How do people get brucellosis?

People can get brucellosis from coming into direct contact with the bacteria when handling or butchering an infected animal. The bacteria can infect people through cuts on their skin or through direct contact with their eyes, nose and mouth. People can also become infected if they eat raw, frozen, dried, or undercooked meat or bone marrow from a caribou with brucellosis. Brucellosis is not normally passed from person to person.

What are the symptoms of brucellosis in people?

The symptoms of brucellosis are often general and can be mistaken for a common illness like the flu. People with brucellosis may experience periods of fever with chills and excessive sweating. These symptoms may be accompanied by headaches, weakness, and loss of appetite. They may also have swollen glands and pain in their joints.

If left untreated, brucellosis can sometimes cause an infection in the brain, which may lead to nervousness, irritability, and depression. Sexual impotence may also occur. If left untreated, deafness, paralysis and death can occur.

Symptoms can start several weeks or months after exposure to the bacteria.

Can brucellosis in people be treated?

Yes. Brucellosis in people can be treated with antibiotics. If you think that you have been exposed to a caribou with brucellosis and you experience flu-like symptoms, you should visit your community health centre to see a doctor or nurse.

Key Contacts

If you spot or shoot a caribou that you think has brucellosis, note its location and report it to your local Conservation Officer immediately:

For more information, contact:

Department of Environment: (867) 975-7700

Department of Health and Social Services Environmental Health Officer: Qikiqtaaluk: (867) 975-4800 Kivalliq - (867) 645-8273 Kitikmeot - (867) 982-7610

Photographs: Ryan K. Brook & Canadian Cooperative Wildlife Health Centre, Saskatoon





What is brucellosis?

Brucellosis is a naturally occurring disease caused by bacteria. It is found in caribou and reindeer in most arctic regions of the world, including Nunavut. The number of caribou with brucellosis varies among herds and can change over time.

Brucellosis rarely kills adult caribou directly. It can impact caribou by weakening individual animals, making them easy prey for predators. It also causes abortions in pregnant female caribou. There is no practical way to treat or prevent brucellosis in wild populations.

How do caribou get brucellosis?

Infected female caribou spread the bacteria in the fluid from their womb, afterbirth, aborted fetuses (unborn baby caribou), and milk. Pregnant females that are infected can pass the disease to their unborn calves. Other caribou can get the disease if they eat plants or drink water contaminated with these infected materials. Brucellosis can also pass between males and females during the rut.

Signs of brucellosis in caribou

In caribou infected with brucellosis, the bacteria are most often found in the animals' reproductive organs and leg joints. This can cause a number of symptoms:

- swollen joints, especially on the front legs (see photo below)
- swollen glands or puss-filled swellings under the skin, in the meat, or in internal organs such as the liver or kidneys
- aborted fetuses (unborn baby caribou)
- swollen testicles
- swollen womb
- limping or lameness

What should I do if I shoot a caribou that may have signs of brucellosis?

After you shoot a caribou, visually inspect it, especially the leg joints and reproductive organs. Depending on what you observe, you should do the following:

If the leg joints and reproductive organs are swollen, the animal probably has brucellosis, and you should:

- · abandon the animal and record the location
- · report the location to a Conservation Officer
- do not touch any diseased parts with your bare hands
- if you handle any diseased parts with gloves on do not touch your face with the gloves - discard the gloves after use or wash them thoroughly in warm soapy water

If you do not see any obvious signs of brucellosis (swollen reproductive organs or leg joints), you should proceed to butcher the caribou as you normally would, while taking the following precautions:

- · do not cut into joints, testicles or tissue swellings
- do not cut into a pregnant caribou's womb
- do not spill fluid from the womb onto the meat

Protect Yourself

The chances of getting brucellosis are low, but it does occur occasionally.

Hunters usually learn how to recognize the signs of brucellosis by travelling with and learning from other more experienced hunters. Experienced hunters are selective when hunting and try to avoid taking animals that appear weak or lame, thereby greatly reducing the chances of killing one infected with brucellosis. All hunters are encouraged to learn to recognize the sings of brucellosis.

When butchering a caribou, even one that appears healthy, hunters are advised to take basic precautions. While the following precautions may not always be practical on the land, hunters are advised to:

- · wear disposable gloves
- thoroughly wash all knives and other tools in warm soapy water after butchering each caribou
- thoroughly wash your hands with soap and hot water after handling the animal(s)
- do not eat meat from a caribou affected by brucellosis unless you cook the meat thoroughly
- do not feed any parts from an infected caribou to dogs unless the meat is thoroughly cooked.

*The Canadian Food Inspection Agency advises that bacteria is killed when meat is cooked to an internal temperature of at least 71° Celsius. Therefore, even in the event the meat you have is from a caribou that had brucellosis, it is safe to eat if well cooked.