

Q fever

Q fever is a zoonotic disease caused by the bacterium *Coxiella burnetii*. The bacteria are found around the world. Cattle, sheep and goats are the most common sources of the infection and do not usually appear ill. People who come in contact with milk, urine, feces or birthing fluids of infected animals can develop the disease. The highest concentrations of bacteria are found in the placenta and amniotic fluids. Symptoms of acute Q fever include fever, muscle pain, weakness, malaise and headache. Severe disease can cause acute hepatitis, pneumonia, and meningitis. Some patients will have no symptoms. Chronic Q fever can cause fatal endocarditis months to years after the acute infection or a chronic fatigue-like syndrome.

Diagnostic testing for Q fever in symptomatic patients includes a fourfold or greater change in antibody titer to *Coxiella burnetii* phase II or phase I antigen in paired serum specimens collected 3-6 weeks apart. Patients with clinically compatible symptoms or who are epidemiologically linked cases with only one positive laboratory test are counted as probable cases. Patients with clinical symptoms or who are epidemiologically linked cases with two positive laboratory results with at least a four fold change in titer are considered to be confirmed cases.

In Maine, in 2007, there were a total of 7 cases, 1 confirmed and 6 probable cases. In 2006 there were a total of 4 cases, 3 confirmed cases and 1 probable case.

There is no vaccine available in the United States for Q fever. Infection can be prevented by properly disinfecting and disposing of infected animals milk, urine, feces and birthing products and fluids. Pasteurization of milk from cows, goats and sheep will inactivate the organism.