Q Fever: Frequently Asked Questions

What is Q fever?

Q fever is a disease caused by *Coxiella burnetii*, a species of bacteria that can infect many animal species, including humans. Q fever is commonly found throughout the world and has been reported throughout the U.S.

What causes Q fever?

Humans are typically exposed to *Coxiella* through close contact with infected animals or their birth products (placentas, fetuses, amniotic fluid), urine, feces, or milk. Breathing in contaminated dust or aerosols can lead to infection.

Rarely, people can also become infected from a tick bite, ingesting contaminated milk, or during close contact with an infected person. Transmission to humans may also occur after contact with contaminated clothing and linens. The Q fever bacterium is extremely hardy; it can survive in the environment for long periods of time and become airborne, traveling on wind currents for miles.

What are the symptoms of Q fever?

Only about half of the people infected with *Coxiella* get sick with Q fever. Symptoms usually begin 2 to 3 weeks after exposure, and include fever, headache, chest or stomach pain, muscle aches, weight loss, chills, or cough. The fever can last 1 to 2 weeks, but some people can also get serious lung or liver infections. Most people recover within 1 to 2 months of infection. Rarely, chronic symptoms can develop, such as endocarditis, recurrent miscarriages, chronic granulomatous infections, or long-term fatigue. People with weak immune systems, pregnant women, and people with heart valve defects are at high risk for chronic Q fever.

Which animals can be infected?

Many animal species can be infected, including livestock (such as cattle, sheep, and goats), pets (such as dogs and cats), wild mammals, birds, fish, reptiles, and ticks. Although most animals do not show any illness, Q fever can cause abortions, weak offspring, and infertility. Even animals with no outward signs of infection may shed the bacteria in feces, urine, milk, and birth products.

How can I prevent Q fever infection?

Clothing and boots worn in areas where animals have recently birthed or where animals affected by Q fever are housed, should be removed and washed or disinfected before returning home. Barns or facilities that house animals infected with Q fever should have limited access. Since the highest risk for human illness is from contact with birth products of infected animals, it is important to carefully dispose of placentas, soiled bedding materials, and aborted fetuses. These materials should be burned, buried or disposed of as hazardous infectious waste and the area decontaminated. Hands and arms should be washed thoroughly after animal contact. Those at high risk for chronic Q fever (pregnant women, persons with weak immune systems, or persons with heart valve defects) should avoid areas where animals have recently given birth. Consume only pasteurized dairy products.

How is Q fever diagnosed?

Current or past Q fever is diagnosed by blood tests. While people are ill, evidence of *Coxiella* infection may be detected in their blood. Additionally, *Coxiella* antibodies may be detected in blood from people or animals who are not currently ill but were exposed to *Coxiella* at some point in the past.

How is Q fever treated?

An acute case of Q fever is treated with the antibiotic doxycycline for 2 weeks. The earlier doxycycline is started after symptoms begin, the more effective it is in treating the infection. Other antibiotics may be prescribed for those unable to take doxycycline.

If I think I have Q fever, what should I do?

If you feel unwell and have symptoms consistent with Q fever, you should seek medical care. Q fever is diagnosed with a blood test, but treatment should begin immediately if Q fever is suspected, even while laboratory tests are pending.

Who should I contact for more information?

For more information, please visit CDC's websites on Q fever at http://www.bt.cdc.gov/agent/qfever or http://www.cdc.gov/qfever/. If you think you may be ill with Q fever, contact your health care provider.

National Center for Emerging and Zoonotic Infectious Diseases
Division of Vector-Borne Diseases