



## Canine arthritis encephalitis (CAE)

Canine arthritis encephalitis (CAE) is a chronic multisystemic disease in goats. Infection is widespread and arthritis in more than one joint is the most common clinical sign. Infection occurs by ingestion of fluids that contain infected cells from an infected animal to an uninfected animal. The most common means of transmission is the ingestion of colostrum by kids nursing infected does. It has been documented that CAE can also be spread by breeding, contaminated dehorning equipment and needles, and at parturition.

The target tissues of CAE virus are the joints, mammary glands, lungs and brain. The disease results from inflammation induced by the reaction of the immune system to the virus. Goats can develop a blood titer in two to eight weeks but may not show clinical signs for years.

**Signs:** Progressive arthritis in goats over 6 months of age, usually noted in the front pastern and knee joints, with chronic progression over the years. The encephalitic manifestation of the disease is rare but appears in kids less than 6 months old; it is severe and usually fatal. The disease can also cause "hard bag" if the udder is targeted; affected animals have a hard udder and produce little milk. If the lungs are affected, animals can display respiratory distress.

**Diagnosis:** Routine diagnosis is based on specific serological testing called an agar gel immunodiffusion test (AGID) or polymerase chain reaction assay (PCR).

There is no vaccine or treatment; affected animals are a source of infection to others. It is recommended that infected and positive animals be culled in order to eradicate the disease on the farm, otherwise rigorous management is required. A CAE-negative herd can be created through testing and culling, removing kids from positive dams at birth and feeding heat-treated colostrum and pasteurized milk or milk replacer.

Refer to: [http://cop.extension.org/wiki/Caprine\\_Arthritis\\_Encephalitis\\_\(CAE\)](http://cop.extension.org/wiki/Caprine_Arthritis_Encephalitis_(CAE))

<http://www.extension.org/pages/28924/caprine-arthritis-and-encephalitis-virus>

