

Vet Call

The facts about EHD

by Dr. Bob Larson and Nathan Voris

Most producers have heard of the diseases that endanger their herds. But occasionally a disease that only appears sporadically is diagnosed in an area, and producers and veterinarians alike work to identify and deal with the risk.

Epizootic hemorrhagic disease (EHD) normally affects deer but can cause problems for cattle herds and dogs. EHD is fatal in deer, but in cattle it is fairly mild.

EHD is caused by a virus that is closely related to the bluetongue virus and is transmitted by the same gnat (*Colicoides*) that transmits bluetongue. EHD causes similar, although milder, lesions as the bluetongue virus. Because bluetongue and EHD are similar viruses and are carried by the same insect, it is not uncommon to have both diseases present during an outbreak.



The symptoms in cattle are muscle soreness or stiffness, swollen tongues, and erosions or ulcers on the nose and mouth. The cattle often salivate excessively and refuse to eat because of mouth soreness.

The disease will usually clear up by itself in a week or two. The biggest danger to cattle is becoming dehydrated or starving if the disease lasts long enough. The treatment is basically to ensure the affected cattle get water and feed.

Disease outbreaks are scattered geographically and appear sporadically. The disease is most likely to be diagnosed in late summer and early fall, coinciding with peak populations of the gnat that transmits the disease. Temperature and rainfall are

important factors that contribute to the gnat population and, hence, the prevalence of EHD. The insect that transmits EHD is generally active when the weather is warm, humid and calm. Moist soil is necessary for reproduction to occur. Optimal breeding grounds for the gnat are wet, low-lying areas such as valleys, along rivers and creeks, or marshland. These insects transmit EHD viruses to susceptible animals via blood meals.

Historically, the animals at greatest risk are the older ones in the herd. Usually less than 20% of the herd is affected during an outbreak, and the death rate is very low. However, deer populations can be severely affected, suffering mortality rates in the 60%-80% range for affected animals. The rate of illness declines sharply following the first frost, which removes the insect carrier.

EHD and bluetongue can be diagnosed by blood tests. Your veterinarian should be called and a diagnosis confirmed in any case where cattle have erosions or ulcers on the mouth or coronary band. Because reportable diseases such as vesicular stomatitis, foot-and-mouth disease, and malignant catarrhal fever have the same lesions as EHD and bluetongue, state veterinary offices must be contacted and a diagnosis obtained.

Treatment is aimed at alleviating the symptoms of the disease. Some veterinarians use systemic antibiotics to prevent secondary bacterial infections and nonsteroidal anti-inflammatory drugs to help control fever and pain. Fresh water and soft, palatable feed must be provided to animals reluctant to stand or eat. There is no vaccine available to prevent EHD; and because the disease is mild and sporadic, a vaccine is probably not economically justified.

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