

GOVERNMENT OF ASSAM
OFFICE OF THE DEPUTY DIRECTOR, ANIMAL HEALTH CENTRE
NORTH EASTERN REGIONAL DISEASE DIAGNOSTIC LABORATORY
ANIMAL HUSBANDRY & VETERINARY DEPARTMENT
KHANAPARA :: GUWAHATI 781022

No. AHC_107/NERDDL/LSD/2020-21/ 517

Dated Khanapara the 7th July, 2020

From: Prodeep Kumar Gogoi
Deputy Director, Animal Health Centre, NERDDL
A.H & Veterinary Department, Khanapara

To: All District A.H & Veterinary Officer
A.H & Veterinary Department

Sub: Advisory for Lumpy Skin Disease – reg

Sir/Madam,

In reference to the above mentioned subject this is to inform that there are reports of cattle and buffaloes suffering from a disease condition showing symptoms of eruption of round cutaneous nodules on the skin all over the body. These may be suspect cases of Lumpy Skin Disease (LSD), an OIE notifiable disease of bovines and first notification of the disease in the country has already been submitted from some districts of Odisha.

In this regard, please find enclose an advisory for LSD for information and wide circulation amongst field veterinarians, veterinary institutions in your district for awareness raising and necessary advice to the farmers. Further, you are requested to direct all concerned to investigate all suspected cases of LSD/ pseudo LSD on priority and forward clinical/ necropsy samples along with the epidemiological format as per Annexure enclosed.

Please treat as TOP MOST URGENT

Yours faithfully,



Deputy Director,
Animal Health Centre, NERDDL
A.H & Veterinary Department, Khanapara

No. AHC_107/NERDDL/LSD/2020-21/ 517-A

Dated Khanapara the 7th July, 2020

Copy to:

1. The Commissioner & Secretary to Government of Assam, A.H & Veterinary Department, Dispur Guwahati-6 for favour for kind information.
2. The Director, A.H & Veterinary Department, Assam, Chenikuthi, Guwahati-03 for favour for kind information.
3. The C.E.O., Assam Livestock Development Agency (ALDA), Khanapara, Guwahati-22 for favour for kind information and necessary action.



Deputy Director,
Animal Health Centre, NERDDL
A.H & Veterinary Department, Khanapara

Advisory - Lumpy Skin Disease (LSD)

Lumpy skin disease (LSD) is an infectious viral disease of cattle and buffaloes caused by the *Capripox* virus of family *Poxviridae*. It is transmitted by arthropod vectors such as mosquitoes, biting flies and ticks.

The disease is characterised by mild fever for 2-3 days followed by development of stiff, round cutaneous nodules (2- 5 cm in diameter) on the skin all over the body. These nodules are circumscribed, firm, round, raised and involves the skin, sub-cutaneous tissue and sometimes muscles.



Symptoms may include lesions in mouth, pharynx and respiratory tract, emaciation, enlarged lymph nodes, oedema of limbs, reduction in milk production, abortion, infertility and sometimes, death.

Although infected animals often recover within a period of 2-3 weeks, there is reduction in milk yield in lactating cattle for several weeks. The morbidity rate is around 10-20% and mortality rate is around 1-5%.

Clinical Surveillance

Clinical surveillance of susceptible cattle population for nodular skin lesions should be carried out along with recording of morbidity and mortality data in LSD-



suspected areas. Monthly clinical surveillance data should be communicated to DAHD in the format annexed.

Referral of Samples from clinically affected animals

Representative samples (EDTA blood and skin biopsies/scabs) from animals in LSD suspected outbreaks should be referred to Animal Health Centre, NERDDL, Khanapara, Guwahati-22 for laboratory testing.

Prevention and Control: Immediate isolation of sick/ infected animals from the healthy animals

- Any animal suspected of febrile nodular skin disease should not be introduced into the unaffected holding or farm
- In affected villages and animal holdings, the affected animal should be kept separate from unaffected animals by avoiding common grazing and thereby direct contact
- Efforts should be made to reduce the vector population in affected areas. Unaffected animal should be applied with insect (ticks, flies, mosquitoes, fleas, midges) repellent to minimize mechanical transmission of LSD
- Ensure strict control of animal movement from affected areas to free areas and to local animal markets
- Trade of live cattle, participation in fairs, shows should be banned immediately upon confirmation of the disease in the affected areas
- All biosecurity measures and strict sanitary measures for disposal of personal protective equipment (PPE) etc. used during sampling from affected animals should be followed -

- g) Cattle markets located within 10 km radius of the epicentre of infection should be closed
- h) Thorough cleaning and disinfection of affected personnel, premises and contaminated environment including vehicles plying through the affected animal holdings should be carried out with appropriate chemicals/disinfectants e.g



[Ether (20%), chloroform, formalin (1%), phenol (2%/15 minutes), sodium hypochlorite (2–3%), iodine compounds (1:33 dilution), quaternary ammonium compounds (0.5%)].


Bovine Semen:

1. Semen should not be collected and processed for frozen bovine semen production and distribution from the animals showing clinical sign of LSD
2. The blood and semen from affected and clinically recovered animals shall be subjected to agent detection by PCR with negative results before use for AI/natural service

Awareness campaign

Awareness campaign regarding the clinical signs and production losses due to LSD shall be conducted. Reporting to the veterinary authority should be done immediately when suspected cases are noticed.

Treatment

- a. Sick animals are to be kept in isolation
 - b. Symptomatic treatment of affected animals may be carried out in consultation with veterinarian
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- A photograph of a brown cow standing in a field. The cow's skin appears to have some lesions or irritation, particularly on its side, which is consistent with the context of the document discussing LSD (Lumpy Skin Disease).
- c. Administration of antibiotics for 5-7 days to check secondary infection may be considered on case to case basis to check secondary bacterial infection.
 - d. Administration of anti-inflammatory and anti-histamine preparation may also be considered.
 - e. In case of pyrexia, paracetamol can be given
 - f. Application of antiseptic ointment with fly-repellent property over the eroded skin is recommended
 - g. Parenteral / oral multivitamins is advised.
 - h. Feeding of liquid food, soft feed and fodder and succulent pasture is recommended for the infected animals.

Disposal of carcass of LSD-affected animals

In cases of mortality, animal carcass should be disposed of by deep burial.

Format for Reporting on clinical samples on Lumpy Skin Disease

| | | |
|----|---|--|
| 1 | District | |
| 2 | Block | |
| 3 | Name of veterinary dispensary | |
| 4 | Village | |
| 5 | Latitude and Longitude of the village/ premise | |
| 6 | Date of start of event/ outbreak/ symptoms noticed | |
| 7 | Animal species affected and number of each species affected | |
| 8 | Number of susceptible animals | |
| 9 | Number of cases | |
| 10 | Number of animals died (mortality cases) | |
| 11 | Epidemiological findings | |
| 12 | Date of sample collection | |
| 13 | Date of sample submission to lab. | |
| 14 | Control measures applied | |
| 15 | Whether treatment given, if so specify | |
| 16 | Number of awareness camps organized | |