

Status of Lumpy Skin Disease and Prevention in Disease investigation Wates, Indonesia

Desi Puspita Sari

DIC Wates, Indonesia

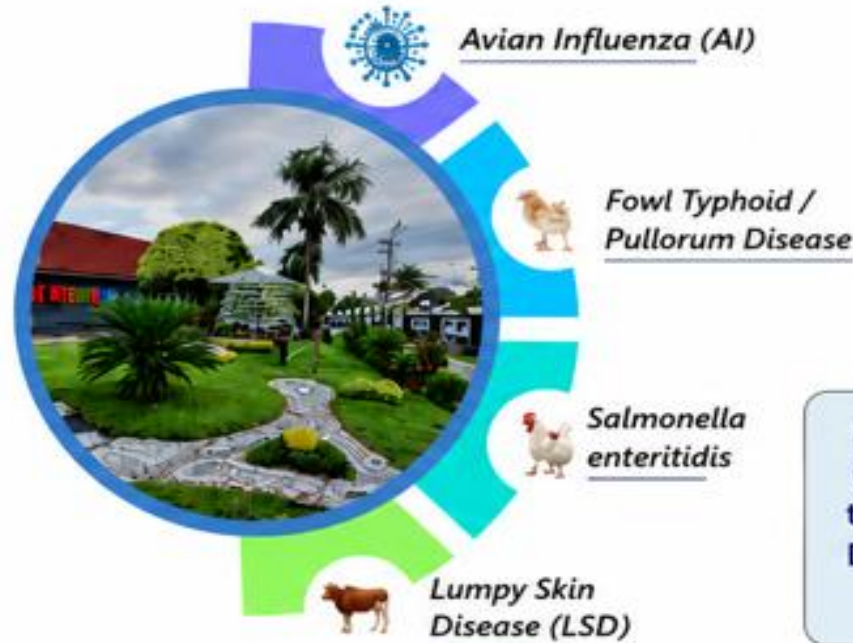
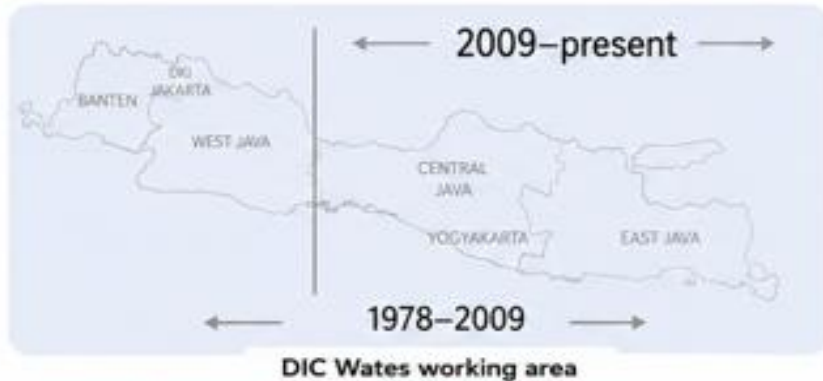


DISEASE INVESTIGATION CENTER WATES

National, Regional Reference Laboratory and International Cooperation

The Mandate of DIC Wates:

Conducts surveillance and identification of animal diseases, testing of animal products, and development of technical methods for monitoring, identification, and diagnosis of animal diseases.



A World Organisation for Animal Health (WOAH)-recognized bilateral laboratory twinning partnership (BiCollab) between DIC Wates and the Australian Centre for Disease Preparedness (ACDP).

LABORATORIES AND SUPPORTING UNITS

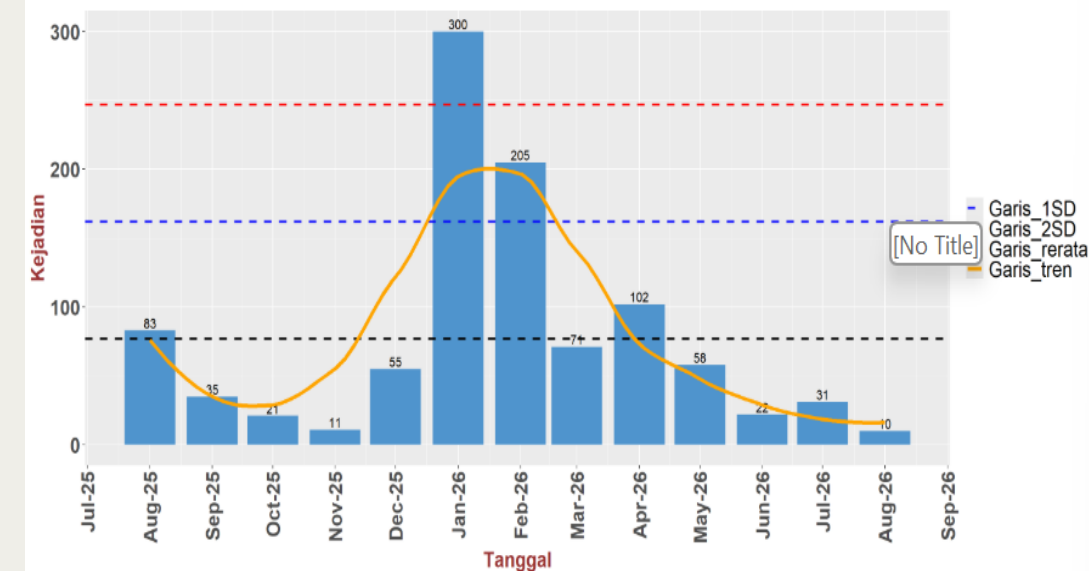
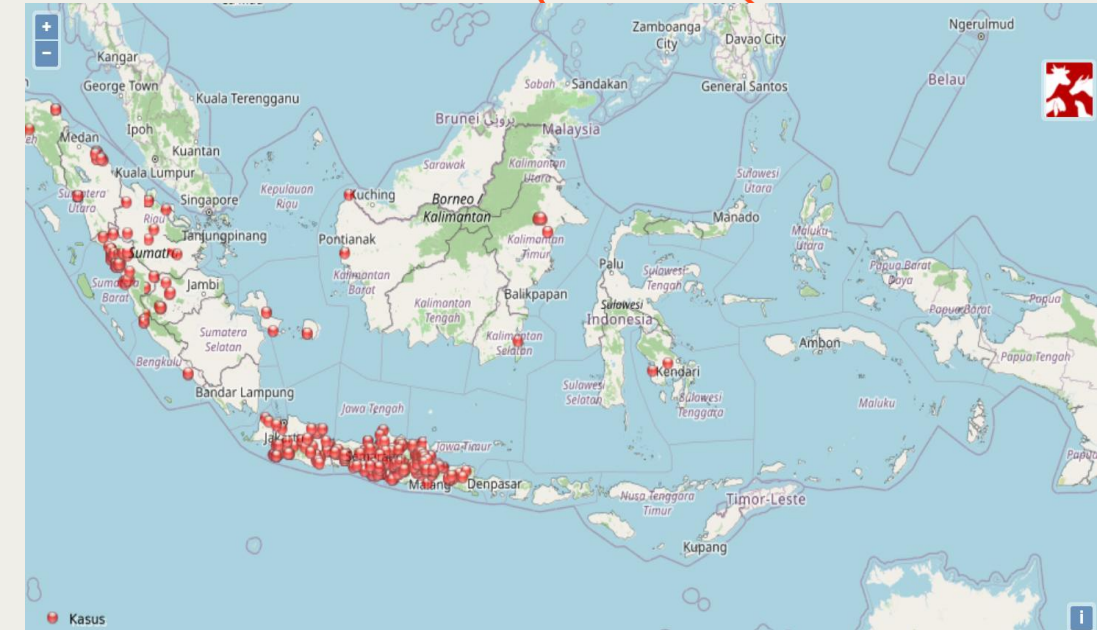


- 7 million+ cattle is at risk at working area of DIC Wates.
- 76%-84% of dairy cattle and 41%-45% cattle population are located in our working area.
- 90%-98% is predominantly traditional cattle farming.
- Prevention of LSD through biosecurity, movement control, vector control and vaccination.
- Poor sanitation and high livestock movement are risk factors of the spread of LSD.



Disease situation

- LSD is spreading in Sumatra, Java and part of Kalimantan and Sulawesi, and this impact direct clinical on livestock, as well as economic impact
- Disease trend
 - Increased cases during the rainy season
 - Increased livestock movement before religious holidays
- Key strains/ varian circulating : The LSD virus was detected in Indonesia: *LSDV/Indonesia/S1/2022* (Riau); *LSDV/Indonesia/S4/2022* (Riau) dan *LSDV/Semarang/A04224595/2022* (Semarang)
- Affected species
 - Cattle (*Bos taurus* and *Bos indicus*)
 - Water Buffalo (*Bubalus Bubalis*)

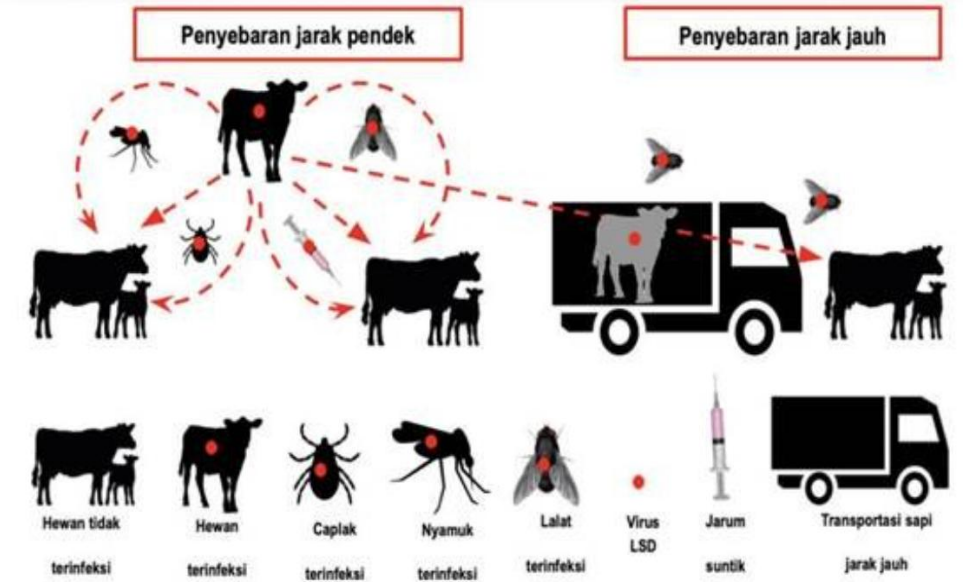




Prevention and control measures

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- Surveillance : activities with Risk-based LSD surveillance and pasif with report than Outbreak investigation
- Prevention and rapid response use of iSIKHNAS application for disease incursion
- Control measures: focal culling, livestock movement control, sanitation-disinfection, zonasi, vaccination, vector control, surveillans, KIE.
- Vaccination programs: emergency vaccination in infected areas



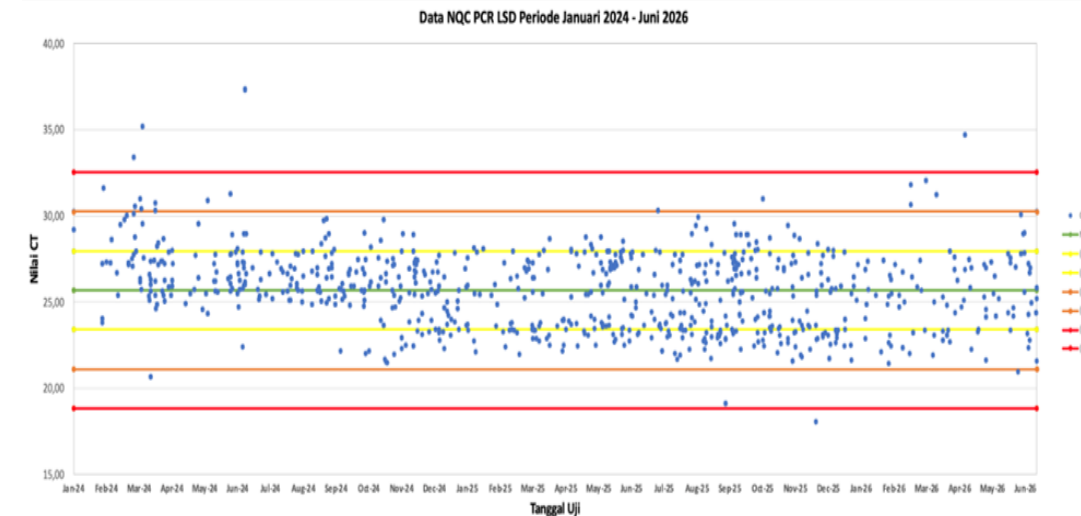
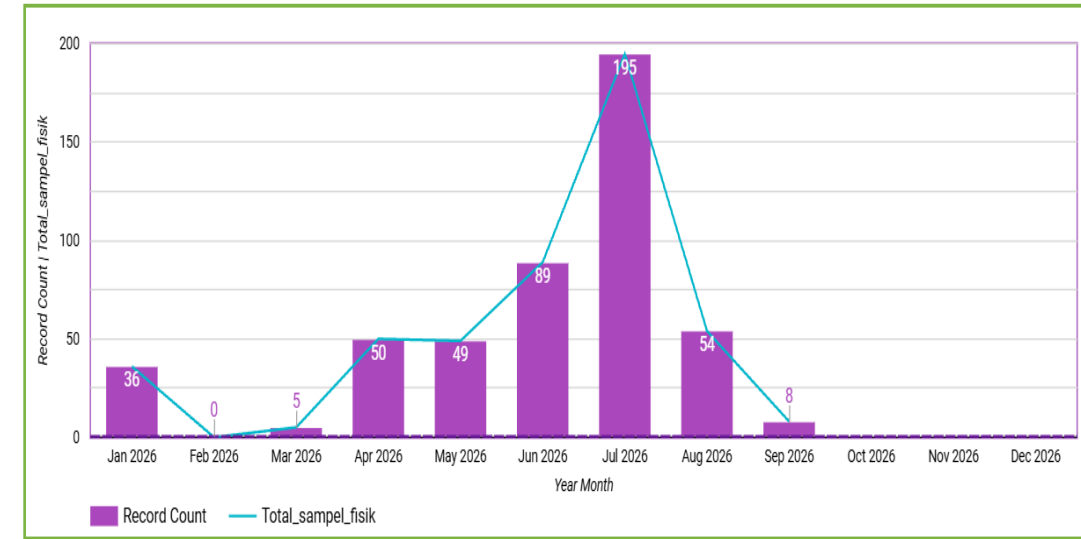


1. Laboratory diagnostic capacity in DIC Wates

- Virus Isolation
- Realtime PCR
- Sequencing
- ELISA Capripox

2. Production of material biology for network quality control (NQC) dan panel proficiency test (PT) LSD

3. DIC Wates as a proficiency test provider for LSD

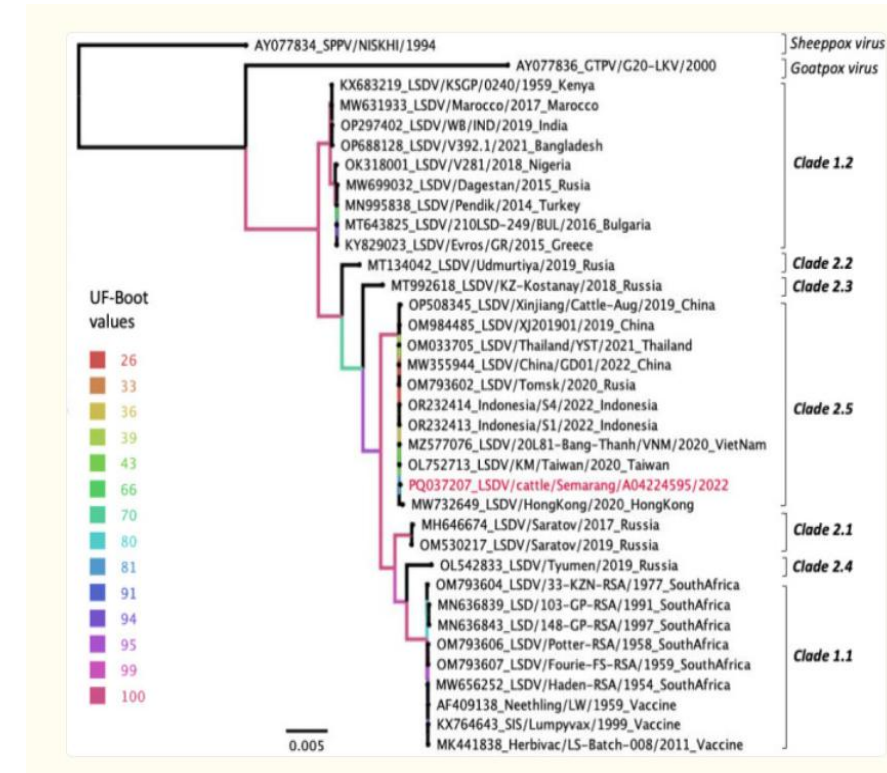




- International Collaboration
- G2G partnership with Australia
 - Vaccination program – DAFF & DFAT
 - Technical assistance – CSIRO ACDP
- International reference laboratory engagement
 - International PT participation – Sciensano Belgium
 - IAEA
- International Organization
 - FAO
 - WOA

Complete coding sequence of the Lumpy skin disease virus collected from cattle in Central Java, Indonesia, 2022

[Hendra Wibawa](#)^{1,✉}, [Lestari](#)¹, [Toan Hong](#)², [Zaza Fahmia](#)¹, [Sri Handayani Irianingsih](#)¹, [Herdiyanto Mulyawan](#)¹, [Megaria Ardiani](#)¹, [Rochmadiyanto](#)¹, [Farida Camallia Zenal](#)³, [Syafri Idris](#)⁴, [Gemma Clark](#)²





1. Challenge :

- Changes in national policy and political conditions involving partner countries
- Climate change
- Uncontrolled animal movement in archipelagic country

2. Possible solutions:

- Monitoring and evaluation for ongoing partnership
- The establishment of good governance for the ongoing partnership
- Spatial analysis of disease spread



Future plans

1. Short term

- Enhance diagnostic capabilities
- Pre and post vaccination assessment and monitoring
- Expand vaccination coverage (intensive farms)
- Improve husbandry management (knowledge, attitude and practice/KAP)
- Active community participation

2. Medium/ Long term

- Collaboration with WOAHA reference laboratory for LSD

Thank you!

Contact Information

DISEASE INVESTIGATION CENTER (DIC) WATES, INDONESIA

JL. Raya Jogja Wates Km. 27 Wates Yogyakarta, Indonesia

Telp. 0274-7773168

Website : <https://bbvetwates.ditjenpkh.pertanian.go.id>

Email : bbvetwates@pertanian.go.id
