

Q fever

What is Q fever?

Q fever is a disease that spreads from animals to humans. It exists all over the world. The bacteria *Coxiella burnetii* causes Q fever. These bacteria can live for months and even years in dust or soil.

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 a short-term viral illness such as influenza.

Symptoms that may appear in 2 to 3 weeks after infection include:

- Rapid onset of fever
- Chills and sweating
- Headache
- Muscle pain
- Malaise (a general sick feeling)

In most cases, the illness lasts less than 2 weeks and does not need special medical treatment. However, some people may develop pneumonia, liver infection, or rare conditions affecting the brain and nervous system. In these cases, they will need to consult with their health care provider.

Complications from this disease are rare. They are more likely to happen if you are an older adult or have a weakened immune system.

People with diseased or artificial heart valves who get Q fever are at an increased risk of endocarditis, an inflammation of the heart. People who get Q fever while pregnant are more likely to have a miscarriage.

How is Q fever spread?

Animals like goats, sheep, cattle, cats, birds, dogs and ticks can carry the Q fever bacteria in their flesh and body fluids. The highest numbers of these bacteria are found in tissues involved in birth including the uterus, placenta and birth fluids.

Q fever is very infectious and even a small number of bacteria can make you sick.

Bacteria can contaminate dust and infect you when inhaled. This is more likely when an infected animal gives birth or aborts their offspring. You can also get sick from touching your face after touching contaminated animal tissue or fluids.

The bacteria may also be present in raw milk from infected animals. You may get Q fever by drinking unpasteurized, contaminated milk. The disease rarely, if ever, spreads from person to person.

What is the treatment for Q fever?

Most people who get Q fever recover without any special medical treatment. In more severe cases, antibiotics are used to treat Q fever.

Who is at risk for Q fever?

Q fever bacteria may be present in farming areas and can affect anyone who works outdoors and is in contact with contaminated soil or dust. Airborne bacteria can be carried one kilometer, or more, downwind. The bacteria also spread easily from room to room in buildings such as farm buildings and laboratories housing infected animals.

People at higher risk for Q fever include:

- Farmers, ranchers and farm workers who are in contact with goats, sheep and cattle, especially 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 such as veterinary staff and zoo attendants
- Certain health care workers who have contact with infected tissue or bodily fluids

How can Q fever be prevented?

- Appropriately get rid of all livestock and domestic animal birthing products. This includes placentas, fetal membranes and aborted fetuses. Incinerate or bury the birthing products, as permitted
- Do not allow animals to be around birthing products
- Separate indoor facilities should be set aside for animal birthing, where possible
- Keep the public out of barns and laboratories used for housing animals that may be infected

- Consume only pasteurized milk and milk products
- Isolate imported animals
- Control infected animals
- Test animals routinely as infected animals do not show symptoms
- Take measures to prevent airflow to other occupied areas of barns or laboratories
- Use protective clothing, gloves and masks while working with these animals (especially pregnant animals)
- Properly disinfect surfaces with a 70% solution of ethanol or a disinfectant containing quaternary ammonium compounds, like professional Lysol
- Properly get rid of contaminated waste
- People that are pregnant should not help with the birthing of livestock
- When visiting farms, livestock auctions or shows, careful cleaning is recommended. This includes your hands, footwear, vehicles and transport trailers

This HealthLinkBC 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



BC Centre for Disease Control
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