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Canadian Center for Occupational Health and Safety

www.ccohs.ca/oshanswers/diseases/qfever.html

Center for Disease Control's Q-Fever information:

www.cdc.gov/ncidod/dvrd/qfever/

For more information, please contact your Regional Veterinarian or the Animal Health Division.

Other information pamphlets are available online from the Department of Natural Resources at:

www.nr.gov.nl.ca/agric/

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Q-Fever in Goats



Introduction

Q-fever has been found in goats in this province and in some cases in people who handled these animals.

What Causes Q-Fever?

Q-fever is caused by a bacterium called *Coxiella burnetii*.

Who Can Get Sick?

Q-fever as an illness is most common in humans. Though it can be carried by many different species of wild and domestic animals, sickness in animals is usually only seen in goats and sheep in the form of abortion or stillbirth. Other domestic animals that can carry it include cattle, cats, pigs, horses and dogs. Common wild animals that carry it include birds (such as the dove or birds of prey that may have consumed infected animals), rodents and rabbits (possibly 1/3 of the snowshoe hares in Nova Scotia carry it).

In areas where there are a lot of ticks, these arthropods can spread the disease. Ticks are not common in Newfoundland.

How is it Spread?

Humans usually get the disease by breathing in the bacteria. This most commonly comes from contact with the birthing fluids of infected goats, sheep or cats, or from the air in a building where dusty, contaminated bedding is disturbed.

In addition, people can get it by swallowing the bacteria. This can happen after getting hands contaminated when handling infected animals or infected bedding. Drinking contaminated raw milk can also result in infection.

Though not impossible, it is not considered likely that people with the illness can spread it to other people.

In goats, Q-fever is often seen in outbreaks rather than individual cases. All of the reasons for this are not known but stress is an important influence on the occurrence of such illnesses. The mixing of animals from different backgrounds, new surroundings or other such disruptions can cause the bacteria to be shed and make animals more vulnerable to infection.

What are the Symptoms in Humans?

Q-fever in humans results in “flu-like” symptoms which can persist. These can include fever, headache, chills, sore muscles, loss of appetite, dry cough, chest pains and sweats. Symptoms vary depending upon whether the bacteria was inhaled or swallowed.

Are there Previous Reports of Q-Fever in Newfoundland?

There are no records of previous cases of this disease in humans in this province. There are very few records of infection in cattle, usually as a result of a survey or other incidental testing. As this rarely causes illness in cattle, there is usually no reason to look for evidence of exposure in these animals. This does not mean that there were not more cases, but rather that there is no record.

Who is at Risk?

As Q-fever spreads from animals to people, it is usually those people who work directly with them that would be at higher risk. This would include sheep and goat dairy farmers, slaughterhouse operators and veterinarians. In the case of Q-fever from cats, it would be anyone who is in the proximity of infected cats when they give birth.

What Precautions Should be Taken?

Most animals have the potential to carry illnesses that can spread to humans. In some cases, these may be very serious and life threatening, such as rabies and hantavirus. Whereas in others, they may be annoyances that do not cause serious threats to otherwise healthy individuals.

With respect to Q-fever, the precautions depend on the situation. If someone is purchasing new animals, they can request that testing be done beforehand to minimize the chances that the animals carry the disease (this is also true in the purchase of any other livestock, though the diseases would depend on the actual species).

Once purchased, the animals can be kept in isolation upon arrival to see whether they show signs of any illness that might affect other animals in the herd. Many people try to keep closed herds with their animals to minimize the entry of diseases.

Though normally people do not use filter masks or gloves when working with animals, this can be done if there is any concern over the possibility of transmission of such illnesses. Regular washing of clothes and hands also decreases the risk of disease.

Though animals can carry illnesses from one barn to another, so can people. Many livestock operations keep their premises closed off to the general public as they do not want to risk having any illnesses brought in on people’s boots or clothing. Similarly, many livestock operators will not visit other barns as they do not want to bring anything back to their own barns. This is what is referred to as bio-security and is promoted broadly throughout the livestock industry.

The normal precautions that we take for the handling of food products from animal sources (i.e. meat and milk) would also apply. These include cooking or pasteurizing the raw product, proper cleaning of surfaces that come into contact with raw product and regular washing of hands.

Anyone who feels they may have contracted an illness from any source should see their family doctor.