



CAPRINE ARTHRITIS/ENCEPHALITIS VIRUS

CAE in Sheep and Goats

Maedi-visna and caprine arthritis and encephalitis are significant viral diseases affecting sheep and goats. These diseases are caused by a group of lentiviruses known as small ruminant lentiviruses (SRLVs). The SRLVs include maedi-visna virus (MVV), primarily affecting sheep, and caprine arthritis encephalitis virus (CAEV), mainly found in goats. There are also other SRLV variants and recombinant viruses. These viruses infect their hosts for life, often remaining asymptomatic, but some animals may develop progressive and untreatable disease syndromes. CAE is not a public health threat.

CAUSES OF CAE

CAE in sheep and goats is caused by small ruminant lentiviruses (SRLVs), particularly MVV in sheep and CAEV in goats. Transmission occurs through infected colostrum, milk, and direct contact between animals. Implementing strict biosecurity measures and separating kids from infected does at birth can help control the spread. Testing and timely removal of infected animals are essential prevention strategies.

PREVENTION OF CAE

To prevent CAE infection and spread, consider purchasing only test-negative animals or maintaining a closed herd. Additionally, promptly separate kids from infected does after birth. Ensure that kids receive heat-treated colostrum and pasteurized milk or milk replacer exclusively. If any individuals test positive for the CAE virus, promptly remove them



***This is a
Notifiable disease***

SYMPTOMS OF CAE

Common symptoms include:

- Progressive lameness and joint swelling in affected goats, particularly in the knees, hocks, and carpal joints.
- Stiffness and difficulty walking.
- Muscle wasting and weight loss.
- Encephalitis, which may lead to behavioral changes, head pressing, circling, and lack of coordination.
- Nervous system issues, such as paralysis or hind limb weakness.
- Respiratory distress in some cases.

TREATMENT OF CAE

No specific treatment exists for CAE. Supportive care, such as pain medication and antibiotics for bacterial infections, may be administered to goats. Despite these efforts, the encephalitic form of CAE is typically fatal. If any goat is suspected of having CAE, it should be promptly reported to the State Veterinarians or USDA Area Veterinarian in Charge.

Sources

Goats. (2019, August 14). *Caprine arthritis encephalitis virus (CAE)*. *Goats*. <https://goats.extension.org/caprine->

Factsheet provided by:

**The Idaho Sheep & Goat
Health Board**

