



## Blackleg

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Usually at least one time each summer that I was in practice, a producer would call to inform me of the sudden death of his or her best calf. After more conversation and examining the dead animal, a diagnosis of blackleg would usually be made to the surprise of the producer.

Blackleg is caused by a rod shaped bacteria called *Clostridium chauvoei*. This bacteria causes an acute non-contagious but highly fatal disease of the heart and skeletal muscle. The bacteria is found worldwide. It exist in the environment in spores. The spores gain entry to the body by ingestion or by contamination of an open wound. If ingested the bacteria lie dormant in the liver, spleen, and gastrointestinal tract. The bacteria gains access to the muscle tissue following an injury or bruising. The damaged tissue is ideal for the pathogen to proliferate and produce toxins. The toxins cause muscle death.

Weather may play a role in disease outbreaks. An increase in the number of cases may follow flooding conditions. Floods disturb the soil exposing the spores. During droughts, cases may increase due to grazing closer to the soil. Grazing so low increases the likelihood of coming in contact with the spores.

In most cases of blackleg, the onset of the disease occurs between 6 months and 2 years of age. Rarely do animals over 2 years of age get the disease. Clinical signs of the disease are rarely seen. Most animals will be found dead. The few that are alive will show signs of depression, lameness, swelling of infected area, fever, pain, and crepitus under the skin (the area feels and sounds like bubble wrap when palpated).

Treatment is usually futile. But if an animal is found alive, it can be given large doses of antibiotics and supportive care. Preventing blackleg is simple. All calves should be vaccinated between 60 to 90 days of age followed by a second vaccination in 4 to 6 weeks. This protocol should provide good immunity.

With the flooding that some of Oklahoma has experienced and the possibility of a flash drought, conditions are prime for blackleg cases to possibly be on the rise. Producers need to make sure to vaccinate all their calves to protect them from this disease. For more information on blackleg, producers should contact their local veterinarian or Local County Extension Educator.