

Laboratory Animal Allergy (LAA)

Three LAA incidents over the past few years have served as a reminder of the significant risks from exposure to animal allergens. Two rat bites and a likely airborne exposure to mouse allergens led to significant medical reactions, including itching, rashes and breathing difficulty. Two of the three incidents required care at the Emergency Room, and the other with follow up at Yale Occupational Health.

The primary take-home message from the rat bite allergic reactions was to remember that any rodent bite, whether it was a few months ago, last year, 10 years ago, or 30 years ago or longer, has the potential to sensitize you to animal allergens, and you may not be able to predict when, where, or how significant a reaction you may receive following a subsequent bite or exposure. For prevention, report all rodent and other animal bites to Yale Health Occupational Health (203-432-7978) and fill out a CorVel incident report after talking to Yale Health by calling 833-400-7222. Work with EHS to examine various ANSI cut and puncture-resistant gloves, though dexterity issues are not fully resolved. Contact your Office of Animal Research Support (OARS) Liaison for your lab and discussion mechanisms for animal restraint to prevent future bites. The best prevention is to avoid any future animal bites if you have had an anaphylactic reaction from an animal bite. If you cannot avoid situations where a rodent bite is possible, please never work alone and ensure you have emergency medical equipment, such as an EpiPen available for prompt reaction.

The take home from the airborne allergen exposure was to ensure that you are following the medical surveillance program information provided by Yale Health Occupational Health. If you are identified as an individual with a known allergy or have a moderate or high risk of acquiring an LAA, discuss potential options for control measures, such as utilizing an N95 respirator or a powered-air-purifying respirator with HEPA filter cartridges. Also work with EHS to have your work locations for handling animals evaluated and includes your assigned animal facility rooms and any other areas outside of animal facilities where animals are handled. EHS will make sure that the engineering controls available to you are suited for the tasks and procedures performed. If you do not have an allergy at the time of completing the onboarding medical surveillance form once you begin work with animals, please update Yale Health Occupational Health, if you develop animal allergies after starting to work with rodents or other animals. Occupational Health will evaluate personal protective equipment and also work with Yale EHS on the appropriate controls to provide protection for you.

Yale EHS has created a [Laboratory Animal Allergens webpage](#) following these events.

Animal allergens can be present in the air and on surfaces and those handling animals can be exposed by inhalation, ingestion, through skin contact, and also through the skin as noted with the two rat bite incidents.(1) [A recent reference from Dr. Gregg M. Stave and colleagues in the Journal of Occupational and Environmental Medicine](#) provides a comprehensive review of exposures and medical issues associated with LAA.

(1) Stave, G.M. et al, "Laboratory Animal Allergy," JOEM, Vol. 67, No. 5, May 2025.

Lab Animal Allergens Awareness Online Resource

A comprehensive online overview on [Laboratory Animal Allergens Awareness](#) is now available in Workday Learning.

Resource Description:

This online resource is intended for all personnel whose work involves laboratory animals. It brings awareness to the risks associated with allergic responses to animals, particularly in the laboratory setting.

Learning Objectives:

- Recognize animal allergens and allergy symptoms
- Assess the hazards and risks associated with work involving animal allergens
- Apply appropriate controls to mitigate allergen exposure
- Recognize when an allergy is worsening
- Respond to allergic reactions and emergencies