

**University of Colorado Boulder**  
**Office of Research Integrity**  
**Institutional Animal Care and Use Committee**  
**SOP 15**

**Title: Personal Protective Equipment**

**I. Purpose**

- a. To protect both animals and animal research personnel from the unique risks involved in working with laboratory animals and research animals in the field, the routine use of personal protective equipment (PPE) is required by this policy and is species and work dependent as outlined below. This policy is intended to reduce the risk from injury due to animal bites and scratches, potential zoonotic disease exposure, and development of laboratory animal allergies. This policy is promulgated by UCB's Occupational Health Program.

**II. Covered Entities**

- a. All UCB personnel, contract personnel, student employees, volunteers, and visitors with direct animal contact must use the indicated PPE based on species and tasks performed.

**III. Personal Protective Equipment Required**

**a. ALL UCB Animal Facilities & Field Research Locations**

**i. Gloves**

1. Disposable latex, vinyl, or nitrile exam gloves must be worn at all times while handling animals or animal housing (e.g., cages or traps) in all research settings, including field research, except when handling fish. Gloves must be worn whenever there is a potential for contact with urine, feces, blood or other biological fluids. Gloves will reduce the amount of skin contact with animals or their allergens.
  - a. If handling fish, gloves do not need to be worn but hands and forearms must be thoroughly washed and rinsed prior to handling animals. Hands and forearms must be washed and rinsed between working with different aquaria so as not to spread pathogens.
2. Gloves must be worn whenever animal personnel are doing disinfection activities.
3. Gloves do not need to be worn if only observing animals.
4. Exam gloves should be discarded after every use.
5. Exam gloves used to handle animals or their cages or bedding must not be worn throughout the facility and should be discarded as you leave the housing or procedure room so as to not contaminate the hallways. Gloves should be sprayed with disinfectant in between handling animals from different cages. Gloves should be changed when handling animals of a different strain, different health status, or when handling animals from different investigators.
6. Exam gloves must be worn when handling amphibians, reptiles, and birds. ALWAYS change gloves between work with multiple species. If

- recommended to wear cotton gloves for handling reptiles, an exam glove must be worn underneath the cotton glove. The exam glove must be disinfected between each reptile and the cotton glove must be changed between animals.
7. Wash hands thoroughly with soap and water, or use an alcohol gel hand sanitizer at the end of any procedures, after removing gloves, and after leaving an animal area.
- ii. Closed-toed shoes
    1. Animal research personnel are required to wear closed-toe shoes while working with animals and while working in laboratories. Sandals or open-toe shoes are not permissible.
    2. Specifically designated shoes for working in animal housing areas are highly recommended for husbandry staff.
  - iii. Shoe covers
    1. Disposable shoe covers are required in areas housing mammals, birds and reptiles.
    2. Facility-provided shoes are required in some barrier facilities.
  - iv. Eye protection
    1. Protective eyewear must be worn while doing any procedure when there is any reasonable probability of injury or splash exposure to the eyes.
  - v. Hair bonnets
    1. Disposable or reusable hair bonnets are required in housing facilities.
  - vi. Masks
    1. The use of a mask when handling mammalian species is required. The minimum mask that can be worn is a disposable surgical mask.
    2. The use of fit-tested N95 masks is strongly recommended for individuals who have pre-existing animal or environmental allergies and **required** for people who have developed laboratory animal allergies. Contact the Occupational Health Nurse or Specialist for assistance in selecting and fit-testing N95 masks. The use of simple surgical masks is not recommended for these individuals because they do not protect individuals from respiratory exposure to animal allergens.
    3. Masks are not required if working with non-mammalian species.
  - vii. Long pants
    1. Long pants or scrub pants are required for all animal research personnel working with animals, chemical, radiation, or infectious disease hazards.
  - viii. Clothing
    1. Dedicated clothing (i.e. scrubs) is required to be worn by individuals performing husbandry of mammalian species.
    2. Research staff working in housing areas that contain mammals, birds, or reptiles are required to wear either dedicated clothing (i.e. scrubs) or a disposable gown over their street clothes.

3. Dedicated clothing must be laundered after each use in dedicated machines on campus or by a commercial laundry provider. Disposable gowns should not be reused.
4. Always change clothing and PPE between work with mammalian and reptilian species.
5. Clothing and PPE designated for animal areas should not be worn in public areas.

ix. Other

1. Additional PPE or procedures (e.g., showering in and showering out) may be required by particular facilities or protocols or may be recommended to prevent illness by the Occupational Health Nurse or Specialist. These will be determined per facility and on an individual basis.
2. Please refer to facility specific traffic patterns regarding when clothing and outer protective clothing should be changed. In general, clothes and other PPE will be restricted to a given group of animals with the same health status (e.g., similar quarantine stage or infectious disease status)
3. When performing survival surgeries on rodents, please refer to required PPE listed in the addendum for Aseptic Survival Surgery.

**IV. Personal Protective Equipment Recommended**

a. Special gloves

- i. Protective gloves are recommended to protect against injury while doing decapitations (leather, chainmail, or similar) or other procedures where there is a potential for human injury.

b. Dedicated clothing

1. Dedicated clothing must be worn by individuals performing field studies. The dedicated clothing must be disinfected and laundered in the manner as described in their Field Safety Plan in order to protect both researchers and to prevent contaminant spread between field sites.

V. Non-adherence to Personal Protective Equipment Requirements

- a. Access to animal facility will be denied if personnel do not adhere to the requirements in this policy.

**VI. References**

- a. This policy is in accordance with requirements and recommendations set forth in the following documents:
  - i. *Guide for the Care and Use of Laboratory Animals*, Eighth Edition. Institute for Laboratory Animal Resources, National Research Council. 2011. National Academy Press.
  - ii. *Occupational Health and Safety in the Care and Use of Research Animals*. Committee on Occupational Safety and Health in Research Animal Facilities, Institute of Laboratory Animal Resources, National Research Council. 1997. National Academy Press.