













# Lumpy Skin Disease (LSD) An Update on LSD Prevention & Control with focus on LSD Vaccination

# Malaysia

Dr. Akma binti Ngah Hamid

Deputy of Director General, Department of

Veterinary Services, Malaysia















Outbreak Updates
------------------

Outbreak Opuates	
Date of first report	10 May 2021
Date of report to OIE	21 Jun 2021
Total Number of Province affected out of total province	60 / 94 districts (Peninsular Malaysia)
Number of farm affected	295 / 8,180 inspected farms (3.6%)
Number of animals affected (Cattle/ Buffalo)	668 / 216,472 inspected cattle/buffalo (0.3%)
Number of death (Cattle/ Buffalo)	600 animal (slaughtered)
Virus type (confirmed by which Laboratory)	Lumpy Skin Disease Virus [Veterinary Research Institute (VRI)]
Total number of outbreaks:	295
Total number of outbreaks resolved:	35
Ongoing outbreaks:	260









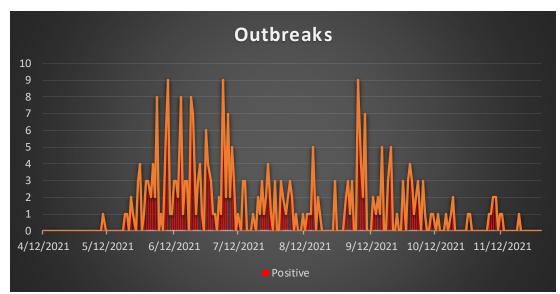




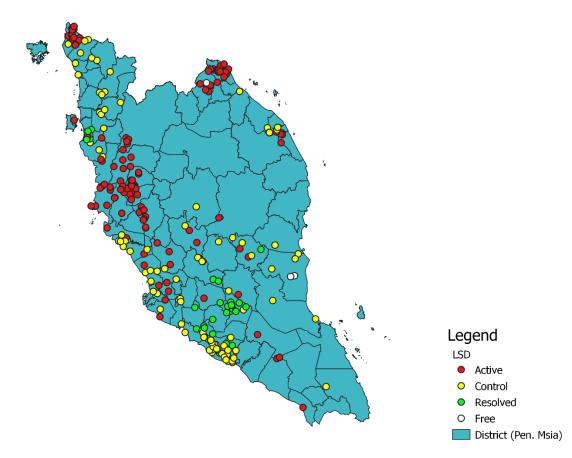


# LSD situation updates (until 30 Nov 2021)

 Temporal patterns of the outbreaks with number of outbreaks on Y axis and Dates/ Months on X axis



 Spatial patterns with distribution of reported outbreaks on the maps

















#### Control measures – Vaccines and Vaccination

- Objectives of Vaccination Control, prevention and eradication of LSD
- Vaccine types used
  - Attenuated/ killed
  - Homologous/ Heterologous
  - Country of manufacture/ Brand name (Morocco / Bovivax LSD-N), (South Africa / LumpyVax), (Egypt / Mevac LSD)
  - Total doses imported: 226,878 doses [18,053 doses (farmers), 96,625 doses (State DVS), 112,200 doses (Federal DVS)]
  - Who bears the cost the vaccine? Farmers, Government (State & Federal DVS)
- Any legislation on LSD/ emerging infectious disease vaccination, vaccine registration and procurement? Animal Act 1953 (rev. 2013) under Section 18 to 36. LSD is one of 126 notifiable diseases.
- Vaccination strategy
  - Barrier/ Ring/ Blanket/ Targeted & livestock movement purpose
- Whether LSD vaccination combined with another disease vaccination programme? FMD or HS or RB51 vaccination
- Animal types covered (Species/ animal types dairy, beef?) Cattle and buffalo for both dairy and beef















### Control measures – Vaccination

- Any communication/ advocacy activities to support vaccination? Webinar, seminar, dissemination of information through social media such as FB, Instagram, poster, banner, pamphlets and direct communication to the farmers.
- Who carried out the LSD vaccination? DVS staffs, private veterinarians and farmers.
- Whether training provided to the Vaccinators before initiation of vaccination? Yes.
- Any biosecurity measures to prevent spread of LSD by Vaccinators? Thorough disinfection of personnel protective equipment (PPE), vehicles & vaccination tools.
- Post Vaccination Monitoring (PVM) and evaluation of Vaccination Program
  - PVM: sample collected & in the process for testing
  - Vaccination coverage (no. vaccinated/ no. of animals intended to be vaccinated): 32% (68,921/215,966)
  - Any outbreak among vaccinated population: No
  - Any adverse reaction in vaccinated animals: Neethling response was observed (minimal)















## List challenges in LSD Control including vaccination

- Short lifespan of vaccine once opened
- Lack of financial sources
- Effectiveness of vector control
- Low cooperation from farmers for culling of infected animals
- Insufficient knowledge on economic impact of LSD among farmers & extension staffs















## Way Forward to improve LSD control and vaccination

- Request secured financial support for procurement of LSD vaccine for 3 years consecutively
- 2) Strengthen control of illegal animal movement at international border with other agencies
- 3) Vaccinate all animals before movement (inter-state, inter-districts)
- 4) Strengthen culling effectiveness by increase compensation rate
- 5) Revision of import protocols of infected countries
- 6) Strengthen awareness campaign through mass media
- 7) Increase knowledge and awareness of stakeholder (traders and farmers) and extension staffs on economic impact of LSD