The following is an overview of Q Fever information for researchers working in the Perinatal Research Facility. Contact occupational.health@cuanschutz.edu if you have any questions.

WHAT IS Q FEVER?

- Q Fever is a zoonotic rickettsial disease caused by the bacterium *Coxiella burnetii*
  - *C. burnetii* can reach high concentrations in animal tissues, especially placenta and other products of conception
  - *C. burnetii* is most commonly associated with sheep, but other animals can be carriers
- **Acute**
  - 5 out of 10 people infected with *C. burnetii* will get sick
  - Illness develops 2 to 3 weeks after exposure to the bacteria
- **Chronic**
  - Develops months or years following initial Q fever infection
  - Can be deadly if not treated
  - Risk factors: heart valve disease, blood vessel abnormalities, weakened immune system, pregnancy

**Transmission** to humans occurs by:
- Airborne dissemination of *C. burnetii* through direct contact with infected animals
- Ingesting contaminated food or breathing in dust that has been contaminated by infected animal feces, urine, milk, and birth products that contain *C. burnetii*

**Signs and symptoms of Q Fever**
- High fever
- Sore throat
- Chills, sweats
- Non-productive cough
- Muscle pain
- Body discomfort
- Fatigue
- Severe headache

IN THE EVENT OF AN EXPOSURE/SYMPTOMS

- When working around sheep areas, it is important to remain vigilant with a high index of suspicion of potential signs and symptoms of Q fever.
- Report any symptoms to Occupational Health
  - (303) 724-9145
- Schedule an appointment with Occupational Health
  - Consult and possible blood draw
- In the event of a positive titer, file a workers' compensation claim with risk management

SURVEILLANCE REQUIREMENTS

- **Initial Surveillance:**
  - Submit Initial Medical Surveillance Questionnaire
  - Make appointment with Occupational Health for initial blood draw to establish baseline serology
  - PPE education and training
  - N95 fit testing
- **Annual Surveillance:**
  - Submit Annual Medical Surveillance Questionnaire
  - Annual blood draw
  - PPE education and training
  - N95 fit testing
- When exiting the program
  - Exit Q Fever titer one year after last entry into PRF

Updated: August 2024
**PPE AND PRECAUTIONS**

- Traffic patterns marked by signage and donning/doffing locations must be adhered to
- Adherence to BSL-3 practices is essential during necropsy and birthing
- **Required PPE:**
  - Respiratory protection
  - Eye protection
  - Disposable gowns
  - Gloves

**BUILDING INFORMATION**

- Facility access is controlled via electronic badging
- **Only one approved entry & exit point**
  - Entry and exit from the rear door or any other entryways are forbidden
- Rear door access is limited to a few PRF and Facility staff for the purposes of delivery or maintenance activities

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**Perinatal Research Facility Map**

*CAUTION!

*AK32 roof and dumpster access also included in contamination zone*

Updated: August 2024
**Table 1. Perinatal Research Facility requirements**

<table>
<thead>
<tr>
<th>Materials used in research</th>
<th>Q Fever titer every year (Q Fever surveillance-exit titer required when leaving surveillance)</th>
<th>TDaP vaccine every 10 years</th>
<th>ABSL-2+ PPE N95 respirator, solid-front lab coat with closed cuffs, gloves, long pants/skirt/dress, eye protection (safety goggles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep blood</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sheep plasma</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sheep tissue/other than birthing materials*</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sheep placenta/birthing materials*</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cow placenta/birthing materials*</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Any university personnel (facilities, police, researchers, etc.), contractors, or visitors that enter the Red Zone of the PRF (see map)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*Uterus, placenta including cotyledon and caruncle, amnion, chorion, amniotic fluid, and allantoic fluid

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- occupational.health@cuanschutz.edu
- https://research.cuanschutz.edu/ehs/home/divisions/occupational-health
- (303) 724-9145