Thailand's Experience in LSD Surveillance

Thitinun Sukniwatchai

Senior Professional Veterinary officer

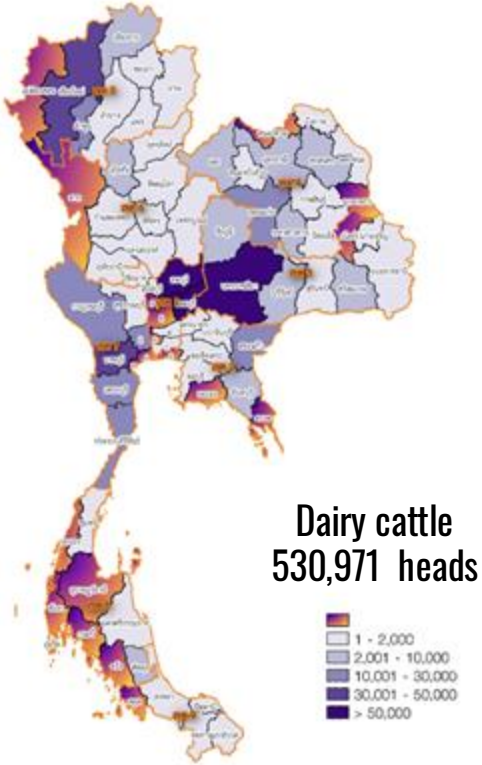
Bureau of Disease Control and Veterinary services, DLD, Thailand

Training Workshop on Animal Disease Surveillance
12-13 November 2026, Manila, Philippines

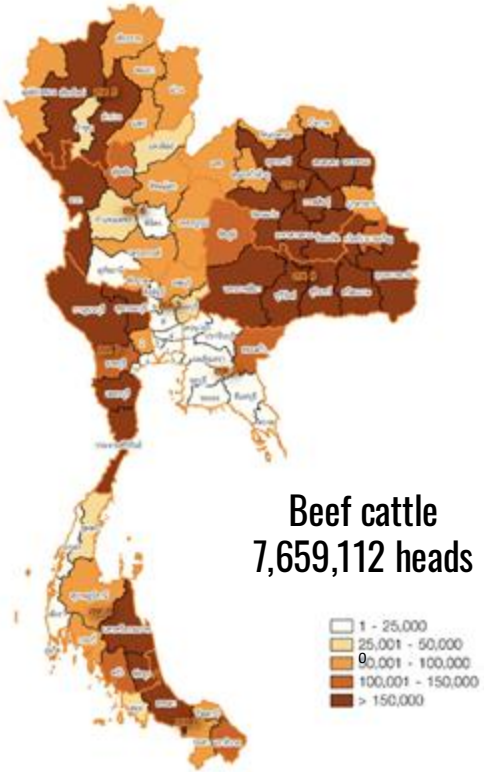
World Organisation for Animal Health
Founded as OIE

LSD susceptible host In Thailand

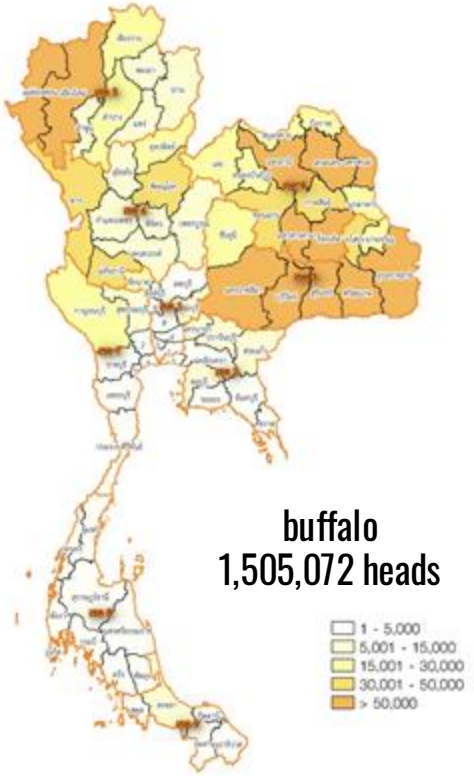
9,655,155 heads



Dairy cattle
530,971 heads

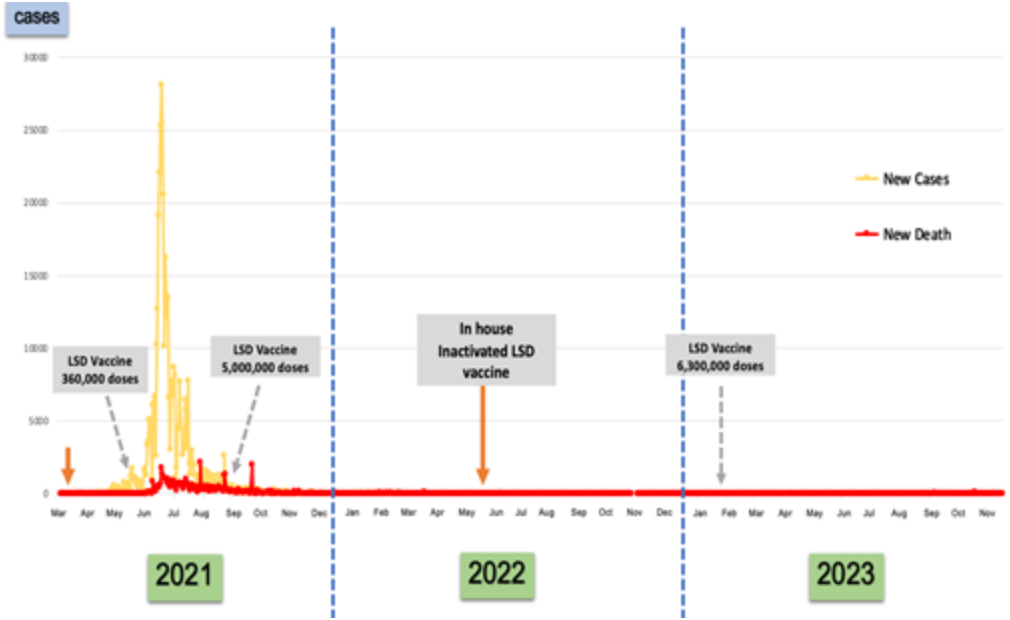


Beef cattle
7,659,112 heads



buffalo
1,505,072 heads

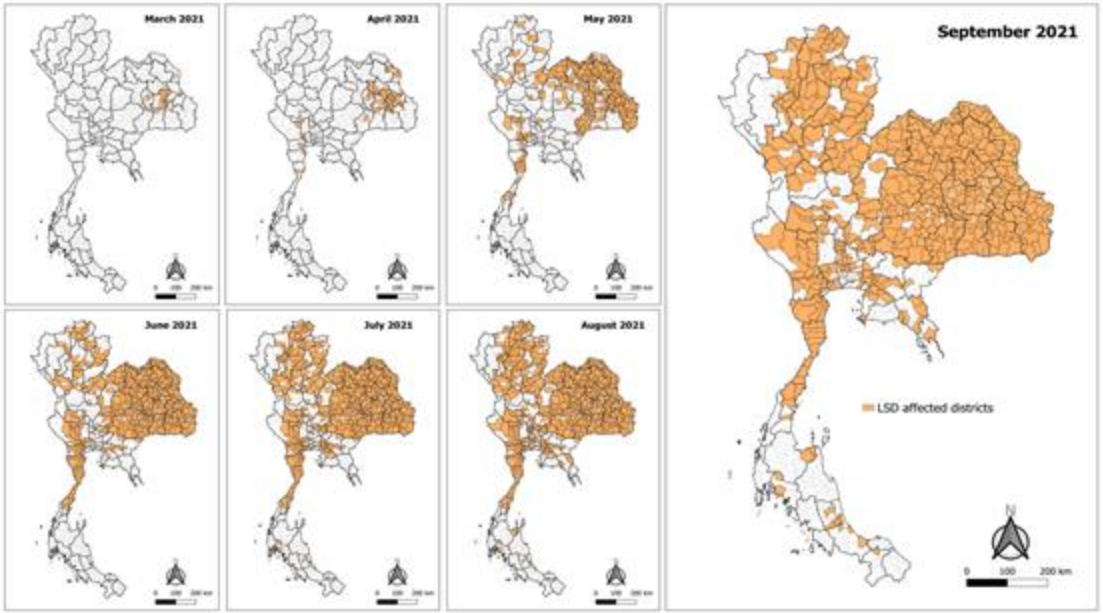
Temporal distribution of LSD



	2021	2022	2023
Sick animal	627,152	4,646	162
Dead animal	63,757	3,296	9

	Infected specie	number
2021-2022	Dairy cattle	12,341
	Beef cattle	616,260
	buffalo	3,681
	gaur	4
2023	Dairy cattle	31
	Beef cattle	130
	buffalo	1

Spatial Distribution of LSD Outbreaks in Thailand





2021

2022

2023









	Infected specie	number
2021-2022	Dairy cattle	12,341
	Beef cattle	616,260
	buffalo	3,681
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2023	Dairy cattle	31
	Beef cattle	130
	buffalo	1

Rapid Risk Assessment (RRA) for Lumpy Skin Disease in Thailand (2020)

Risk Assessment of LSD Introduction from Infected Countries into Cattle and Buffalo Farms in Thailand

Overall Probability	**High**
Consequence/Severity level	**Very High**
Overall Risk	**High**

Risk Factors for LSD Introduction

- Cross-border movement of live cattle and buffaloes.
- Informal and illegal livestock trade.
- Introduction of infected insect vectors.

Risk Factors for LSD Spread

- Movement of infected cattle and buffaloes.
- Abundance of insect vectors.
- Inadequate farm biosecurity and vector control.

Improved Disease Prevention and Control

1. Movement Control
2. Import and Border Control
3. disease surveillance
4. Vaccine Preparation
5. Farm Biosecurity and Vector Control
6. Risk Communication and Public Awareness

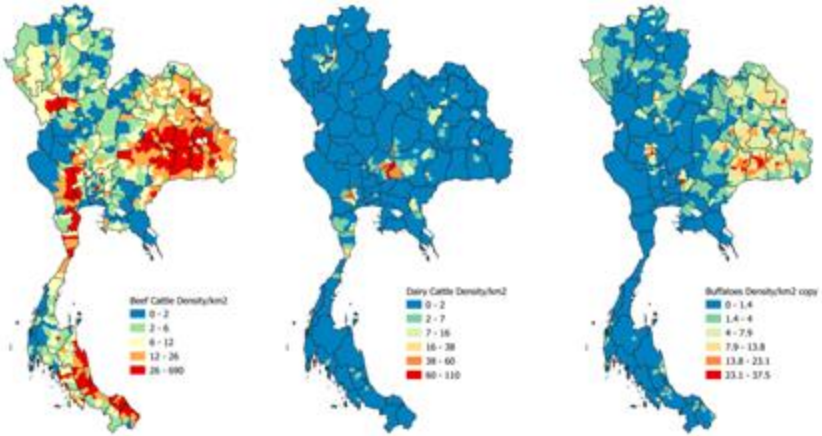
Application of Risk Maps

Identify target areas for intensified disease surveillance, prevention, and control.

- vaccination.
- active surveillance.
- vector control.
- animal movement control.
- disease investigation and case finding.
- farmer awareness and risk communication.



LSD Outbreak Distribution Map



Cattle and Buffalo Population Density Map

National Animal Disease Control and Eradication Plan



1. **Disease Surveillance**
2. Immunization
3. Movement Control
4. Disease Control
5. Disinfection
6. Improvement of Farm Management Practices
7. Public Awareness and Early Warning

LSD Surveillance in Thailand

PASSIVE SURVEILLANCE

Detection & Notification



Mobile applications, messaging platforms
(e.g., LINE),
and telephone calls.

farmers, livestock owners, Private Sector

DLD e-Smart Surveillance

- Clinical Examination
- Epidemiological Investigation
- Sample Collection
- Laboratory Result Reporting
- Disease Monitoring and Control

DLD LIMS

Nationwide

DLD officer

LSD Surveillance in Thailand

Active Surveillance

- Clinical surveillance
- Laboratory Surveillance



Farm Visit

LSD Surveillance Program

Clinical Examination

Sample Collection

• high livestock-density areas	Skin or Blood Sample
• high-risk areas based on LSD outbreak reports over the previous three years.	insect vector samples

Laboratory Result Reporting

DLD LIMS

Livestock volunteers and DLD officer

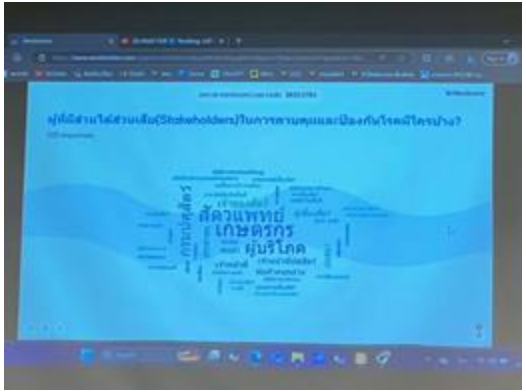
Training Program on Surveillance, Prevention, and Control of Lumpy Skin Disease (LSD)













Thailand's Action Plan for Lumpy Skin Disease Surveillance, Prevention and Control (2022–2029)



1. Laws and Management
2. Disease Surveillance, Prevention and Control
3. Livestock Development
4. Risk Communication and Public Awareness
5. International Cooperation
6. Research and Technology Development
7. Monitoring and Evaluation

Thailand's LSD Control and Eradication Roadmap (2022–2029)



Key success : Animal are vaccinated
: Strong public private partnership

Key Messages

- Early Detection and Reporting
- Risk Assessment and Mapping
- Active and Passive Surveillance
- Integrated Disease Control Measures
- Strong Cooperation