

# Q Fever

## What is Q Fever?

Q Fever is caused by the bacteria *Coxiella burnetii* and infects both humans and animals. The bacteria is typically spread from non-symptomatic animals and causes flu-like symptoms in humans.

## Where does Q Fever come from?

Cattle, sheep, and goats are most likely to carry and spread *C. burnetii*, but other kinds of animals including other species of livestock and domesticated pets can also have this disease. *C. burnetii* does not usually cause noticeable symptoms in these animals, although spontaneous abortions in goats and sheep have been linked to *C. burnetii* infection.

## How is Q Fever spread?

People usually get Q fever by inhaling barnyard dust where infected animals have been present. Most infected animals do not show signs of Q fever, but the bacteria can be in manure, urine, or dried fluids from the births of calves or lambs. Occasionally, people can get Q fever from drinking contaminated milk or from tick bites.

## What are the symptoms of Q Fever?

Roughly only one-half of all people infected with *C. burnetii* show symptoms of the illness. Most acute cases of Q fever in humans begin with sudden onset of high fevers (up to 104-105°F), and one or more of the following: severe headache, a general ill feeling, muscle pain, confusion, sore throat, chills, sweats, non-productive cough, nausea, vomiting, diarrhea, abdominal pain, and/or chest pain. Fever usually lasts for 1 to 2 weeks. Weight loss can occur and persist for some time. Up to fifty percent of persons who develop severe illness may develop pneumonia. Some people also develop hepatitis, an inflammation of the liver. In general, most people will recover to good health, although the recovery period may take a few months. Because of the non-specific signs and symptoms of Q fever, laboratory tests are required to confirm the diagnosis. Only 1% to 2% of people with acute Q fever die of the disease.

## How soon after infection do symptoms appear?

The length of time before symptoms appear after exposure depends on the number of organisms involved in the exposure. Infection with greater number of organisms will result in a shorter time until infection. Most patients become ill within 2-3 weeks after exposure. Those who recover fully from infection may possess lifelong immunity against re-infection.

## What is the treatment for Q Fever?

The antibiotic doxycycline is the treatment of choice for acute Q fever. Antibiotic treatment is most effective when given within the first 3 days of illness. Treatment is taken for up to three weeks and may need to be started again if symptoms of the disease reoccur.

## How can I protect myself from Q fever?

- Whenever possible, avoid direct contact with the placenta, birth products, fetal membranes, and aborted fetuses of sheep, cattle, and goats.
- Eat and drink only pasteurized milk and milk products.
- Quarantine imported animals.
- If you have heart valve disease or have had valve replacements, be extra careful around areas with sheep, cattle, and goats