I. Description

Describes the risk and infection prevention practices for research animals in UNC Health Care facilities.

II. Rationale

Animals have generally been limited to laboratories and research facilities, but their presence in health care facilities is now more frequent because they may require diagnostic testing or treatment not available in veterinary facilities such as PET scans or radiation. These animals (dogs, cats, fish, birds, rodents, reptiles, and non-human primates) can be reservoirs for zoonotic pathogens that can potentially infect patients and health care workers who are exposed directly or indirectly to these pathogens. This policy will outline control measures that need to be taken to prevent the transmission of zoonotic pathogens.

III. Policy

A. Personnel

1. Only university employees may have direct contact with research animals and shall undergo federally mandated training via the UNC-CH Office of Animal Care and Use (OACU) Institutional Animal Care and Use Committee (IACUC) and the Division of Laboratory Animal Medicine (DLAM) or other similar training from an external institution.

2. UNC Health Care personnel will not have direct physical contact with the animals unless they are working in a research capacity for a university at that time and have undergone proper training as in A1 above.

3. All personnel must adhere to UNC Medical Center, IACUC and DLAM policies.

4. All university personnel who handle animals or come in contact with animal allergens must submit a completed University Employee Occupational Health Clinic (UEOHC) Research Animal Handlers & Animal Caretakers medical history registration form, and have any necessary vaccinations and medical screening.

5. Personnel involved in handling of the animal will wear appropriate personal protective equipment (PPE), (i.e., gowns, gloves, mask, goggles), as needed when handling animals or animal excreta.

6. Personnel who work with animals and provide patient care will strictly follow the Hand Hygiene guidelines.
and Use of Antiseptics for Skin Preparation Policy prior to and following each animal contact.

B. Animal Health

1. Animals entering the facilities should be obtained from certified vendor and, ideally, documented to have tested negative for agents with significant human health risk.

2. Animals must be provided care consistent with the Animal Welfare Act and USDA Animal Care Policy #3.

3. Any animal with an active infection must be removed from the healthcare facility by the principal investigator or designee.

C. Animal Transportation

1. Transportation of animals between facilities should be done in a manner to maintain biosecurity, limit the spread of pathogens and health hazards, and maintain the animals' health status.

2. All animals transported within the healthcare facilities must be in covered, escape proof, closed bottom cages that do not allow droppings to fall to the floor or the aerosolizing of allergens. This applies to empty cages as well.

3. Animals should not be transported through public areas, if possible. Utilizing routes that minimize the potential for contact with patients or the public.

4. Service elevators should be used whenever possible.

5. Animals, and patients or patient-care items should not be transported at the same time on the same elevator.

6. All animals will be brought into the facility in off-hours and weekends only, utilizing the shortest possible route to minimize the area of potential contamination and exposure of non-affiliated persons.

7. Animals must not be left unattended while inside the UNC Health Care Facilities and must be monitored at all times by trained staff members that have experience and the means to deal with potential complications.

D. Terms of Use for UNC Health Care Facilities

1. All other veterinary facilities, equipment, and instrument options must be exhausted before utilizing health care facilities.

2. Prior to using UNC Health Care Facilities, the Principal Investigator (PI) must submit a detailed protocol that is reviewed and approved by the IACUC, DLAM, Institutional Biosafety Committee (if appropriate), Hospital Epidemiology, Environmental Health and Safety, Risk Management, Health Care department involved, and Public Relations.

3. The detailed protocol should include: when and where the procedure will be performed, what personnel will be involved, who is responsible for ensuring that all protocols are followed, what PPE will be required, what cleaning and disinfection practices will be required, what route(s) will be used to transport animals to and from the clinical area, who is responsible for transporting and care and maintenance of the animal while in the health care facility.
4. The PI must schedule the animal procedure at a time when human patients and non-essential staff are not present in the area to be used.

5. After approval, effective communication between the PI (or designee), the DLAM Director, and the clinical area manager is necessary.

6. Treating animals in operating rooms or other patient care areas where invasive procedures are performed (e.g. Cardiac Catheterization Laboratories, Invasive Nuclear Medicine Areas) is prohibited.

7. The PI will provide all supplies needed to care for and treat the animals. Exceptions may be made by the Medical Director of Hospital Epidemiology on a case by case basis.
   a. Use of disposable equipment and instruments is preferred.
   b. Whenever possible, duplicate items should be procured so that animals utilize dedicated reusable equipment.
   c. If invasive reusable medical or surgical instruments are used, restrict the future use of these instruments to animals only. Instruments must be labeled "For Animal Use Only" and stored in a separate location so there is not inadvertent use on human patients.
   d. Non-invasive equipment (e.g. x-ray equipment) that is also used on patients may not be used on animals unless the equipment has an established protocol for proper and effective cleaning and can be effectively disinfected.

8. All mobile equipment and material not needed for the animal procedure should be removed from the procedure room prior to bringing the animal into the area. All fixed equipment not in use should be draped to sufficiently prevent soiling with animal dander, allergens, or microorganisms prior to animals entering the facility.

9. Doors to the procedure rooms should be closed and a "Do Not Enter" sign should be posted when the animal is in the room.

10. Appropriate PPE must be utilized by personnel.

11. In the area where the animal(s) is being treated, at least six air changes per hour (ACH) should be achieved to help remove airborne dander, microorganisms and allergens.
   a. If six ACH cannot be achieved, a portable HEPA filtration unit should be used in the area to help remove dander, microorganisms, and allergens.

12. **Before** animals occupy an area, all surfaces to be utilized during the study will be cleaned and disinfected with an EPA-registered disinfectant.

13. **After** all animals have been removed from the room, the PI or designee will clean and disinfect all surfaces using an EPA-registered surface disinfectant.

14. The PI or designee will contact Environmental Services to have the areas occupied by animals terminally cleaned prior to patients utilizing the space.

15. Feces, urine, and other potentially contaminated waste must be captured, contained, and disposed of properly.
E. Implementation

The PI is responsible for maintaining compliance with all policies and procedures set forth in this document. Hospital Epidemiology reserves the right to conduct unannounced inspections of the facility while in use by the PI to ensure compliance with this policy.

IV. References


The University of Texas at Austin Institutional Animal Care and Use Committee. Guidelines for Animal Use in Human Subject Study Environments, 2015. www.utexas.edu/research/rsc/iacuc/.


USDA Animal Care Policy 3: Veterinary Care.

APIC Text of Infection Control and Epidemiology: Animal Research and Diagnostics chapter. Chapter 121, 2014

V. Related Policies

Hand Hygiene and Use of Antiseptics for Skin Preparation Policy

Attachments:

01: Example of Diseases Associated with Zoonotic Transmission to Humans

Approval Signatures

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<tr>
<th>Step Description</th>
<th>Approver</th>
<th>Date</th>
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<tbody>
<tr>
<td>Policy Stat Administrator</td>
<td>Patricia Ness: Nurse Educator</td>
<td>10/2018</td>
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<td>Thomas Ivester: CMO/VP Medical Affairs</td>
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<td>Emily Vavalle: Director, Epidemiology</td>
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<td>Sherie Goldbach: Infection Prevention Registrar</td>
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Applicability

UNC Medical Center