PERSONAL PROTECTIVE EQUIPMENT

1. PURPOSE

1.1. The purpose of this Animal Care and Use Procedure (ACUP) is to describe the proper attire required for working in designated animal areas. This ACUP is approved by the Cornell Institutional Animal Care and Use Committee (IACUC). Any deviation must be approved by the IACUC prior to its application.

2. SCOPE

2.1. This document outlines standard practices to all persons entering animal facilities at (or part of) Cornell University.

3. INTRODUCTION

3.1. This ACUP outlines the procedures for utilizing the standard Personal Protective Equipment (PPE) within Cornell animal facilities.

3.2. Refer to the Hierarchy of Controls Matrix for area-specific PPE requirements

3.3. Environmental Health and Safety (EHS) and the Center for Animal Resources and Education (CARE) at Cornell University jointly determine the PPE requirements based on safety and animal biosecurity.

3.4. Specific facilities, projects, and different biosafety levels, may require additional PPE. Contact CARE by emailing care@cornell.edu for more information or for assistance.

3.5. Always follow project-, room-, and facility-specific PPE recommendations.

3.5.1. Consult appropriate PPE signage at the entrance of the room or facility for any specific requirements.

NOTE: PPE and dedicated clothing designated for animal areas should not be worn in public areas (e.g., public hallways or cafeterias), or taken to private residences for laundering.

4. MATERIAL AND EQUIPMENT

4.1. PPE Sign (see section 9.1 for an example)
4.2. Dedicated work clothes or outer protective clothing (e.g., lab coat, scrubs, gown, Tyvek suit)

4.3. Gloves

4.4. Mucous membrane, respiratory protection (e.g., face masks, respirators)

4.5. Eye and facial protection (e.g., safety glasses, face shield, splash goggles)

4.6. Foot protection (e.g., dedicated footwear, shoe / boot covers)

4.7. Hearing protection (e.g., ear plugs, ear muffs)

5. PROCEDURE

5.1. General Considerations and Outerwear

5.1.1. Wear dedicated work clothes or outer protective clothing (e.g., lab coat, scrubs, gown, Tyvek suit) as appropriate for specific animal facilities, especially when:

5.1.1.1. Handling animals;

5.1.1.2. In areas with infected animals, their waste or bodily fluids;

5.1.1.3. In areas with infectious, radioactive and / or chemical hazard;

5.1.1.4. In areas with Specific Pathogen Free (SPF) animals maintained in a barrier facility.

5.1.2. Specific animal facilities may not have a PPE requirement, depending on the species and use of the animals, as determined by EHS and CARE (e.g. equine facilities do not require specific PPE requirements).

5.1.3. Keep clean clothes available and change as often as needed. Single use, disposable clothing is preferred. Provide laundry service at the workplace for reusable clothing. If a contracted laundry service is unavailable, identify an appropriate laundering method with supervisor, CARE, and EHS.

5.1.4. Restrict clothes to a given group of animals with the same health status (e.g., same room, same herd, similar infectious status). Do not wear the same clothes outside the facility (i.e., in public areas).

5.1.5. Cover legs, feet, and arms when working with chemical, infectious, or radioactive hazards.

5.2. Hands

5.2.1. Gloves are required when handling rodents within campus vivaria.

5.2.1.1. Gloves for basic laboratory rodent handling can prevent allergic reactions.

5.2.2. While gloves are not required for basic agricultural animal handling, gloves are strongly recommended whenever there is contact with their body fluids (e.g., urine, feces, and blood).

5.2.2.1. Follow EHS glove recommendations for infectious, chemical, or radioactive hazards. Guidance is provided in Appendix F of the Laboratory Safety Manual and Chemical Hygiene Plan and the Biological Safety Manuals. Questions may be directed to EHS by emailing askEHS@cornell.edu or calling (607) 255-8200.
5.2.3. Change gloves frequently to minimize fomite contamination within the animal room. Use of double gloves (i.e., outer and inner pairs) facilitates frequent PPE changing within an area while preventing skin contact.

5.2.4. Wash hands thoroughly with soap and water, or if soap and water are unavailable, use an alcohol sanitizer at the end of the procedure or upon leaving the facility. When soap and water become available, wash hands.

5.3. Face, Eyes

5.3.1. Utilize a face mask if there is a risk of splashing or droplet exposure to mucous membranes.

5.3.2. Wear protective glasses or protective glasses and a face shield (face shields alone are not a substitute for appropriate impact protective eyewear) whenever there is a risk of exposure or physical injury to the face / eyes.

5.3.3. Regular eyeglasses used to correct vision are not considered protective; wear additional protective glasses or protective glasses and a face shield.

5.3.4. If there is a risk of splashing with chemical hazards, wear splash goggles in place of protective glasses.

5.4. Respiratory

5.4.1. Consult with EHS to determine the need for respiratory protection against airborne hazardous materials and allergens. Respiratory protection includes disposable respirators such as N95 filtering face pieces.

5.4.2. If respiratory protection is required, you must enroll in the Respiratory Protection Program. If it is worn voluntarily, an EHS Voluntary Use Form is submitted by the user to EHS. Examples of respiratory protection include the use of dust masks, N95 Respirators, and Powered Air Purifying Respirators (PAPR).

5.5. Hearing Protection

5.5.1. Hearing protection may be necessary when working in areas or facilities where noise may be a concern (e.g., areas with large numbers of dogs or chickens, cage washing equipment).

5.5.2. Personnel who are exposed to 85 decibels or greater (when averaged over an eight hour work day) will need to participate in Cornell's Hearing Conservation Program Consult with EHS to determine your exposure.

5.6. Footwear

5.6.1. Wear disposable shoe covers whenever working with:

5.6.1.1. Infected animals or their waste;

5.6.1.2. Infectious or radioactive hazards.

5.6.2. Closed-toed shoes must be worn in animal facilities.
5.6.3. Dedicated working shoes or shoe covers are recommended when working with SPF animals inside a barrier. These working shoes should not be worn outside the facility.

5.6.4. Shoes / boots can be a vector for infectious agents.

6. PERSONNEL SAFETY

6.1. Medical Emergencies: CALL 911.

6.2. When working with animals wear appropriate PPE, observe proper hygiene, and be aware of allergy, zoonosis, and injury risks. Refer to the CARE Occupational Health and Safety webpage for more information.

7. ANIMAL RELATED CONTINGENCIES

7.1. NA

8. REFERENCES


8.2. Cornell University’s Environmental Health and Safety (EHS): http://ehs.cornell.edu

8.3. CARE Occupational Health and Safety webpage: http://ras.research.cornell.edu/care/OHS.html

9. APPENDIX

9.1. Example PPE Sign

Personal Protective Equipment (PPE) required for this area:

- Shoe covers
- Yellow Gown
- Gloves (don gloves if handling animals)
- Hairnet (if hair is longer than shoulder length and not tied-up)

10. HISTORY

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