Materials

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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-sucking 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 (swollen, 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 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?

1. Contact the Veterinary Services.
2. Prevent further spread of the disease by asking the animal owners/keepers to:



3. Carry out clinical examinations on the rest of the animals, in order to identify the disease at very early stages.
4. Provide supportive treatment to affected animals to reduce the fever, maintain hydration and prevent secondary bacterial infections.
5. 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:
www.oie.int/eng/npah/lumpy-skin-disease.htm



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



For more information:

OIE regional webpage on LSD:
www.oie.int/eng/npah/lumpy-skin-disease.htm
FAO, 2017, Lumpy skin disease field manual – A manual for veterinarians.
www.fao.org/3/73505en/73505en.pdf
Check the latest information on the evolution of LSD in the region:
Consult the OIE-WAHB platform: <https://wahb.oie.int/>
Subscribe to OIE-WAHB alerts: <https://wahb.oie.int/subscribe/2019-08-01>

Featured on:

OIE Asia and Pacific, in-depth updates on
OIE South-East Asia, on outbreaks in 2017

Lumpy skin disease

a threat to the region



OIE WORLD ORGANIZATION FOR ANIMAL HEALTH
Protecting animals, promoting our future

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 (swollen, palpable).
- Appearance of highly characteristic firm, 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?

1. Contact the Veterinary Services.
2. Prevent further spread of the disease by asking the animal owners/keepers to:



3. Carry out clinical examinations on the rest of the animals, in order to identify the disease at very early stages.
4. Provide supportive treatment to affected animals to reduce the fever, maintain hydration and prevent secondary bacterial infections.
5. 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 round 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?

1. Notify immediately to the local veterinarians or official Veterinary Services.
2. Separate suspected case(s) from the rest of the herd.
3. Monitor the health of animals everyday in order to identify sick animals.

4. Stop cattle movement from/to the farm.
5. Seek advice from vets and paravets to provide supportive treatment.

How to prevent and control LSD in your farm?

1. Only buy healthy animals from trusted sources.
2. Keep farm/sheds free from breeding sites for insects such as standing water and dung.

3. Only allow visitors to your farm for essential services.
4. A vaccine exists to protect your animals. Contact your local vet/nurse or official Veterinary Services for information on the vaccine.

For more information:

OIE regional webpage on LSD:
www.oie.int/eng/npah/lumpy-skin-disease.htm





Video on LSD vaccination

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Live action video: Protecting farmers livelihood through LSD vaccination



Animated video: Guidance on using good quality vaccine for LSD control

WOAH Regional Workshop on Lumpy Skin Disease (LSD), Peste des Petits Ruminants (PPR) and other priority Transboundary Animal Diseases (TADs) in Asia and the Pacific, Colombo, Sri Lanka, 15 – 17 June 2026

- Technical sessions on LSD and PPR with focus on strengthening surveillance across Asia Pacific
- Sub-regional breakout sessions for ASEAN and South Asia to tackle subregion-specific concerns.



Thank you!

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