

Auburn University Risk Management and Safety Standard Operating Procedure	Effective Date: 11-17-2020		SOP Number: AP - 119
	Supersedes NA	Superseded: NA	Page: 1 of 3
Subject: BSL1 and BSL2 Management at the Miller Poultry Research & Education Center Animal Health Research Building (Biocontainment Facility)	Approval: <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  <hr/> </div> <div style="text-align: left;"> Biosafety Officer </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  <hr/> </div> <div style="text-align: left;"> Risk Management and Safety </div> </div>		

I. PURPOSE

This document provides standard procedures for the Miller Poultry Research and Education Center Animal Health Research Building (Biocontainment Facility) for managing poultry, poultry waste, poultry caging, and other objects potentially contaminated after the animals have been dosed with a BSL1 or BSL2 organisms.

II. SCOPE

These guidelines apply to managing poultry, their waste, etc. at the Miller Poultry Research and Education Center Animal Health Research Building (Biocontainment Facility).

III. APPLICATION

The guideline applies to, but is not limited to, the following BSL1 and BSL2 organisms and is not all inclusive:

- Escherichia coli
- Salmonella spp
- Clostridium spp
- Campylobacter spp
- Eimeria spp
- Ascaridia spp
- Heterakis spp
- Reovirus

IV. GENERAL GUIDELINES

Animals that have been dosed with a BSL1 or BSL 2 organism may excrete some of that agent into the bedding. Animal Care Personnel can be exposed to these agents through ingestion during the animal care or cleaning process. Adverse health effects from BSL2 organism exposure could include infection with the organism.

SAFE HANDLING PROCEDURES FOR THOSE HANDLING ANIMALS/BEDDING OF ANIMALS DOSED BSL1 OR BSL2 ORGANISMS

Facility Managers will review this SOP with animal care attendants prior to the employees working with dosed animals or the animal's caging.

PPE Requirements

Cover open cuts or irritated skin with an impervious bandage during animal care.

All personnel working with animals that have been dosed with BSL1 or BSL2 organisms should don the following PPE prior to entering animal rooms for any reason including animal care and room cleaning and disinfection:

- Disposable gown or overalls
- Disposable shoe covers
- Disposable hair bonnet
- Nitrile or latex gloves. Change gloves when they become torn or obviously contaminated AND before handling animals in other experimental groups. Wash hands after removing gloves.
- Safety glasses and impervious mask, safety goggles and impervious mask, or a face shield if the product label or SDS indicates use is necessary or if a splash hazard exist. If these items will be reused, wash them with water and detergent, and store in a clean place.
- Safety goggles and impervious mask or a face shield will be worn during cleaning with chemicals and

pressure washing procedures.

Signage Requirements

- Animals receiving BSL1 or BSL 2 organisms will be housed in a facility designated for use with such organisms. The PI will post appropriate biosafety signage on all entryways into rooms used in the project. Door signs can be made on the BioRAFT Online Safety System at <https://auburn.bioraft.com>
- **MANDATORY INVESTIGATOR ITEMS:**
 - Investigators must label pen/cage cards with the agent that has been administered.
 - Place a copy of the Safety Data Sheet (SDS) in the BUA/IACUC Notebook stored in the office.

Cleaning Procedures

All animals will be housed in cages or in isolation units.

Facility cleaning will be performed when the experiment is completed.

- Don PPE. Note: Safety goggles and impervious mask or a face shield must be worn during chemical spraying and pressure washing procedures.
- The waste in the catch trays underneath the isolation units will be hosed into basins that drain to tanks that disperse the waste water via underground injection.
- All uneaten feed, etc. will be removed and autoclaved in autoclave bags and disposed of in municipal trash.
- The animal room, with all the utilized cages or isolation units as well as all associated equipment (feeders, water jars, etc.) will be sprayed with the appropriate deactivation agent for the organism and allowed the recommended contact time prior to being pressure washed after which a quaternary ammonia product (Bioquat or Quatcide) will be applied following the manufacturer's directions. Once dried, the equipment and work areas will again be pressure washed to remove chemical residuals and allowed to dry.
- This cleaning will be performed from the least contaminated area to most contaminated area.
- For bacteria, environmental samples will be collected from the room after disinfection/sanitation to verify the effectiveness of the methods employed in eliminating the organism.

Disposal Procedures

- Regulated Medical Waste (excluding sharps) will be autoclaved in autoclave bags and disposed of in municipal trash
- All used poultry bedding, uneaten feed, PPE etc. will be removed, autoclaved, and disposed of in municipal trash.
- Water remaining inside the animal's water bottle can be poured into a drain.
- Animal carcasses and tissues will be transported in a leak proof container to the freezer. Risk Management and Safety will collect carcasses and tissues for incineration. Submit pickup request at <https://aim.auburn.edu/aim> Contact Steven Nolen at 703-3859 for assistance.
- Sharps are to be placed in the appropriate puncture proof and leak proof sharps container. Schedule sharps waste pickups by calling Steven Nolen at 703-3859 or Billy Cannon at 703-0419.
- Waste bags and containers must be leak proof, clean, and closed for transport through the facility and for pickup.

Animal Scratch Procedures

- Put the animal back in its cage.
- Wash the wound for 15 minutes with soap and vigorously running water directed at the wound.
- Inform your supervisor.
- Go to Auburn University Medical Clinic at 400 Lem Morrison Drive 844-4416 or the physician of your choice for evaluation of the animal bite/scratch and exposure to a hazardous agent or hazardous chemical. Take a copy of the Safety Data Sheet (SDS) with you. (SDS is on file in the Notebook in the Facility Office.)
- Complete a First Report of Injury form at <https://cws.auburn.edu/rms/pm/claims>

Auburn University Biological Safety Manual (2009) retrieved from <https://cws.auburn.edu/shared/files?id=227&filename=bsm2.pdf>

Guide for the Care and Use of Agriculture Animals in Research and Teaching, third edition. (2010) retrieved from <https://www.aaalac.org/pub/?id=E900BDB6-CCCF-AB13-89B6-DA98A4B52218>

Biosafety in Microbiological and Biomedical Laboratories, fifth edition. (2009) retrieved from <https://www.cdc.gov/labs/pdf/CDC-BiosafetyMicrobiologicalBiomedicalLaboratories-2009-P.PDF>