



Common name

abscess, pus pocket, bumblefoot

Scientific name

a variety of bacteria, including species of *Corynebacterium*, *Pseudomonas*, *Staphylococcus*, and *Streptococcus*

What's Bugging Wild Critters?

Fact sheet #6:
Abscesses

Abscesses

(bacterial)

in Alberta

Significance

Most abscesses occur as benign conditions resulting from previous damage or injury. Occasionally, they can be associated with deteriorating health and body condition when they persist over long periods of time or occur in vital tissues. At times, abscesses produce unsightly damage in game carcasses and may cause hunters to unnecessarily discard edible game meat.

What? Where? How?

Pus pockets are collections of creamy yellow or greenish semi-liquid material often surrounded by a glistening white fibrous wall. They are made up of dead cells and accumulated debris associated with a local bacterial infection. Abscesses may occur anywhere in an animal's body but are found most often in skeletal muscles. They can vary in size from a pea to a grapefruit or even a football.

Transmission Cycle

The bacteria associated with abscesses are common inhabitants of many environments. Abscesses usually start with some injury that allows the bacteria to enter an open wound or drives bacteria deep into the tissues. The bacteria grow and multiply in the warm, moist, protein-rich conditions inside the animal. At the same time, the immune system of the animal attacks the offending bacteria and a battle between good and evil is underway. As an added part of the immune response, the animal

tries to build a wall around the battlefield and limit the spread of bacteria to other tissues. The majority of abscesses eventually develop an escape route to the skin surface where a small opening allows the pus to drain from the animal. Eventually these abscesses dry out and fill with scar tissue. Sometimes the location of the abscess or the thickness of the skin does not allow drainage to the surface. Such abscesses continue to grow and can become a chronic problem for the affected animal. Occasionally the bacteria are not completely walled off and may enter the bloodstream. Such infections usually cause rapid death.

Distribution in Alberta

Abscesses can occur in all species and throughout the province. They are an integral part of the immune response to tissue damage in mammals and birds. However, they appear to be particularly common in cervids (deer, moose, elk, caribou), especially males. Many of the abscesses in the muscles are the result of sparring injuries during the rut. Similarly, sometimes the skull is damaged at the base of an antler and bacteria enter the brain where they may develop into abscesses that eventually lead to death of the animal. Abscesses also may form around foreign objects as benign as rose thorns in the skin. The most common abscesses in birds are seen on the foot (bumblefoot).

Abscesses in Alberta

(bacterial)

Importance for Wildlife Management

Abscesses are not considered a significant problem for wildlife. The majority of them heal relatively quickly and do not cause any lasting harm to the animal. Some game carcasses may be abandoned unnecessarily by hunters because of the presence of abscesses. When walled-off abscesses are encountered in a hunter-killed animal, one should cut out the affected area and throw it away. The remainder of the carcass will be safe for use. In the very few cases where the bacteria have spread in the blood, telltale signs will become readily apparent. If the animal was killed quickly, gutted, cooled properly, and kept clean, yet the whole carcass turns green and slimy, and smells rotten in less than two days, it is likely that bacteria were present in the meat before the animal died.



Government of Michigan DNR

Such carcasses should not be eaten. 
Anyone with such a carcass should contact a Fish and Wildlife Division office about the possibility of receiving a replacement game tag.

Public Significance

Abscesses cannot be transferred from one animal to another. As such, they do not pose a health concern for humans, pets, or livestock.

Prevention/Control

There are no preventive or control measures; nor are they warranted.



Summary

Abscesses are relatively common in wildlife in Alberta, particularly in big game species. They are the result of previous tissue damage but usually do not pose significant concern. They are not transferable.

Additional Information

Northwest Territories RWED: <http://www.nwtwildlife.com/Publications/diseasepamphletweb/abscesses.htm>

University of Northern British Columbia: http://www.unbc.ca/nlui/wildlife_diseases_bc/abscesses.htm

Government of Michigan: <http://www.michigan.gov/dnr>

Government of Alaska, Dept of Fish & Game: <http://www.wildlife.alaska.gov/aawildlife/disease/guide/general2.cfm>