

## Relative Risks:

Various studies have shown that the incidence of animal allergies among people who work with animals ranges from 10% to 44%. This means that most people who work with animals are not allergic to them. But, this also means that if you work with animals your risk of allergy to them is as much as three times higher than people who don't work with animals. Allergy to animals is particularly common in workers exposed to animals such as cats, rabbits, mice, rats, gerbils and guinea pigs.

The most important risk factor for the development of laboratory animal allergy is the level of exposure to animal allergens. Certain tasks such as changing cages and handling animals can cause the individual to be exposed to high levels of allergens, which may hasten the onset of allergic symptoms. Other risk factors that may put you at risk for developing a laboratory animal allergy are; a personal history of other allergies such as hay fever, individuals with a family history of developing allergies and smoking.

### What to do to Minimize Risk Factors:

The following are actions that you can take to decrease your exposure:

- Do not wear street cloths while working with animals and leave work clothes at the workplace to be laundered.
- Reduce skin contact of animals and their allergens by wearing proper personal protective equipment, including gloves, lab coat, eye protection, appropriate masks, scrubs, hairnet and other PPE.
- Do not eat or drink in areas where animals or their bedding are handled.
- Wash your hands frequently. Avoid touching your hands to your face.
- Change clothes and wash or shower before leaving work to avoid bringing laboratory animal allergens home with you.
- Reduce the amount of allergens you are inhaling by wearing appropriate masks or wearing a respirator if needed

### What to do if You Think you are Developing Laboratory Animal Allergies:

If you feel that you may be developing allergies to lab animals it is important that you report this to your supervisor. You can complete the Occupational Health Risk Assessment follow-up form; <http://uwm.edu/animal-care/> to receive advice from Occupational Health Specialists. You can also contact University Safety & Assurances for respiratory protection information and fit testing; <http://uwm.edu/safety-health/respiratory/> You should also contact the Lab Safety Coordinator at University Safety and Assurances.

NIOSH Alert: Preventing Asthma in Animal Handlers, January, 1998  
DHHS (NIOSH) Publication No. 97-116.  
Occupational Health and Safety in the Care and Use of Research Animals, National Academy Press, Washington, DC, September 2007, p 51-64.  
Guide for the Care and Use of Lab Animals, NRC, 2011, P 18-20,22-23, 45.



## UW-Milwaukee Animal Care Program



# Laboratory Animal Allergies

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# Laboratory Animal Allergies

## Why it's Important:

When working with animals it is important to be aware of the risk of developing allergies to the animals you work with or even to your own pets.

If you become allergic to the animals you work with, your job can become quite uncomfortable and even unhealthy.

If you have asthma, working with animals to which you are allergic can be a significant health risk.



## Symptoms:

Allergy symptoms can range from minor to severe. People who are having an allergic reaction can have symptoms such as:

- Runny nose, sneezing, or coughing
- Nose/head congestion, watery or itchy red eyes
- Hives
- In more severe cases - asthma attacks (chest tightness, shortness of breath and wheezing)
- Very severe cases- anaphylaxis (life threatening swelling of the upper airways and shock).

These symptoms can occur in as little as 10-15 minutes or can be delayed for up to 8 hours after exposure. Symptoms can develop anywhere from months to years after a person begins working with animals.

A majority of the individuals who are going to develop symptoms will do so within the first year. It is extremely unusual to develop symptoms after more than two years of animal contact.

## How it Happens:

People who work with or even near animals can be allergic to any animal species.

First, the person must become sensitized to the material that causes the allergy. These materials are called allergens. The allergens are proteins that are excreted in the animals' saliva, urine and from various glands associated with the skin. The proteins tend to be sticky and become associated with the animal's hair and with particles of dander and can float around in the air.

Allergens are unique in each animal species. That is why a person can be allergic to mice but not rats or cats but not dogs. It's also possible to be allergic to more than one species. In fact, if you are allergic to something (an animal species or anything else) you're more likely to become allergic to something new than a person who isn't allergic to anything.