

Emergency Medical Services

Q-FEVER

Agent Information: Q-Fever, a bacterial zoonosis, is caused by the rickettsia-like bacterium

Coxiella burnetii. The bacteria are naturally occurring with cattle, sheep, and goats being the primary reservoirs, although infection has been noted in a wide variety of other vertebrates. The organisms are resistant to heat, drying, and many common disinfectants. Because of the stability

of the organism and its ability to be transmitted via inhalation, the

aerosol form has the potential for use in bioterrorism.

Transmission: Person-to-person transmission is rare. Infection occurs most often by

inhalation of dust or aerosols derived from infected domestic animals (dried placental material, birth fluids, and excreta). Infection may also be

transmitted from animals to humans by ticks. Humans are very

susceptible to disease and very few organisms are required to cause infection. The incubation period is dose dependent; it is generally 2-3

weeks.

Signs and Symptoms:

Only half of all infected people show signs of clinical illness. Acute Q fever is characterized by sudden onset of one or more of the following: high fevers (up to 104-105°F), severe headache, malaise, myalgia,

confusion, sore throat, chills, sweats, non-productive cough, nausea/vomiting, diarrhea, abdominal pain, and chest pain. Fever usually lasts 1-2 weeks. Following inhalation of bacteria, patients would likely present with atypical pneumonia. Q-Fever can also cause chronic symptomology with endocarditis appearing as the primary manifestation.

Protective Measures:

Follow appropriate Body Substance Isolation (BSI) precautions, with use

of Personal Protective Equipment (PPE).

Standard Precautions: Hand washing before and after all patient

contacts and contact with patient care equipment.

<u>Contact Precautions</u>: Use of gloves, gown, and eye protection.

Airborne Precautions: Initiate droplet precautions for persons with flu-like

illness or confirmed infection, including wearing masks (fit-tested, NIOSH-approved N-95 respirator) when in contact with patient. If

equipment is visibly soiled or significant contact has been made with the patient, remove the protective clothing **BEFORE** entering areas that are not contaminated to prevent transmission of material. Victims presenting

immediately after aerosolized exposure require decontamination.

Decontamination of PPE and Equipment:

Equipment can be decontaminated using soap and water. Also, 0.5 percent hypochlorite solution (one part household bleach to 10 parts water) can be used as appropriate or if gear was visibly contaminated. Note that bleach may damage some types of firefighter turnout gear (one reason why it should not be used for biological agent response actions). After removing gear, response workers should shower using

copious quantities of soap and water.

24/7 Emergency Contact Number: 1-888-295-5156



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Prophylaxis: Vaccine is not licensed for use in the United States.

Treatment: The treatment of choice for acute Q-Fever is Doxycycline administered

for 14 days. For children and pregnant women with acute Q fever, cotrimoxazole should be used. For patients with chronic Q fever

treatment of choice is a combination of doxycycline and

hydroxychloroquine.

Reporting: Immediately report any suspect cases to the Division of Public Health,

Office of Infectious Disease Epidemiology: 1-888-295-5156.

For additional information, visit the CDC website:

www.cdc.gov/qfever/.