

PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

ACVS Managed Conventional Animal Facilities

SAF - 003



1. PURPOSE

OCTOBER 2016

This Standard Operating Procedure (SOP) describes the proper attire required when working in Animal Care and Veterinary Services (ACVS) managed conventional animal facilities. This includes conventional housing and procedure spaces within the West Valley Building, Medical Sciences and Dental Science Buildings and the Experimental and Behavioural Suites at Robarts.

2. RESPONSIBILITY

This SOP applies to **anyone** entering an animal facility, including Principal Investigators (PI) and their research staff, animal care staff, veterinary care staff, facility manager (FM)/supervisor, visitors, and Western University employees who may not have direct contact with or responsibilities related to animals, but who, as part of their job duties work in animal housing facilities or animal procedure rooms where others work directly with animals.

3. PROCEDURES

- 3.1. Individual personal protective equipment (PPE) and clothing guidelines are determined by the following:
 - 3.1.1. Risk assessment of the workplace and the activities performed in the area completed by the FM/supervisor.
 - 3.1.2. Review of the chemical, biological, radiation, and physical hazards used in the area by the appropriate safety officer.
 - 3.1.3. Review of the Safety Data Sheets (SDS) or other appropriate safety information.
 - 3.1.4. Assessment by Workplace Health, including;
 - 3.1.4.1. A completed Workplace Hazard Communication Form, and
 - 3.1.4.2. Individual worker accommodations.
 - 3.1.5. Western Occupational Health and Safety (OHS) recommendations.
 - 3.1.6. PPE requirements MUST be posted on the door accessing each room or area (see Appended Table)
- 3.2. Personal Protective clothing MUST follow Western University's Laboratory Health and Safety Manual for General Laboratory Practices and Biosafety Manual http://www.uwo.ca/hr/form_doc/health_safety/

4. PPE REQUIREMENTS









- 4.1. Protective Clothing:
 - 4.1.1. Wear dedicated work clothes or outer protective clothing (e.g., lab coat, scrubs, surgical gown, Tyvek® suit) upon entering a designated animal area involving:
 - 4.1.1.1. The animals and their waste, bodily fluids, or bedding
 - 4.1.1.2. Biological, chemical, or radioactive hazards
 - 4.1.2. Keep clean clothes readily available and change them as often as needed. Provide laundry service at the workplace for reusable clothing. Restrict clothes to a given group of animals with the same health status (e.g. same room, same herd, similar infectious status).
 - 4.1.3. Facility designated clothing MUST NOT be worn in public areas or to a personal residence.
 - 4.1.4. Ensure legs, feet, and arms are fully covered when working in a laboratory or in a room with chemical or biological hazards.
- 4.2. Gloves:

- 4.2.1. Wear gloves whenever there is a potential for contact with urine, feces, blood, or other biological fluids, infectious materials, chemical, or radioactive hazards.
- 4.2.2. Change gloves frequently to minimize fomite contamination within the animal room. Consider the use of double gloves (i.e., outer and inner pairs) for additional protection and/or for preventing contamination of surfaces by changing outer gloves frequently while maintaining protection with the inner gloves.
- 4.2.3. Wash hands thoroughly with soap and water, or use an alcohol sanitizer at the end of the procedure and/or before leaving the room.
- 4.3. Mucous Membrane/Respiratory Protection:
 - 4.3.1. Wear a NIOSH approved respirator in designated animal areas.
 - 4.3.1.1. Surgical or dust masks do not offer sufficient protection against allergens. Only properly selected and individually fitted respirators, provide appropriate protection.
 - 4.3.1.2. Participation in fit testing with Western Occupational Health and Safety (OHS) and medical clearance are required with respirator use.
 - 4.3.2. Consult with Workplace Health and OHS to determine the appropriate respiratory protection against airborne hazardous biological and chemical materials and allergens.
- 4.4. Ocular/Facial Protection:
 - 4.4.1. Wear CSA approved safety glasses, goggles, or a face shield whenever there is a risk of aerosol production, splashing, or physical injury to the face/eyes. The type of PPE is determined by the task being performed.
 - 4.4.2. Prescription eyeglasses used to correct vision are not considered protective; wear additional protective glasses or protective glasses and a face shield.
- 4.5. Foot Protection:
 - 4.5.1. Footwear MUST follow [Western University's Safety Footwear Guidelines](#).
 - 4.5.2. Closed-toed and closed-heeled shoes MUST be worn in animal facilities.
 - 4.5.2.1. Sandals, clog style shoes, and open-toed shoes are NOT allowed.
 - 4.5.2.2. Shoes with the top of the foot exposed (e.g. ballet flats) are NOT allowed.
 - 4.5.3. Wear disposable shoe covers whenever working with:
 - 4.5.3.1. Animals infected with biological, chemical or radioactive or their waste.
 - 4.5.4. Shoes with protective steel caps are recommended when working with large animals or heavy caging supplies, using carts to move drums, or handling large boxes and objects. The type of footwear selected is determined by the risk assessment of the task being performed.
- 4.6. Head/Hair Protection:
 - 4.6.1. Wear disposable bouffant cap, ensuring it covers all hair, whenever working with:
 - 4.6.1.1. The animals and their waste, bodily fluids, or bedding
 - 4.6.1.2. Animals that have been administered biological, chemical, or radioactive hazards
- 4.7. Hearing Protection:
 - 4.7.1. Personnel who are exposed to noise levels over 85 decibels (dBA) or greater, averaged over an eight-hour work day, MUST have their Hazards Communication Form Updated by their Supervisor, and MUST consult with Workplace Health and OHS.
 - 4.7.2. Hearing protection may be necessary when working in areas or facilities where noise may be a concern MUST follow [Western University Hearing Protection Program](#).
- 4.8. Heat Protection:

4.8.1. Wear heat protection gloves when removing items from the cage washer or the autoclave at the end of the cycle.

5. CONVENTIONAL ANIMAL AREA PPE CHART

PPE Chart - Conventional Animal Rooms

REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE)		TASKS PERFORMED (by column):			
		ENTERING ROOM	HANDLING ANIMALS OR CAGES	CHANGING CAGES	BEDDING REMOVAL
					
GLOVES			X	X	X
INDIVIDUALLY FITTED NIOSH RESPIRATOR		X mandatory	X	X	X
SAFETY GLASSES			X	X	X
BONNET			X	X	X

* Disposable PPE should be discarded in bins provided prior to entry into public corridors*

** Follow the requirements of specific labels or special instructions at cage level**

6. REFERENCES

- 6.1. McGill University, *Allergy Prevention* (March 2016)
- 6.2. National Institutes of Health, *Laboratory Animal Allergy Prevention Program* (May 24, 2011)
- 6.3. Bush, R. and Stave, G. (2003) Laboratory Animal Allergy: An Update, *Institute for Laboratory Animal Research (ILAR) Journal*, Vol 44 (1) 28-51.
- 6.4. The National Institute for Occupational Safety and Health (NIOSH), *Preventing Asthma in Animal Handlers*. January, 1998. DHHS (NIOSH) Publication No. 97-116.