Background: Q fever is a zoonotic disease caused by the rickettsial organism *Coxiella burnetii*. Cattle, sheep and goats are the most common reservoirs of *C. burnetii* and large numbers of organisms (up to 10^9 organisms per gram of tissue) may be present in placenta, birth tissues and amniotic fluids of infected animals. Human infection usually occurs through inhalation of contaminated dusts and aerosols generated by infected animals, their waste products, placental tissues and fluids, and contaminated straw or bedding. Only 10 inhaled bacteria may be sufficient to cause infection in a susceptible host. Most patients will recover to good health within several weeks without any treatment. Persons at risk (i.e. those with valvular heart disease, persons who are immunosuppressed, pregnant women) should be advised of the risk of serious illness that may result from Q fever.

Sheep requirements:

1. **General health:** Animals are healthy as determined by veterinary staff upon arrival. Sheep are purchased from a flock with no history of Q-fever or Caseous Lymphadenitis (CL). Sick animals are not permitted to enter the animal facility.

2. **Pregnancy:** Only male or non-pregnant females are used. Non-pregnancy is confirmed using serological testing, at least 4 weeks after being isolated from intact males.

3. **Vaccination:** Sheep are vaccinated against: *Clostridium perfringes* types C & D, tetanus toxoid, *Pasteurella haemolytica*, *Pasteurella multica*, ovine echyma (lesions are healed before delivery), and rabies.

4. **Testing and pathogen exclusion:** Brucellosis and Q fever test results must be negative. Two negative Q fever tests at least 3 weeks apart are required. The second Q fever test must be performed no later than one week before sheep delivery.

5. **Other treatments:** Sheep are dewormed, shorn, receive foot trimming and zinc sulfate treatments.

Operational Practices:

1. **Training:** All personnel involved in sheep studies must attend the sheep zoonotic prevention seminar.
2. **Entry:** The sheep holding area is restricted to personnel who are involved in sheep studies (investigators and animal care staff).

3. **PPE:**
   1) Gloves
   2) Disposable or on site-laundered jumpsuits, coveralls, or scrubs
   3) Knee high boots (when cleaning pens)
   4) Full face shield or goggles and surgical mask are worn when cleaning the pens and during cage wash or certain veterinary procedures (i.e., lancing an abscess).
   5) Respiratory protection (N95) or PAPR are required during some veterinary procedures (i.e., lancing an abscess, trimming of foot rot) or for handling sheep with bloody vaginal discharge. Personnel must be enrolled in the Respiratory Protection Program in order to wear a respirator.

4. **Recommended disinfectants:**
   1) Household bleach (diluted to 10%)
   2) Hydrogen peroxide (5%)
   3) Lysol

   **Any exceptions to this policy must have IACUC approval**