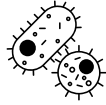


OCCUPATIONAL HEALTH Q FEVER EDUCATION

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

BUILDING INFORMATION

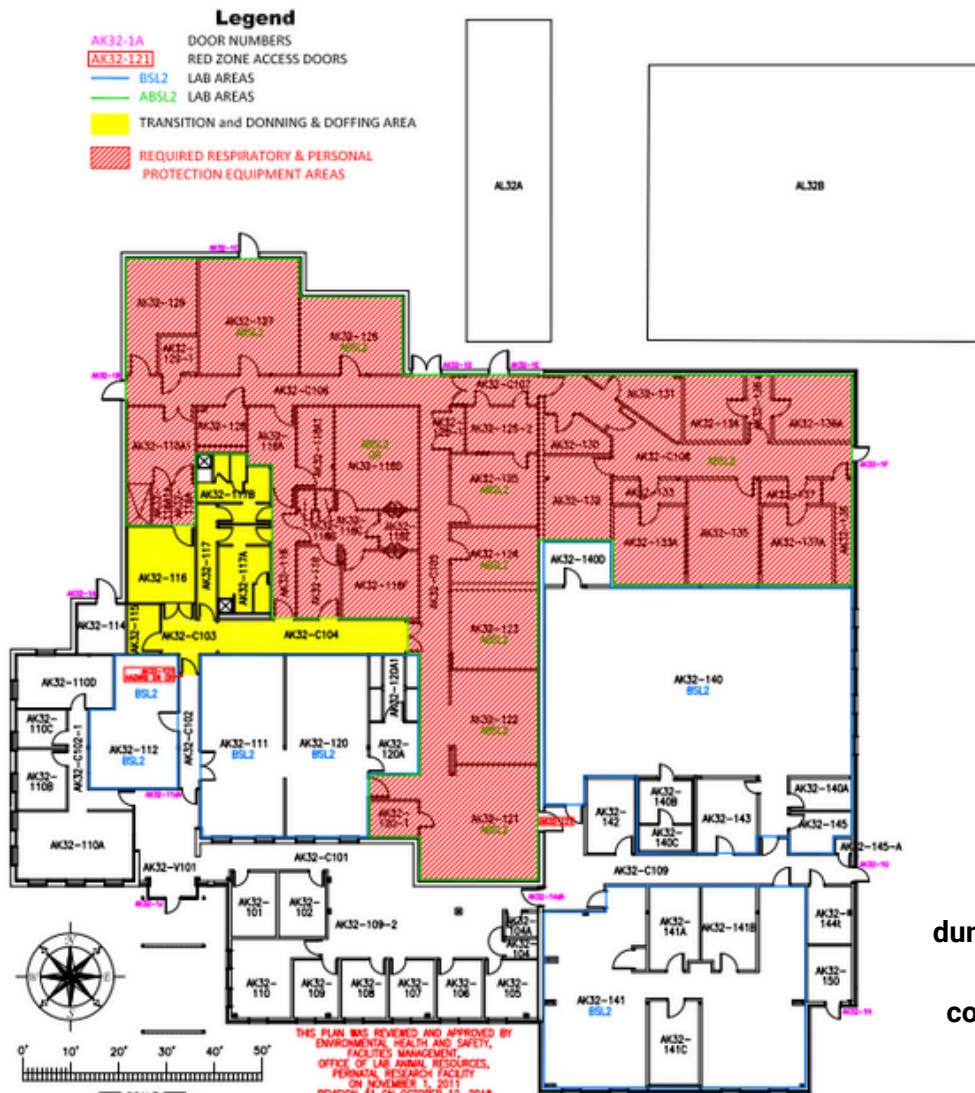
- Facility access is controlled via electronic badging
- **Only one approved entry & exit point**
 - Entry and exit from the rear door or any other entryways are forbidden
- Rear door access is limited to a few PRF and Facility staff for the purposes of delivery or maintenance activities

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

Perinatal Research Facility Map*

CAUTION!



*AK32 roof and dumpster access also included in contamination zone

Table 1. Perinatal Research Facility requirements

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

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

