

FOG FEVER

Acute bovine pulmonary emphysema and oedema is commonly known as Fog Fever, and is a cause of sudden death in cows and bulls on pasture in the fall. Although it may occur in outbreaks, it is also possible for single animals to be affected. Some severe cases may simply be found dead, while others linger for a few days. Milder cases may show signs of respiratory distress with normal temperature and eventually recover. Calves are usually not affected, even when grazing the same pasture with the cows.

Cause: Fog Fever is associated with grazing lush fall pasture, and cases often occur within 4 to 10 days of being moved onto new pasture. We have also observed cases where cattle had been on the same pasture for several months, but fall rains followed by unseasonably mild weather had caused a flush of growth in pasture plants. Cases occur on a variety of pasture types, including grass, legume, and cereal pastures. Rape and kale planted for fall pasture have also been implicated, as have turnip tops; however, these pasture types are no longer commonly planted in Ontario.

In cattle with Fog Fever, the amino acid tryptophan found in lush pasture is converted to a chemical called 3-methylindole by bacteria in the rumen. This chemical combines with others to form toxins that damage cells that line the air sacs in the lungs and cause fluid to leak into the airways. As this is not an infectious disease, treatment with antibiotics is of no benefit; indeed, no treatment has been shown to make much difference to the clinical course of the disease. Most cases will occur within a period of four days.

Diagnosis: Fog Fever is identified when your veterinarian recognises typical clinical signs in a live animal or by the appearance of lung tissue on post mortem examination of one that has died. Because there are many types of pneumonia that cause similar clinical signs, a post mortem examination is recommended to confirm the cause of death. Sometimes, the visual post mortem changes will be enough to confirm the diagnosis; in other cases, we will take samples for microscopic examination and testing for viruses.

Prevention: Gradual introduction, feeding hay, and limiting time spent on lush pasture for 10 days usually prevents cases. When moving cattle to lush, new pasture in the fall, Fog Fever can also be prevented by feeding monensin or lasalocid, which change the types of bacteria found in the rumen. This method requires grain to be fed in order to deliver the drug on a daily basis, and may not be practical for many or most cow-calf operations.

The veterinarians of Central Ontario Veterinary Services are available to examine cattle with respiratory distress and to perform post mortem examinations in the field. Where necessary, samples may be sent to the Animal Health Laboratory, University of Guelph to confirm the diagnosis and rule out other causes of pneumonia. Early diagnosis of the cause of death and illness provides the vital information necessary for our veterinarians to help producers plan strategies for disease prevention.