

Q FEVER

What is Q fever?


Q fever is a disease caused by the bacteria *Coxiella burnetii*. Cattle, sheep and goats are the main carriers of this naturally-occurring disease.

How can someone come into contact with Q fever?

Person-to-person spread is very rare. Humans can come into contact with Q fever through—

- Breathing in the bacteria that may be in the air (dust particles in or around farms/barns may be contaminated by dried birth fluids and feces of infected animals);
- Drinking contaminated milk (not very common); or
- Being bitten by infected ticks.

Q fever as a weapon: The bacteria would most likely be aerosolized and released into the air. As a weapon, Q fever would make people so sick that they just lie down, sleep and moan. It is not expected to cause a lot of deaths.

 Please note: Just because you come into contact with Q fever does not mean you will get sick from it.

What happens if someone gets sick from Q fever?

Most cases of acute Q fever, which lasts less than six months, begin suddenly with one or more of the following:

- high fevers (up to 104-105° F)
- severe headache
- general discomfort
- muscle pain
- confusion
- sore throat
- chills
- sweats
- cough
- stomach pain
- nausea
- vomiting
- diarrhea
- chest pain

The fever usually lasts for one to two weeks. Weight loss can occur. About 30 percent to 50 percent of patients with symptoms will develop pneumonia. Additionally, many patients have abnormal results on liver function tests and some will develop hepatitis.

Chronic Q fever, an infection that continues for more than six months, is not common but is a much more serious disease. Patients who have had acute Q fever may develop the chronic form as soon as one year or as long as 20 years after the first illness. A serious complication of chronic Q fever is the inflammation of heart valves.

Most patients who develop chronic Q fever have a history of valvular heart disease. People who have received transplants, patients with cancer and those with chronic kidney disease also are at risk of developing chronic Q fever.

How likely is someone to die from Q fever?

Only about 50 percent of all people infected with the bacteria show signs of illness. In general, most patients will recover to good health within several months without any treatment.

Only 1 percent to 2 percent of people with Q fever die of the disease. As many as 65 percent of persons with chronic Q fever may die of the disease.

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What is the treatment for Q fever?

- **Prevention of illness after contact:** Antibiotics are not routinely given to try to prevent the development of the disease.
- **Treatment of illness:** Antibiotic treatment works best when started within the first three days of the illness. Chronic Q fever is much more difficult to treat and often requires the use of many drugs. Some patients may need surgery to remove damaged heart valves.

Is there a vaccine for Q fever?

A vaccine for Q fever has been developed and has successfully protected humans in Australia. However, this vaccine is not commercially available in the United States.

What should be done if someone comes into contact with Q fever?

If you think that you or someone you know may have come into contact with Q fever, contact the local county health department right away. (Visit www.idph.state.il.us//local/alpha.htm for a listing of all county health departments in Illinois or check your local phone book.)

If you or someone you know is showing symptoms of Q fever, call your health care provider or the Illinois Poison Center right away. The toll-free number for the poison center is 1-800-222-1222.

Where can one get more information about Q fever?

- U.S. Centers for Disease Control and Prevention www.cdc.gov/ncidod/dvrd/qfever/index.htm
- Illinois Department of Public Health www.idph.state.il.us
- Illinois Poison Center www.IllinoisPoisonCenter.org