



SAFETY PROCEDURE/GUIDELINES Sheep Containment Unit

NUMBER: Procedure Guideline SF-07

**SUBJECT: For Transportation of Hazardous Samples Outside of the SCU -
such as organs, tissues and/or blood from sheep used in the Sheep
Containment Unit (SCU) Occupational Health and Safety**

PAGES: 3

EFFECTIVE DATE: January, 2007

SUPERSEDES: September, 2006

APPLIES TO: All Personnel

APPROVED: January, 2007, Biosafety Committee Chair

1.0 Introduction

- 1.1 Sheep are a common reservoir of the zoonotic agent *Coxiella burnetti*, a rickettsial micro organism which, if transmitted can infect humans and may cause an illness called Q fever. About one half of people infected with *C. burnetti* show signs of clinical illness with a small percentage of clinical cases developing pneumonia and some cases developing liver disease or rarely, endocarditis.

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.

The risk of exposure for personnel is significantly higher when work with pregnant sheep where large numbers of organisms may be present in placenta, birth tissues and amniotic fluids of infected animals. Persons at risk (i.e. those with valvular heart disease, persons who are immune suppressed or pregnant women) should be advised of the risk of serious illness that may result from Q fever and should seek medical advice before working with pregnant sheep.

For more information on Q-Fever, please see:

(Health Canada) <http://www.phac-aspc.gc.ca/msds-ftss/>
(CDC) <http://www.cdc.gov/ncidod/dvrd/qfever/>

2.0 Measures to Reduce the Risk of Exposure to Q Fever

- 2.1 Sheep will only be admitted to the facility where there is no record of Q fever infection in the originating flock as determined by the best available testing methodology (See SOP 169).
 - 2.2 The sheep housing facilities and operating rooms at UWO will be designed and operated at the standard required by Health Canada as stated in the “*Guidelines for Biomedical Facilities using Sheep as Research Animals*” December 2000”. This standard is available at: www.phac-aspc.gc.ca/ols-bsl/aminres_e.html
 - 2.3 Entrance to the sheep facilities will be limited to approved persons only.
 - 2.4 ***These procedures and SOPs are intended to reduce the risk of exposure to Q Fever for all personnel who work in the Sheep Containment Facility at the University of Western Ontario. It is essential for the protection of all, that all procedures are followed at all times by all personnel.***
- 3.0 Tissues or blood which have been decontaminated by a procedure approved by Occupational Health and Safety at UWO do not need to be transported as dangerous goods samples.

Tissues or blood from animals verified by PCR analysis to be *C. burnetti* free do not need to be transported as dangerous goods samples.

All containers containing samples leaving the sheep unit must be decontaminated with 10% Virobac before leaving the facility.

- 3.1 Tissues or blood from animals not verified by PCR analysis to be *C. burnetti* free or decontaminated must be transported as per Transportation of Dangerous Goods Regulations – Clear Language when package is being sent by road or rail.

If a package is being sent by air, Transportation of Dangerous Goods Regulations - IATA (International Air Transportation Authority) rules apply. **Occupational Health and Safety must be notified of all IATA shipments.**

- 3.2 One person must be present for the packaging, documentation and transportation of the dangerous goods, and this designate must be specifically trained and certified in transportation of dangerous goods.

- 3.3 The documentation must be dated and signed by the designate. The certified designate must be present during the transportation of the dangerous good by road. No passengers are allowed. Only those people working in the sheep unit are allowed to be in the vehicle with the designate.
- 3.4 Samples must be packaged according to Transportation of Dangerous Goods Regulations, and must be in UN approved packaging. Samples must be in an STP100, inside an STP 300 Saf-T-Pak or other packaging approved by Occupational Health and Safety.
- 3.5 Follow the UWO Transportation of Dangerous Goods Policy:
www.uwo.ca/humanresources/facultystaff/h_and_s/enviromental_prog/transport_idx.htm
- 3.6 Questions regarding the transportation of dangerous goods must be directed at the UWO Occupational Health and Safety Office.