

Deer Adenovirus



- “Deer adenovirus” causes death by damaging blood vessels in the lungs, intestines, and/or other organs in deer, elk, and pronghorn in Colorado.

Species Affected in Colorado

- Mule deer (mostly fawns)
- Elk (mostly calves)
- Pronghorn

What to Look For

- Dead animals - mostly young animals
- Bloody diarrhea
- Sores in the mouth, drooling
- Neurologic signs including seizuring
- Animals found dead with no signs of trauma or other cause of death



Fluid (arrow) around the lungs and heart in a pronghorn fawn that died from deer adenovirus.

Cause and Transmission

Deer adenovirus is the cause of adenovirus hemorrhagic disease in deer and other ungulate species in North America. Deer adenovirus was first detected in Colorado during the winter of 2015-2016. Since then,

deer adenovirus has been identified as a potentially important cause of death in mule deer and elk, with fewer cases observed in pronghorn, in Colorado. Like other hemorrhagic diseases (see hemorrhagic disease fact sheet), deer adenovirus attacks the blood vessels of affected animals and may cause bleeding into the intestine, and bleeding and/or fluid loss in other organs. Signs of the disease include bloody diarrhea, sudden death, fluid around the lungs, ulcers of the tongue or mouth, drooling, and neurologic signs. Transmission of deer adenovirus is through direct contact, and outbreaks in Colorado have been associated with congregation of animals both naturally on winter range, and artificially due to illegal feeding practices. The disease has been most frequently observed in young animals.

Public Health Considerations

Deer adenovirus is not known to cause disease in species other than deer and other cervids. Cattle and other domestic species do not appear to be susceptible to the disease. Although there is no known human health risk from the virus, hunters are advised not to consume meat from animals that were found dead or seen to be ill or acting abnormally prior to death.

Additional Information/References

Woods LW et al. 1996. Systemic Adenovirus Infection Associated with High Mortality in Mule Deer (*Odocoileus hemionus*) in California. *VetPath* (33)2: 125-132. DOI: 10.1177/030098589603300201

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