The University of Tennessee
Institutional Animal Care and Use Committee
Occupational Health Program

Q FEVER

People at Risk: This bacterial disease can occur in most domestic and wild animals that have been exposed to ticks. It is most commonly seen in domestic animals (goats, sheep, cattle, dogs, cats, and fowl). The animals that prove the greatest risk are sheep. Groups at high risk of contracting Q Fever are those workers that routinely care for sheep and goats and especially those working with pregnant sheep, their newborns, products of birth (placenta, amniotic fluid) blood, or soiled bedding.

Transmission: The organism is *Coxiella burnetii* and can be shed in urine, feces, milk, or fluids of the reproductive tract. The infection can be spread by aerosolization or ingestion.

Symptoms: Signs of Q Fever are usually sudden onset of fever, chills, headache behind the eyes, weakness, and profuse sweating. Q Fever may also be asymptomatic. Signs may progress to pneumonitis, non-productive cough, and chest pain. Acute pericarditis and hepatitis may also occur. Most signs of Q Fever resolve in 2 weeks. Endocarditis can occur, especially in people with artificial heart valves. Any high risk individual with generalized signs of the flu should mention this disease to their physician.

Diagnosis and Prevention:

Q Fever can be diagnosed in people by a blood test (serology).
Prevention of Q Fever is best accomplished by:

1. Providing separate areas for any sheep
2. Using male and non-pregnant sheep when possible
3. Appropriate disinfection of research areas and proper disposal of protective clothing. Protective clothing should only be used within the laboratory area. Gloves should be worn at all times. Complete disinfection of the laboratory area should be done with a dilute bleach solution.
4. Serologic testing and removal of positive animals
   Any person with heart disease, artificial heart valves, or who is immunocompromised would not work with intentionally infected animals (sheep, goats, or cattle).