

Cysticercosis



- Cysticercosis is common in most big game species in Colorado and is of low concern when few parasite cysts are present.

Species Affected in Colorado

- Deer, elk, moose, bighorn sheep, and pronghorn

What to Look For

- Large (~1 inch) fluid-filled cysts, each containing a floating white dot, in the belly or chest (pictured on left)
- Small (~¼ inch) fluid-filled cysts, each containing a floating white dot, in the muscle tissue (pictured on right)



Fluid-filled cysts in the omentum (left), and heart (right) of animals with cysticercosis.

Cause and Transmission

The most common parasites encountered by big game hunters in Colorado are the tapeworms *Taenia hydatigena* and *Taenia ovis krabbei*. As adults, these worms live in the intestines of wild carnivores such as coyotes, foxes, mountain lions, and bobcats. Feces of these infected carnivores contain tapeworm eggs that are deposited on the ground and

are eaten by grazing animals such as deer. Inside the deer intestine, immature tapeworms (larvae) hatch out of their eggs and travel to the body cavities (*T. hydatigena*, left photo) or muscles (*T. ovis krabbei*, right photo). Larvae eventually form small fluid-filled cysts in these locations. It is the fluid-filled cysts (called cysticerci) that hunters most often encounter. Each cyst contains a floating white dot which is the scolex, or head, of the worm that will grow to maturity in the carnivore host. When the deer is eaten by a carnivore, the life cycle of the worm is complete.

Public Health Considerations

Cysticercosis does not pose a risk to human health, but may cause intestinal infections if eaten by domestic dogs or cats. Although a few cysts are normal findings in healthy animals, cases of severe infections (30+ cysts observed) may suggest that the animal was ill from some other cause, and the meat may be of poor quality. Proper cooking of meat is always recommended. Always wear gloves and wash hands when handling wildlife, and never consume an animal you observed to be sick or found dead.

Additional Information/References

Taeniasis and Echinococcosis, in *Parasitic Diseases of Wild Mammals* (Authors: Arlene Jones and Margo J. Pybus)

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