
PURPOSE

OCTOBER 2016

To reduce exposure to animal allergens and minimize the risk of animal allergen sensitization in Western University facilities. The animal allergen exposure reduction policy was created to inform and educate people about safe work practices to minimize their exposure to allergy-causing agents, such as animal urine, saliva, dander, and hair. In addition, this policy will help minimize the exposure to allergens for workers and reduce the symptoms of sensitized workers who suffer from animal allergies.

SCOPE

This policy applies to anyone entering an animal facility, including Principal Investigators (PI) and their research staff, animal care staff, veterinary care staff, facility manager/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.

RATIONALE

Allergies to animals are a common health issue in research and teaching animal facilities and are recognized as an occupational hazard. The incidence can be quite high - some estimate that as many as 15% of a human population is allergic to some animal species; for those who regularly work with animals as part of their occupation (such as researchers or animal care providers), the estimate is significantly higher. Individuals with preexisting allergic conditions face a greater risk of developing allergies. Individuals, who suffer from preexisting asthma, may develop symptoms from exposure to airborne contaminants. The animals most commonly associated with workplace allergies are mice and rats, perhaps because these are the most common laboratory animals. Other animals for which allergies have been identified include rabbits, cats, guinea pigs, dogs, birds, horses, cattle, and pigs. An individual could potentially be allergic to any animal; therefore, every animal facility MUST develop a risk based strategy to protect workers from exposure.

DEFINITIONS

Barrier Animal Facility - Any area where animals are held or used where there is a containment barrier between the animal and the worker (e.g. static or individually ventilated caging or filter-top cages).

Conventional Animal Facility - Any area where animals are held or used with open caging (without additional barriers between the animal and the worker).

ROLES AND RESPONSIBILITY

Facility Manager is responsible to

- develop a risk based standard operating procedure (SOP) for personal protective equipment (PPE) for their specific areas that MUST be followed by all people entering that area.
- develop an animal transport SOP where applicable.
- enforce the SOPs and create a detailed procedure for addressing non-conformances.

Individuals entering an animal facility are responsible to

- indicate their contact with animals on their Hazard Communication Form (completed at the time of employment).
- report to their supervisor if they feel they are developing allergy symptoms to animals they work with.
- follow facility specific SOPs.

WHAT ARE COMMON ALLERGY SYMPTOMS

Respiratory Symptoms

People are frequently exposed to allergens, or allergy-causing agents, when they inhale them. Over a period of time, some people may develop sneezing, a runny nose, and irritated eyes—the symptoms of a cold, without fever.

More severe reactions, such as asthma (coughing, wheezing, and shortness of breath) may occur.

Respiratory symptoms may appear minutes or hours after exposure, and will usually persist.

Skin Conditions

Symptoms of allergies caused by contact with an allergen can include a rash (red, bumpy, scaly, or irritate skin) or hives.

Anaphylaxis

In extremely rare cases, life threatening anaphylactic reaction can occur. Common symptoms include generalized itching, difficulty swallowing, hoarseness, shortness of breath, dizziness, fainting, and nausea.

HOW CAN YOU REDUCE THE RISK OF EXPOSURE?

Those who work with animals should be aware of the signs and symptoms of animal allergies. For individuals who work with animals, this must be indicated on their Hazard Communication Form (completed at the time of employment) and if they feel they are developing allergy symptoms to the animals they work with, employees must report this to their Supervisor who will direct them to Workplace Health for counseling and appropriate treatment. Supervisors must be aware of the possibility of allergy in their workers. It is the responsibility of the Supervisor to inform workers of factors in the workplace that can increase or decrease the exposure of their workers to animal allergens and to provide protection against workplace hazards. Facility Managers and Supervisors responsible for workers in areas where animals are held and/or used **MUST** develop a risk based Standard Operating Procedure (SOP) for personal protective equipment (PPE) for their specific areas that **MUST** be followed by all users of these areas.

Animal Allergies can often be managed by a combination of medical management and workplace strategies. It's important to consult with a physician to determine the cause of your allergy in order to manage it effectively.

The following practices will help reduce exposure to animal allergens:

- Limit exposure time to allergens.
- Enforce controlled access to animal facilities.
- **MUST** use good personal hygiene:
 - Always wash hands after contact with animals and before leaving the laboratory, animal holding or procedure space, or animal facility.
 - Do not eat, drink, handle contact lenses, or apply cosmetics in the work areas; and wash hands before engaging in any of these activities.
 - Avoid wearing street clothes while in an animal facility, especially if in direct contact with animals.
- **MUST** follow appropriate cleaning and maintenance procedures:
 - After working with animals, do not dry-sweep working surfaces. Instead, use a damp cloth or another wet method for cleaning and sanitation.
- **MUST** perform animal manipulations in well-ventilated areas and, if possible, in ventilated chemical fume hoods or biological safety cabinets (BSC).
- **MUST** wear appropriate personal protective equipment (PPE):
 - PPE use must follow Standard Operating Procedure (SOP) developed by the Facility Manager or Supervisor of that specific area.

- Wear lab coats, scrubs, or coveralls when working with animals, and have clothes laundered in the workplace.
 - Wear CSA approved safety glasses especially if splashing may occur or aerosols may be produced.
 - Wear a NIOSH approved respirator in designated animal areas. Remember that surgical or dust masks do not offer sufficient protection against allergens. Properly fitted respirators, provide appropriate protection.
 - Consult with Workplace Health and OHS to determine the appropriate respiratory protection against airborne hazardous biological and chemical materials and allergens.
 - Participation in fit testing and medical clearance are required with respirator use. Individuals, who suffer from allergies to a species they work with, **MUST** wear an approved, N95 respirator when in a designated animal area.
 - Respirator use must follow Western University's Respiratory Protective Equipment Program policy.
 - Protective footwear **MUST** follow [Western University's Safety Footwear Guidelines](#).
 - Hearing protection may be necessary when working in areas or facilities where noise may be a concern. When hearing protection is required, it **MUST** follow [Western University Hearing Protection Program](#).
- Animal transport and use outside of animal facilities **MUST** follow appropriate SOPs developed by the FM or Supervisor.

WHAT SHOULD YOU DO IF YOU SUSPECT YOU HAVE AN ANIMAL ALLERGY?

- Inform your supervisor of your allergy concerns.
- Consult Workplace Health (UCC 25, ext. 82047) for any allergy concerns.

References

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