

What are lab animal allergies and occupational asthma?

Laboratory Animal Allergies (LAA) and Occupational Asthma (OA) develop from exposure to animal allergens, and are among the most common and serious occupational disease for workers exposed to animals in laboratories.

How many people develop allergies?

According to [NIOSH](#), approximately 33% of animal handlers have allergic symptoms and approximately 10% have symptoms of animal-induced asthma.

What are some of the symptoms?

Symptoms generally occur as early as 10 minutes after exposure or within 12 months of significant contact with lab animals. The most common symptoms are itchy, watery, eyes and an itchy, runny nose, although skin symptoms and lower respiratory symptoms (e.g. wheezing, shortness of breath, etc.) may also occur.

What are some of the risk factors?

- **Exposure:** Working with animals (or in an animal housing facility) out-ranks all known risk factors.
- **Genetics:** Some individuals are predisposed to develop allergies and asthma.
- **Environment:** Working in animal-related areas without proper ventilation increases risk.

How are allergens transmitted?

Though allergens can sensitize the body via the skin or mucous membranes, inhalation of allergens remains the most potent sensitization route.

Will my allergies go away?

LAA/OA are often permanent conditions, even when the stimulus ends and symptoms regress.

How can I prevent LAA and OA?

Use Administrative Controls

- Fill out a [Medical History Questionnaire \(MHQ\)](#) if you are working with or coming in contact with animals or animal tissues, or enter animal housing areas.
- Follow work place practices such as washing your hands after working with animals or their tissues.

Implement Engineering Controls

- Utilize a Biological Safety Cabinet or Chemical Fume Hood when working with animals.

Standard Operating Procedures

- Follow all applicable operating procedures and design new procedures to minimize exposure to animal allergens.

Wear Personnel Protective Equipment

- When properly fitted, N95 respirators are effective in reducing exposure, sensitization, illness and severity of illness.
- Disposable gowns and gloves should be removed when leaving animal rooms to prevent allergies from being carried into other areas.
- Wear a hair bonnet or bouffant, which will markedly decrease allergen attachment to a worker's hair and prevent the carrying of those allergens to their home (to pillows or bedding).

Additional Information

- Occupational Health Services: (310) 825-6771 or <http://ohs.uclahealth.org>
- EH&S Biosafety: (310) 825-9797 or biosafety@ehs.ucla.edu

Can I develop allergies if I don't work with animals?

Yes, you can have a secondary exposure (non-occupational) like in the following situations:

- Sharing lab space where animals are housed or brought in for procedures (e.g., administrative staff using a desk in the lab or close to animals)
- Exposure of household members via soiled work cloths (scrubs)

Note: Children of lab animal workers have an increased incidence of childhood asthma. Additionally, studies revealed significant levels of mouse allergen in homes of lab workers, particularly in pillows and mattresses.