Principal Investigator: Date Approved:

**Biohazardous Animal: Intranasal and Oral Administration**

This SOP applies to oral and intranasal administration of biohazardous materials into animals at ≥ABSL2.

Administering biohazardous materials into animals via intranasal inoculation and/or oral gavage increases the handler’s risk for mucocutaneous exposure to aerosols and animal bites/scratches. To mitigate risk, proper handling techniques must be used when working with animals, and assistance from a second individual is recommended.

**Personal Protective Equipment**

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**Engineering Controls, Equipment, and Materials**

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| **Biosafety Cabinet (BSC)** | Enclosed, ventilated laboratory workspace that protects the worker from aerosols |
| **Mechanical Pipettor** | Liquid handling tool (usually calibrated) for suction, transfer and/or measurement of small amounts of liquid |
| **Biohazard Waste Container and Bag** | Non-porous, leak-resistant, “biohazard”-labeled container lined with a red biohazard waste bag |
| **Gavage Device** | Device or tube such as a gavage needle used for oral delivery of materials directly into the stomach of animal |
| **Disinfectant** | Appropriate to the agent(s) (see Decontamination/Disinfection SOP) |

**Procedures**

1. Load mechanical pipette or oral gavage with material planned for nasal or oral administration
2. Anesthetize animals, if necessary, and restrain animal by holding it by the scruff
3. **Intranasal Administration:** Deliver material into one or both nostrils using a mechanical pipette or other delivery device
4. **Oral Gavage Administration:** After proper placement of lubricated gavage device or tube within the animal, apply pressure to the syringe to deliver material directly into the animal’s stomach, and gently remove the gavage device
5. Disinfect reusable gavage tubes with appropriate disinfectant after use
6. Dispose of non-reusable delivery devices, pipette tips and/or gavage tubes as biohazardous waste after use
7. Return animal to cage and observe animal for at least 15 minutes and again 24 hours after the procedure for signs of distress (e.g., gasping, bleeding or frothing at the mouth/nose)
8. Contact Office of Comparative Medicine Veterinary staff if signs of distress are observed

**Cautions and Considerations**

* The Supervisor/PI must ensure that laboratory personnel demonstrate proficiency
* All intranasal or oral administration of biohazardous materials into animals must be performed within a BSC
* If anesthesia is used, observe animal continuously until ambulatory
* Use a “biohazard”-labeled transport container to transfer administration tools and biological materials to the location where materials will be delivered to animals (see Biohazardous Material Transport SOP)
* Contact EHS Biosafety at 801-581-6590within 12 hours of an exposure to biohazardous materials