

Most employees working in animal facilities find it similar to any other work environment. However, some employees may experience allergy symptoms that can be directly related to their work with or proximity to animals. Allergies can develop and the symptoms expressed even when there is no direct contact with animals.

Why do animals cause allergies?

Proteins in animal excrement (urine and feces) may cause allergic reactions. Proteins that cause allergies are called “allergens” and may exist as airborne particles in the animal facilities.

Can anyone become allergic to laboratory animals?

Individuals that have existing allergies, a family history or susceptibility to allergens, or suppressed immune systems may be at a higher risk for developing allergies. Others may develop allergies over time that increase in intensity as exposure increases; some may never experience allergies.

What are the symptoms of animal allergies?

Allergy symptoms consist of the following: itchy eyes, nasal stuffiness, sneezing, coughing, wheezing, difficulty breathing, a tight chest, and rashes on the skin. These symptoms can range from mild to severe.



How do I protect myself from animal allergens?

Three levels of control are employed to prevent workers from contact with animal allergens: **engineering controls**, workplace practices or **administrative controls**, and **personal protective equipment (PPE)**.

Engineering controls at USC animal facilities include: biosafety cabinets, animal transfer stations, cage dumping stations, and individually ventilated caging systems. This HEPA-filtered, containment equipment is maintained and calibrated to industry standards.

Periodic air quality monitoring of high risk areas is provided by EH&S. Personal and area monitoring may be performed to determine the effectiveness of controls.

Employees that need to enter animal facilities are offered participation in the USC Occupational Medical Surveillance Program (administrative control). An Animal Exposure Risk

What I need to know...

- Know the signs and how to report in case of a suspected allergic reaction.
- Use engineering and administrative controls as well as appropriate PPE to reduce exposure to animal allergies.
- Wash hands after removal of protective gloves.

Assessment form that includes animal hazards, medical history, and factors that may influence allergy development is completed by the employee. A USC occupational medicine program physician then reviews the confidential document to determine an employee’s susceptibility to animal allergens. Completion of the risk assessment is NOT mandatory, but is strongly encouraged for the employee’s health and safety.

The Department of Animal Resources (DAR) has a minimum PPE requirement for entering animal facilities that includes:

- Pants or other leg covering
- Closed-toe shoes worn with socks
- Disposable, closed front gown
- Gloves
- Shoe covers
- Face mask
- Hair bonnet

Clothing that does not meet or exceed DAR requirements is not allowed in animal facilities.

References

- Occupational Health and Safety in the Care and Use of Research Animals [NRC, 1997]
<http://www.nap.edu/catalog/4988/occupational-health-and-safety-in-the-care-and-use-of-research-animals>
- Guide for the Care and Use of Laboratory Animals [NRC, 2011]
<http://www.ncbi.nlm.nih.gov/books/NBK54050/>
- NIOSH: Preventing Asthma in Animal Handlers
<http://www.cdc.gov/niosh/docs/97-116/>