Principal Investigator: Date Approved:

**Biohazardous Animal Cage Changing and Washing**

This SOP applies to personnel responsible for changing or washing animal cages used to house animals that were exposed to biohazardous materials or may be infected/infectious and require handling and housing at ABSL2.

When biological materials are administered to animals, hazard excretion through the animal’s urine/feces is possible. To mitigate this risk, bedding must be treated as biohazardous waste, and caging materials must be adequately decontaminated.

**Personal Protective Equipment**

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**Engineering Controls, Equipment, and Materials**

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| **Biosafety Cabinet**  | Enclosed, ventilated laboratory workspace that protects the worker from aerosols |
| **Animal Caging** | Rigid, non-porous, leak-proof container appropriately sized for the animal with a fitted lid and biohazard label |
| **Transport Cart** | Non-porous cart large enough to transport animal caging |
| **Biohazard Waste Container and Bag** | Non-porous, leak-resistant, “biohazard”-labeled container lined with a red biohazard waste bag |
| **Cage Washer** | Mechanical washer for animal cages that reaches ≥180 °F |
| **Disinfectant** | Appropriate to the agent(s) (see Decontamination and Disinfection SOP) |

1. Place animal cage, with the contaminated bedding, in cage washer for the required time at the required temperature.
2. Gently place soiled bedding and/or disposable caging materials into the biohazard waste container and secure waste bags when ¾ full (see Solid Medical Waste SOP)
	1. If a cage washer is not available, place animal cage inside of a biological safety cabinet, gently place soiled bedding and/or cage materials into the biohazard waste container and secure waste bags with ¾ full (see Solid Medical Waste SOP)
3. Decontaminate all materials, including soiled caging materials and the biohazard waste container, with disinfectant before removal from the animal handling location
4. Cover and transport decontaminated non-disposable caging materials to a cage wash for final wash
5. Transport biohazard waste to an appropriate accumulation site for final disposal

**Procedures**

**Cautions and Considerations**

* Deviation requests to change animal cages outside of a BSC must be approved by the IBC
* Caging materials should be autoclaved or otherwise decontaminated before removal from animal handling areas ABSL2
* Reduce the risk of infectious aerosols from bedding by maintaining HEPA-filtered caging systems and using HEPA-filtered engineering controls (e.g., BSC or Bedding Disposal Station)
* Respiratory protection is not required if work is conducted in a BSC
* This SOP does not apply to animals exposed to chemotherapeutic agents, chemicals or radioactive materials

**References**

1. [Guide for the Care and Use of Laboratory Animals](https://grants.nih.gov/grants/olaw/guide-for-the-care-and-use-of-laboratory-animals.pdf)
2. [Biosafety in Microbiological and Biomedical Laboratories](https://www.cdc.gov/biosafety/publications/bmbl5/bmbl.pdf)