

## Q Fever

### What is Q fever and what causes it?

Q fever is a disease that spreads from animals to humans. It is caused by a microbe (germ) called "Coxiella burnetii." This microbe can live for months and even years in dust or soil.

It is found all over the world.

Animals like goats, sheep and cattle can carry the Q fever microbe in their flesh and body fluids. The highest levels of these microbes are found in tissues involved in birth – the uterus, placenta, and birth fluids.

People usually get infected by breathing in dust contaminated by these tissues. The droppings of insects and spiders infected with Q Fever have high levels of this microbe. It may also be present in raw or unpasteurized milk from infected animals.

### How is Q fever spread?

People usually get Q fever when they breathe in the Q fever microbe. It is very infectious, and only a very few microbes can make you sick. People may also get Q fever by drinking unpasteurized infected milk, but most infections are spread through the air. It rarely if ever spreads from person to person.

### What are the symptoms of Q fever?

About half the people who get Q fever will not show any signs of the illness.

Most of the time, Q fever is mistaken for an acute viral illness. If you are infected, symptoms appear in 2 to 3 weeks.

The symptoms include:

- rapid onset of fever,
- chills,
- headache,
- weakness,
- malaise (a general sick feeling), and
- severe sweats.

In most cases, the illness lasts less than two weeks, and does not require special medical treatment. Complications to this disease are rare and are more likely to happen with people who have weakened immune systems. These complications include inflammation of the lungs, neurologic problems, and inflammation of the heart among people with abnormal or prosthetic heart valves.

### What is the treatment for Q fever?

Most people who get Q fever get well without any special medical treatment. However, in a very few cases a patient can develop hepatitis or liver disease and jaundice, a yellowing of the skin and darkening of the urine. In these cases, antibiotics are used to treat Q fever.

### Who is at risk for Q fever?

Q fever spreads around farming areas, and can affect anyone who works outdoors and is in contact with infected soil or dust. Airborne Q fever microbes may be carried a long way downwind – one kilometer or more. Q fever also spreads from room to room easily in buildings such as farm buildings and laboratories housing infected animals.

Some people at higher risk for Q fever include:

- Farmers, ranchers, and farm workers in contact with goats, sheep and cattle, particularly during the birthing process;
- Stockyard workers;
- Livestock truck drivers, personnel who service the trucks, and visitors to animal auctions;
- Meat packers, rendering plant workers, hide and wool handlers;
- Hunters and trappers;
- Animal researchers and support staff;
- Workers who care for pets and livestock – veterinary personnel, and zoo attendants; and
- Certain medical and health care people who have contact with blood, spit or tissue from infected people.

### How can Q fever be prevented?

- Appropriately dispose of all birthing products, including placentas, fetal membranes, and aborted fetuses (birthing products should be disposed of by incineration or burial, as permitted).
- Dogs, cats, birds and other animals should not be allowed to scavenge birthing products.
- Kidding should not take place outdoors.
- Separate indoor facilities should be appointed for birthing.
- Restrict access to barns and laboratories used in housing potentially infected animals.
- Use only pasteurized milk and milk products.
- Quarantine imported animals.
- The management of infected animals is important.

- Because infected animals do not show symptoms, animals should be routinely tested for antibodies to this organism, and measures should be taken to prevent airflow to other occupied areas.
- Use protective clothing, gloves and masks while working with these animals (especially pregnant ones).
- Properly decontaminate surfaces with formalin or bleach solutions.
- Properly dispose of contaminated waste.
- Pregnant women should not help with the birthing of livestock.
- When visiting farms, livestock auctions or shows, careful sanitation regarding hands, footwear, trucks and transport trailers etc. is recommended.

This Health File was adapted in part from information provided by the Canadian Centre for Occupational Health and Safety (CCOHS):

[www.ccohs.ca/oshanswers/diseases/qfever.html](http://www.ccohs.ca/oshanswers/diseases/qfever.html)

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