

Auburn University Risk Management and Safety Standard Operating Procedure	Effective Date: 11-17-2020		SOP Number: AP - 118-1
	Supersedes AP - 118	Superseded: NA	Page: 1 of 3
Subject: BSL1 and BSL2 Management at the Miller Poultry Research Farm Battery House and Pen Houses	Approval: <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  <hr style="width: 100%;"/> </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 style="width: 100%;"/> </div> <div style="text-align: left;"> Risk Management and Safety </div> </div>		

I. PURPOSE

This document provides standard procedures on the Miller Poultry Farm Battery House and Pen Houses for managing poultry, poultry waste, poultry bedding, and other objects potentially contaminated after the animals have been dosed with BSL1 or BSL2 organisms.

II. SCOPE

These guidelines apply to managing poultry, litter, used PPE, and other objects that come into contact with animals dosed with BSL1 or BSL2 organisms at the Miller Poultry Research and Education Center Battery House and Pen Houses.

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 the agent into the bedding. Animal Care Personnel can be exposed to the agent through ingestion during the animal care or cleaning process. Adverse health effects from BSL2 organism exposure could include infection with the organism.

Simultaneous studies cannot take place on the same end of a Pen House where a BSL2 study is being conducted.

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 these 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:

- Disposable 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 or goggles and impervious mask or face shield will be worn 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. Note: Safety goggles and impervious mask or a face shield will be worn during cleaning procedures where splashes can occur including cleaning with chemicals and pressure washing.

Signage Requirements

- Animals receiving BSL1 or BSL 2 organisms will be housed in a facility designated for use with such organisms. PI will label entry doors with appropriate signage. 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 Notebook stored in the unit managers office.

Cleaning Procedures

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

Facility cleaning will be performed when the project is completed.

- Don PPE
- Any used poultry bedding that is removed, uneaten feed, etc. will be removed and composted in the compost shed on site unless otherwise specified in the IACUC approved Protocol.
- The project area, with all the utilized cages, pens, 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 this dries the area will be pressure washed again to remove any residual chemicals. This cleaning will be performed from the least contaminated area to most contaminated area. Safety goggles and impervious mask or a face shield will be worn during chemical spraying and pressure washing procedures.
- To prevent cross contamination, all equipment and machinery used to haul litter or clean will be cleaned and disinfected as stated above.
- For bacteria, environmental samples will be collected from the house, pens, litter, cleaning equipment, and machinery after disinfection to verify the effectiveness of the methods employed in eliminating the organism used in the project.

Disposal Procedures

- Regulated Medical Waste (excluding sharps) will be collected in autoclave bags and transported to the Animal Health Building or the Poultry Science Building for autoclaving prior to being disposed of in municipal garbage. If autoclaving is not an option, then contaminated materials should be managed as regulated medical waste through Risk Management and Safety by calling Steven Nolen at 703-3859 or Billy Cannon at 703-0419.
- All used poultry bedding, uneaten feed, etc. will be removed and composted on site, unless otherwise specified in the IACUC approved Protocol.
- Contaminated PPE will be collected in autoclave bags and transported to the Animal Health Building or the Poultry Science Building for autoclaving prior to being disposed of in municipal garbage. If autoclaving is not an option, then contaminated materials should be managed as regulated medical waste through Risk Management and Safety by calling Steven Nolen at 703-3859 or Billy Cannon at 703-0419.
- Water remaining inside the animal's water bottle can be poured into a drain.
- Animal carcasses will be transported in a leak proof container to the freezer. The freezers at the Miller Poultry Center are regularly collected by a commercial rendering company.
- 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 drug or hazardous chemical. Take a copy of the Safety Data Sheet (SDS) with you.
- Complete a First Report of Injury form at <https://cws.auburn.edu/rms/pm/claims>

References:

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>