Chemicals and Drugs Administered to Animals in Standard Housing

Standard Operating Procedure

Revision Date: 1/17/23

# This standard operating procedure (SOP) outlines the handling and use of chemicals and drugs administered to animals in standard housing. In accordance with this document, laboratories should use appropriate controls, personal protective equipment, and disposal techniques when handling drugs and chemicals administered to animal. All laboratory workers must read and understand the [*Laboratory Emergencies SOP*](https://ehs.umich.edu/wp-content/uploads/2022/05/LaboratoryEmergencyProceduresSOP.docx) prior to commencing any work in a laboratory.

# Description [Provide additional information as it pertains to your research protocol]

EHS Animal Safety conducts a risk assessment for all chemicals and drugs administered to animals to determine the handling and housing requirements. This document is to serve as guidance for labs who administer chemicals and drugs to animals that will be housed in standard housing.

Risk of exposure to drugs and chemicals can vary based on route of administration, dose administered, frequency, and number of animals being administered at a time.

***The lab must refer to the EHS Safety Findings within the IACUC Protocol for handling and housing recommendations. Ensure all lab staff working with hazards in animals have reviewed the EHS Safety Findings. Please print the EHS Safety Findings from the IACUC protocol and place them in your EHS Document Binder.***

# Potential Hazards [Provide additional information as it pertains to your research protocol]

Hazards associated with drugs and chemicals may pose a risk to all staff involved. This includes lab staff, animal handlers, ULAM Husbandry, cage wash staff, and EHS Hazmat staff. The environment can also be impacted by drugs and chemicals, therefore we must adhere to state and federal waste regulations.

# Engineering Controls [Provide additional information as it pertains to your research protocol]

A chemical fume hood must be used to prepare, reconstitute or dilute hazards being administered to animals. The preparation must take place in the fume hood in the lab and no concentrated materials brought down to the animal rooms/vivarium space. If this is a new process and the appropriate engineering controls are not available in the lab, contact EHS Animal Safety staff to discuss alternative procedures. EHS Animal Safety is available to all labs to perform a risk assessment of any agent that the lab will be administering to animals.

# Work Practice Controls [Provide additional information as it pertains to your research protocol]

To reduce exposure to chemicals and drugs ensure:

* PPE is changed frequently, damaged, or contaminated.
* Good hygiene practices are followed including frequent hand washing.
* Ensure areas where preparation takes place are cleaned appropriately.
* Waste is disposed of properly.
* See Chemical Hygiene Plan for more information on Work Practice Controls.

# Personal Protective Equipment [Provide additional information as it pertains to your research protocol]

* PPE requirements in the lab include gloves, lab coat, safety glasses or goggles, and closed-toe shoes. The EHS Safety Findings may also indicate other required PPE depending on the chemical or drug.
* PPE requirements must be followed according to ULAM guidelines and requirements found on the door outside of the animal room.
* Depending on the drug or chemical, the EHS Safety Findings may indicate the use for double gloves. Please refer to the EHS Safety Findings for guidance for specific hazards.

# Transportation and Storage [Provide additional information as it pertains to your research protocol]

*Storage* - Preparation of syringes and chemical containers must be done in the lab, labeled with chemical name (& concentration, if diluted) and hazard warnings at a minimum.

*Transportation* - Secondary containers must be used to transport hazards to the animal room.

# Waste Disposal [Provide additional information as it pertains to your research protocol]

Waste generated in the lab must be disposed of in a hazardous waste container located in the lab. Needles must be disposed of in a sharps container, dated, and collected for disposal by Hazmat or the approved vendor in the building's designated area.

Waste generated in the animal room must be disposed of in the animal room in a waste container provided by ULAM staff. Please contact ULAM to discuss waste disposal procedures for the animal room/building.

Because most spent, unused, and expired chemicals/materials are considered hazardous wastes, they must be properly disposed of.  **Do not dispose of chemical wastes by dumping them down a sink, flushing in a toilet or discarding in regular trash containers, unless authorized by Environment, Health & Safety (EHS) Hazardous Materials Management (HMM)**. Contact EHS-HMM at (734) 763-4568 for waste containers, labels, manifests, to schedule a date for waste collection and for any questions regarding proper waste disposal. Also, refer to the EHS [Hazardous Waste](http://ehs.umich.edu/haz-waste/) Web page for more information.

# Training of Personnel

All personnel are required to complete the **General Laboratory Safety Training** session (**BLS025w** or equivalent) via [EHS' My LINC website](http://ehs.umich.edu/education/).

# Certification

I have read and understand the above SOP. I agree to contact my Lab Director if I plan to modify this procedure.

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### Major Revisions (Tracking purposes only -- Do not print as part of SOP)

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