ORTHONAIROVIRUS

Nairobi sheep disease or NSDV in Sheep and Goats

Nairobi sheep disease is a highly pathogenic viral disease that primarily affects small ruminants. In susceptible animals, this tick-borne infection leads to a severe hemorrhagic gastroenteritis with high rates of illness and death. Historically, the causative viruses were limited to certain regions in Africa and the Indian subcontinent. However, viral RNA has now been detected in ticks in China, indicating a wider geographic distribution. Unfortunately, there is currently no effective treatment for the disease, and eradicating the virus from tick populations is challenging once it becomes established.

CAUSES OF NSDV

Nairobi sheep disease is caused by Nairobi sheep disease virus (NSDV) in Africa or Ganjam virus in Asia. They are considered the same virus, belonging to the Orthonairovirus genus in the Nairoviridae family. The officially accepted species name is Nairobi sheep disease orthonairovirus. NSDV/Ganjam virus is part of the Nairobi sheep disease virus serogroup, along with Dugbe virus and Kupe virus, which are found in livestock ticks but do not cause illness in animals.

PREVENTION OF NSDV

Preventing Nairobi sheep disease virus (NSDV) involves several measures: Implement tick control strategies to reduce tick populations, as they are the primary vectors that transmit NSDV. Quarantine new animals before introducing them to the flock, and test them for NSDV to prevent the introduction of infected animals. Practice strict biosecurity measures to minimize the risk of introducing NSDV into the flock through contaminated equipment, feed, or clothing.



This is a Reportable disease

Sources
Nairobi sheep disease - CFSPH. (n.d.-c). https://www.cfsph.iastate.edu/Factsheets/pdfs/

SYMPTOMS OF NSDV

Symptoms of Nairobi sheep disease virus (NSDV) in sheep can include:

- High fever
- Sudden onset of depression and lethargy
- Respiratory distress
- Diarrhea
- Hemorrhagic gastroenteritis (bloody diarrhea)
- Jaundice (yellowing of the eyes and mucous membranes)
- Neurological signs, such as tremors and convulsions

TREATMENT OF NSDV

There is no specific treatment for Nairobi sheep disease; however, supportive treatment, good shelter and quality feed may improve survival. Be sure to consult your veterinarian if you have any suspicion of infection.

Factsheet provided by:

The Idaho Sheep & Goat Health Board

