Animal Biosafety Level 2n- Large Animal

This protocol has been developed by the Office of Animal Resources (OAR) and Environmental Health & Safety (EHS) for use of recombinant/synthetic nucleic acid molecules and/or biological organisms in large animals, when assigned to Animal Biosafety Level 2 (ABSL2). The designation "n" refers to the containment of animals that cannot utilize an individually filtered enclosure Thoren caging system.

Research Staff

General Policies

1. In advance of administration of any agents covered under this protocol, contact the facility supervisor to arrange for appropriate housing of the animals after exposure.
2. Access is limited to necessary personnel.
3. Eating, drinking, smoking, and storing of food for human use are not permitted in any animal room.
4. Exposed animals transported between the Animal Resources facilities and investigator laboratories is only permitted after coordination with and approval from OAR and EHS. Animals must be transported in appropriate caging/housing with a covering material over the cage; transport requirements will be developed for each laboratory's specific need.
    a. Details of the movement of animals outside of the biocontainment room/facility must be included in the containment form and approved by OAR and EHS
5. Required personal protective equipment (PPE) is prominently posted on the entry doors to all animal biocontainment housing rooms.
6. PPE is available and must be worn by all personnel entering the biocontainment room.
    a. Remove PPE either:
        i. Before leaving the animal room, discarding the PPE in the biohazard container in the room.
        ii. Before leaving the biocontainment hallway, discarding the PPE in the biohazard container in the hallway.
7. Personnel must wash their hands before leaving the room or animal facility.
8. A biohazard sign that includes the universal biohazard symbol, the biohazard agent presently in use in the room, PPE required, room entry and exit requirements, and name and telephone number of the principal investigator/lab contact must be posted on the door.
9. Cages must also bear the universal biohazard label, the biohazard agent being used, date of administration and the final date of possible shedding of the agent, if applicable.
10. If applicable, the animals may be returned to non-biocontainment housing after meeting four conditions:
    a. The final day of shedding has passed after the last exposure,
    b. The animal has been placed into a clean cage after shedding has ceased (if appropriate),
    c. There's been at least one cage/pen cleaning after shedding has ceased, and
    d. Housing in a non-biocontainment room has been coordinated and approved through OAR and EHS.
11. Soiled cages, transports, or other housing equipment should not be removed from the biocontainment room without prior review and approval from an OAR veterinarian. If caging or other housing equipment is removed, it must be returned to the biocontainment room where all bedding, waste and other housing equipment from animals exposed to infectious agents will be managed by OAR husbandry personnel.

If transports or carriers are used to move animals outside of the biocontainment room/facility, the lab's containment form must describe decontamination procedures and requires approval by OAR and EHS.

12. Animal carcasses/tissues will be handled by the research staff and must be double-bagged in plastic biohazard bags and staged for disposal by placing the bag(s) in red biowaste tubs located within the walk-in coolers, refrigerators, or freezers of each animal facility.
13. In the event an incident occurs that may result in an exposure to recombinant or /synthetic nucleic acid molecules/infectious materials (including animal bites), immediately notify your supervisor and EHS's Biosafety Officer (353-5679).

Use of Agent

1. Wherever possible, the agent should be manipulated within a biological safety cabinet.
2. Work surfaces must be decontaminated after use and in the event of a spill. Research staff must ensure disinfectant is effective against the agent in use; OAR currently provides Spor-Klenz within the facility.
3. Procedures must be performed to minimize the creation of aerosols. Only needle-locking syringes or disposable syringe units (i.e., the needle is integral to the syringe) may be used for the injection or aspiration of infectious fluids. Following the procedure, the needle and syringe should be promptly placed in a puncture-resistant sharps container.
4. All contaminated materials used by the investigator (needles, syringes, vials, gloves, etc.) must be properly disposed of in the appropriate biohazard containers, i.e., needles, syringes and vials placed in a sharps container, and gloves, etc. placed in the biohazard box/container.

Use of Core Facilities must be reviewed and approved by OAR and EHS.

OAR Personnel

Cage handling

1. Manipulate cages that are not marked biohazard first.
2. PPE is available and must be worn by personnel entering the biocontainment room. Remove PPE before leaving the animal room, discarding the PPE in the biohazard container in the room.
3. When there is a possibility of agent shedding or use of recombinant DNA, bedding and animal waste must be disposed of as biohazardous waste. Bedding should be misted prior to dumping/collection in a red bag to decrease aerosol generation.
4. Cages, nesting boxes, enrichment items, and transport carts will be sprayed down with appropriate disinfectant and allowed the proper exposure time prior to cage washing.

Infected Animal Disposal

1. If a deceased animal is found, OAR personnel will bag the carcass in a biohazard-labeled bag, place it in the cooler, and submit a dead in pen (DIP) slip for the animal. The PI and any staff with system access will receive an email from the OAR office or vet staff notifying them of the death.
2. Carcasses are placed in a DIP bin in the cooler; bins are labeled with the day of the week that corresponds to the date on the automated email that PIs and staff receive once the DIP slip is processed. Carcasses are saved for at least 3 days' post-death, longer over holidays.

List the hazardous agent(s) that will require ABSL2n containment

Will animals be transported out of the ABSL2 holding room (Yes/No)?

Describe deviations from the above listed procedures and/or additional procedures (including transport procedures) specific to this research project . If more space is needed, use the text boxes on the following pages.

Lab Emergency Contact Information

*PI Signature*_____ *Date*_____

Use this space (if needed) to provide additional information regarding your procedures.

Use this space (if needed) to provide additional information regarding your procedures.

Routing and Approvals

Hazard Containment Protocol

Office Use Only

Protocol #

Reviewer	Signature	Date
OAR/IACUC Veterinarian		
Environmental Health & Safety Office		