Hemorrhagic Disease/Bluetongue (EHDV/BTV)

What is Hemorrhagic Disease/Bluetongue

Hemorrhagic disease is most often observed in pronghorn and deer in Wyoming; all ruminants, however, are susceptible. Hemorrhagic disease is caused by an infection with either epizootic hemorrhagic disease virus (EHDV) or bluetongue virus (BTV). Hemorrhagic disease caused by EHDV/BTV in Wyoming and the Rocky Mountain west is seasonal, occurring in late summer to early fall (corresponding with the presence of arthropod vectors), and tends to occur in epizootics with high morbidity and mortality in affected populations (mortalities may be in the tens, hundreds, or thousands). Outbreaks of disease tend to occur at lower elevations (usually <7,000ft) and are observed at fairly predictable 4–7 year cycles, with smaller disease events and sometimes no detectable disease events in intervening years.

How Does EHDV/Bluetongue Affect Me?

None of the causative viruses are recognized as human health threats.

Impacts of EHDV/Bluetongue on Wildlife

Hemorrhagic disease is a major cause of morbidity and mortality in susceptible species in Wyoming and the Rocky Mountain west, but significant mortality events are cyclical and there are no data to suggest that these events affect population stability or are limiting populations. At present, there is insufficient information to warrant management actions to control or prevent disease events or outbreaks in wildlife, but hemorrhagic disease has the potential to negatively impact small, threatened, or endangered populations or species in the future, and continued disease surveillance is recommended and warranted.

What are the clinical signs of animals with EHDV/BTV?

In Wyoming and the Rocky Mountain west, animals are often found without any ante-mortem evidence or history of illness. Affected animals are commonly found near water sources (rivers, creeks, springs, ponds, etc.). Early on or in the peracute or acute forms of disease animals typically are in good nutritional condition and may exhibit fever, depression, inability or unwillingness to rise or move, respiratory distress, and/or swelling of the head, neck, tongue, or ocular (eye) tissues. If animals survive this period, they may exhibit dehydration, lameness, anorexia, prolonged recumbency (“downer” animals), loss of awareness of surroundings, and varying degrees of weight loss or loss of condition. It is rare to see the chronic form of hemorrhagic disease in Wyoming and the Rocky Mountain west (emaciated animals, often with chronic foot problems leading to permanent lameness).

What to do if you see an animal with signs of EHDV/BTV?

To help further our understanding of this disease and its distribution across the state, we request that you report cervids or pronghorn displaying any of the clinical signs listed above to your local WGFD wildlife biologist, game warden, or WGFD office. For additional information on EHDV/BTV or any other wildlife disease, please contact the WGFD Wildlife Health Laboratory at 307-745-5865.