Loyola University Chicago Comparative Medicine Facility

Standard Operating Procedure

SOP Number: 02-18-5260

Service: Research

Operating Section: Clinical Medicine

Unit: CMF

Title: Response to Infectious Disease Outbreaks

Purpose:

To establish procedures for investigating and responding to infectious disease outbreaks.

Procedure:

1) Director, CMF or designee will:

- a) initiate veterinary inspection of the colony to review clinical signs;
- b) review research protocol(s) in which the animals are involved:
- c) review animal procurement (vendors/source) and shipment records;
- d) check animal census in the room and identify individual animals for serologic and other sampling;
- e) determine the need for special housing (i.e. filter tops), clothing, or husbandry patterns in the room;
- f) post room with specific instructions (personnel who can enter, special clothing, etc.);
- g) initiate discussion of the research use of the animals with the investigators.
- 2) Low level infectious agents: Specific instructions will vary depending on veterinary review of testing data and research protocols in the room. If infectious agents are identified in the room, the veterinarian will discuss options with the investigator(s) and arrive at a housing and husbandry pattern designed to eliminate or contain the infection. Options discussed will include depopulation, rederivation, containment and cessation of breeding.
- Zoonotic or colony threatening infectious agents: When infectious agents are identified that present a health threat to humans or the other animal colonies on campus, these colonies will be immediately quarantined with access limited to the veterinary staff. It is expected that the detection of such agents will result in depopulation of the colony with complete decontamination of the area. Specific investigator requests to obtain materials from potentially contaminated colonies will be handled jointly through the Clinical Veterinarian/CMF and the IACUC.
- 4) All Principal Investigators affected by the identified outbreak will be notified. The Director, Assistant Director, Clinical Veterinarian and Laboratory Coordinator will meet with investigators involved to obtain pertinent experimental histories, dates of animal arrivals, sequence of events, and all laboratory data. Principal Investigators will be instructed on appropriate decontamination of all research equipment exposed to the contaminated room by autoclaving, chemical disinfection, or a cycle through the rack/tunnel washer.
- 5) Animals residing in the room where a diagnosis was made are considered contaminated, and treated as if infected until proven otherwise.
- 6) With approval of the Director, Assistant Director, Clinical Veterinarian or Laboratory Coordinator/CMF the PI may elect to isolate a surviving but exposed population. In this case the investigator assumes all additional financial responsibilities associated with such isolation. Such isolation will follow strict guarantine procedures.

- 7) In the event of an actual or suspected disease outbreak, access and husbandry procedures may be altered while further testing proceeds. Whenever possible, sentinel animals will be utilized for testing, but investigator-owned animals may be utilized as well.
- 8) If depopulation or relocation is deemed necessary, then the animal room will be decontaminated. This consists of a complete decontamination of all exposed surfaces using an appropriate disinfectant. A private company will be contracted for decontamination of HEPA filters. Exhaust air filters will be cleaned or changed as indicated.
- 9) If it is determined that the disease is conducive to eradication through cessation of breeding, the following steps are followed:
 - a) Separate males and females and euthanize all unweaned pups.
 - b) Initiate 6-8 week isolation period. Introduction of new animals into the colony is prohibited during this period. Any litters born during this period must be euthanized immediately.
 - c) To re-establish breeding the following steps must be taken:
 - Establish breeding pair or harem in individually ventilated caging verifying the appropriate pairing according to strain and investigator requirements.
 - ii) Place all active breeding groups in the designated breeding room.
 - d) Run appropriate full serology assays at the discretion of the Clinical Veterinarian/CMF on one animal/litter at a minimum of 28 days.
 - e) If serology is negative, move animals to a clean barrier room or separate ventilated rack.
 - f) Re-confirm serologic status of animals at a minimum of 8 weeks of age, then at 2-week intervals; (1/litter). After three negative serologic samples, animals can be released to regular housing.
 - g) If any serologic results are suspect, re-evaluate whether burnout has been accomplished and is appropriate for the strain involved.

APPROVALS

Responsible Of	ficial Signature		Date / /
Que	In Cere	DVM HS	07/03/20
QA Signature	Kon	(w)	Date 07/03/2019
Version #3	Effective Date	Supersedes #2	Original Date 07/14/06