

UNIVERSITY OF CALIFORNIA SAN FRANCISCO
INSTITUTIONAL BIOSAFETY COMMITTEE
SHEEP WORKER
POLICY ON SURVEILLANCE AND TRAINING

Policy

There are potential occupational health and safety risks associated with working with sheep. This policy outlines the mandatory training and medical surveillance programs that all individuals exposed to sheep or sheep tissue must follow in order to mitigate such risks.

Background

Q fever is a zoonotic disease caused by *Coxiella burnetii* (*C. burnetii*). Cattle, sheep and goats are the primary reservoirs of *C. burnetii*. This organism is highly infectious and remarkably resistant to drying, heat and many common disinfectants. Infection of humans usually occurs by inhalation of these organisms from air that contains airborne dust contaminated by dried placental material, birth fluids, and/or excreta of infected herd animals. Humans are often very susceptible to the disease, and very few organisms may be required to cause infection.

Acute Q fever infection can be severe, especially in the elderly or in immune compromised people, where it can cause hepatitis and/or endocarditis. Q fever can also become chronic and cause significant health problems, particularly in individuals who have valvular heart disease, liver disease or a weakened immune system. In most cases, Q fever is manifested by flu-like symptoms that usually resolve within 2 weeks. Q fever is sometimes misdiagnosed as flu.

Scope

The University of California, San Francisco requires that all veterinary staff, animal care technicians, research personnel, facilities personnel, Environment, Health and Safety Staff, IACUC staff and IACUC Committee members working with, or exposed to, sheep or sheep tissue participate in Q fever screening.

Required Procedures

A. Staff Exposed to Sheep and/or Sheep Tissue

1. It is the responsibility of the manager/supervisor to ensure that all staff with exposure to sheep and/or sheep tissue is informed of the surveillance requirements, and that these requirements are fulfilled prior to beginning work.
2. Prior to beginning work with sheep or sheep tissue, all personnel must visit Occupational Health Services (OHS) for baseline screening. The following steps must be followed to obtain Q fever surveillance:
 - a. Complete the Medical Health Screening (MHS) Questionnaire and indicate work with or exposure to sheep.
 - b. Complete and forward a UCSF OHS Request for Service form to the Public Health Office.
 - c. The employee will be contacted to schedule an appointment for the blood draw.

3. Once Q fever screening results have been submitted:
 - a. The Public Health Office will electronically submit an Animal Exposure Work Clearance to the individual, as well as to the individual's supervisor, or
 - b. The Public Health Office will refer individuals to the Occupational Health Clinic, if necessary.
4. Annually, all personnel working with live sheep must:
 - a. Provide documentation of a Q fever titer (from no less than 11 months and no more than 13 months from their previous Q fever screening), or
 - b. Attend the annual Q fever Screening Days held by Occupational Health and the Public Health Office.

Individuals working with sheep tissue only are not required to complete the annual screening. A baseline screening for these individuals is the only Q Fever titer requirement.

5. If an employee fails to comply with any of the above requirements, the Public Health Office will inform his/her supervisor and the IACUC that the worker is not cleared to work with sheep.

Training Requirements

1. **Online Q Fever Training** – All individuals who work with sheep and/or their tissue must complete the online Q Fever training course before beginning work and every three years thereafter.
 - a. Visit the UC Learning Center online to complete this training, and search for “Q Fever”: <https://learningcenter.ucsfmedicalcenter.org/default.aspx>
2. **One-time Orientation** – Prior to beginning work with live sheep, a species orientation, provided by LARC, is required. This orientation may only take place once you have completed baseline Q fever Screening and the online Q Fever training. Individuals working with sheep tissue only are not required to complete this species orientation.
 - a. Contact LARC Veterinary Staff at RVTs@LARC.ucsf.edu to schedule an orientation.

Compliance Monitoring

1. Compliance with the *UCSF Sheep Worker Policy on Surveillance and Training* will be monitored annually by the Public Health Office and will be reported to the Institutional Biosafety Committee, IACUC and Occupational Health Steering Committee.
2. Any personnel who fail to comply with the above requirements may have their laboratory privileges suspended or withdrawn by the IBC.

For Additional Information

Contact the Public Health Office:

Office of Environment, Health and Safety
490 Illinois St. San Francisco CA 94158
(415) 514-3531
PublicHealthOffice@ucsf.edu

References

Some of the above information has been summarized or adapted directly from the following sources:

1. Center for Disease Control and Prevention (CDC) [Internet]. [updated 2009 Jan 11]. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Infectious Diseases, Division of Viral and Rickettsial Diseases, Viral and Rickettsial Zoonoses Branch; [cited 2010 March 10]. Available from: <http://www.cdc.gov/ncidod/dvrd/qfever/>
2. Center for Disease Control and Prevention and National Institutes of Health. Biosafety in microbiological and biomedical laboratories [Internet]. Washington: U.S. Government Printing Office; 2007 [cited 2010 March 10]. Available from: <http://www.cdc.gov/biosafety/publications/bmbl5/index.htm>