

Preventing Asthma in Animal Handlers

Animal-related asthma and allergies are exaggerated reactions of the body's immune system to animal proteins, also known as allergens. A worker who has developed asthma symptoms from animal allergies often improves or recovers completely if he or she immediately stops being exposed to dust-containing animal allergens. However, the longer the exposures continue, the more likely the illness will persist, even after all contact with animals has stopped. Symptoms from animal-related asthma and allergies can be severe and may require affected workers to change jobs or careers.

The following information is taken from the CDC-NIOSH ALERT "[Preventing Asthma in Animal Handlers](#)." The information and recommendations presented here can help reduce such exposures and prevent animal-induced asthma and allergies.

Steps to Take to Protect Yourself from Exposure to Animals and Animal Products

- Use an animal species or sex that is known to be less allergenic than others.
- Perform animal manipulations within the ventilated hood or safety cabinet when possible.
- Reduce skin contact with animal products such as dander, serum, and urine by using gloves, lab coats, and approved particulate respirators with face shields.
- Keep cages and animal areas clean.
- Use absorbent pads for bedding. If these are not available, use corncob bedding instead of sawdust bedding.
- Decrease animal density (number of animals per cubic meter of room volume).
- Avoid wearing street clothes while working with animals.
- Leave work clothes at the workplace to avoid potential exposure problems for family members.
- Wash your hands when finished.

Common Sources of Exposure

- Inhalation is one of the most common ways for allergens to enter the body. After some time (often several months, but occasionally many years), individuals may inhale enough allergens to become sensitized; that is, they develop symptoms when exposed again, even to tiny amounts of the allergen.
- Exposures to the urine, saliva, and pelts of rats, mice, and guinea pigs have frequently been associated with the development of occupational asthma.
- Other important sources of allergen exposure include rabbit pelts, cat saliva and dander, dog dander, and horse serum and dander.
- Species other than mammals have also been reported to cause respiratory symptoms such as various insects, for example, and frogs (which are commonly used in science classes).
- Exposures to birds have been associated with other respiratory diseases, including hypersensitivity pneumonitis.
- A person who becomes allergic to one animal species may react to other species as well. Even low exposure to these common sources of animal allergens can result in allergies, but the risk increases as a person's exposure increases.