Q Fever

What is Q Fever?

Q fever is a bacterial disease that can be transmitted from animals to humans and is caused by an organism called *Coxiella burnetii*.

Where does it come from?

The most common reservoirs for *Coxiella burnetii* are sheep, cattle, and goats. It may also be found in dogs, cats, rodents, birds, and ticks.

How is it transmited from animals to humans?

Q fever is most commonly spread through inhalation of the organism which may become airborne when animals give birth or when animal products are processed. Transmission may also occur through direct contact of contaminated materials such as milk, urine, feces, vaginal mucus, or semen of infected animals. Rarely, it is passed on through tick bites. It is not generally spread through direct person-to-person contact but can be spread through infected blood or bone marrow.

Am I at risk for infection?

Although Q fever occurs worldwide, it is a rare disease in humans. People at greatest risk for infection are those who work with infected animals. Occupations identified as high risk for exposure to *C. burnetii* include veterinarians, laboratory personnel, meat workers, sheep workers, and farmers.

What are the symptoms of Q Fever?

Most people will show no symptoms of infection. For those people who do show symptoms, there will generally be an acute onset of flu-like illness (i.e., fever, chills, headache, fatigue, malaise, and severe sweats.)

How can I find out if I am infected?

Blood samples may be taken to test for antibodies specific to *C. burnetii*. In some cases, tissue samples may also be taken.

What treatments are available?

Most people will recover without treatment. For those who require treatment, one of three antibiotics is used--tetracycline, doxycycline, and chloramphenicol.

Are there any long-term complications due to infection?

Although very rare, chronic infection may lead to endocarditis (inflammation of the heart) or hepatitis (inflammation of the liver).

What are the symptoms in animals?

Most animals show no clinical symptoms of disease, but may show a fever, loss of appetite, and lethargy. Abortions can occur in goats.

What treatments are available for my pet?

Antibiotics are used to treat animals. Vaccines are being studied.

How can I protect myself from infection?

Avoid the consumption of unpasteurized milk or cheese. People who work with potentially infected animals should minimize potential exposures. People with underlying heart conditions or compromised immune systems should try to avoid high-risk exposures. A vaccine for Q fever has been has been successfully used to protect humans in occupational settings in Australia. This vaccine however is not commercially available in the United States.

This fact sheet provides general information. Please contact your physician or veterinarian for specific information related to you or your animals.

For more information go to: • Centers for Disease Control www.cdc.gov • National Association of State Public Health Veterinarians www.nasphv.org