

Allergen Avoidance – Controlling Exposure

House Dust Mites

House dust mites (*Dermatophagoides* species) are common in the environment and feed on human and animal dander, skin scales and hair. They thrive in humidity of 50–70% and are commonly found in beds, mattresses, carpets, sofas and pet bedding. Elimination is impossible; control measures are aimed at inhibiting mite multiplication. Ideally, the entire household is incorporated in an environmental control program. If this is not possible, at a minimum, pet sleeping areas should be maintained according to the following guidelines:

- Wash bedding (human and pet) and soft dog toys weekly in HOT (130° F) water. Dry on full heat for at least 20 minutes.
- Avoid feather and wool bedding, use allergen-proof bed covers and encase box springs in vinyl or plastic covers.
- Minimize clutter where dust can collect.
- Change furnace and air conditioning filters regularly. If possible, use filters made for allergen control.
- Vacuum and dust regularly, preferably while pet is outdoors. Use a vacuum with a high efficiency particulate air (HEPA) filter or a double-layered micro filter bag.
- Use a damp or oiled rag to dust rather than dry dusting, which can stir up mite particles.
- Groom animal regularly.

Storage Mites

Tyrophagus putrescentiae is a grain storage mite and may be referred to as the mold mite. Storage mites thrive in environments where there is moisture or increased humidity. They can be found in dry food items, such as flour, grains, dried fruits and cereal and may also occur in dry dog and cat food. Dry pet food does contain some level of moisture (less than 10%), which can create an environment that promotes storage mite growth; however, additional studies are needed to more thoroughly document this.

Pets exposed to this mite through ingestion, inhalation or absorption through the skin may develop an allergy to it, and immunotherapy can be effective in reducing clinical signs. In addition, environmental control may be useful in decreasing exposure to storage mites. Although it is impossible to eliminate mites from the environment, the following steps may help control the population:

- Do not stockpile food; purchase only what is needed to maintain a 30-day supply.
- Prior to purchase, check the food bag for tears or holes.
- Store pet foods in airtight containers in a cool, dry environment.
- Divide the bag of pet food into one-week portions and place in freezer safe storage containers. Keep the containers of food in a freezer until needed.
- Wash food storage containers frequently with detergent and HOT water. Dry completely before refilling with food.
- Clean pet food bowls daily with detergent and HOT water. Dry completely before filling with food.
- Same control measures may be used for pet treats.

Fleas

Fleas are one of the most common causes of itchy skin in pets. Fleas can cause itching in the following ways:

- Their physical presence causes scratching, biting and self-trauma, which develops into a perpetual cycle.
- Hypersensitivity, or allergy, to flea saliva injected when fleas bite.

Pets with hypersensitivity to fleas may develop flea allergy dermatitis (FAD), an extremely itchy disease which predisposes them to secondary bacterial and/or yeast skin infections. FAD should be considered a progressive disease; each flea season results in an increasingly severe reaction. A well-planned flea control strategy targeted towards all stages of the flea life cycle is essential for these patients.

An effective flea control program must involve the entire household, and all animals in contact with the affected pet. The goal is to eliminate fleas from the pet and the environment and prevent re-infestation. The following are recommendations for the house, the yard and the pet:

The House

- Frequently vacuum and mop all floors (dispose of vacuum bag outside of the home).
- Wash kennel floors and pet bedding.

The Yard

- Block off access to crawl spaces and treat with insecticides.
- Consider commercial extermination and outdoor spraying.

Your Pet

- Talk with your veterinarian about topical and oral flea control products.

Pollen Allergens

Pollens from grasses, trees and weeds can be carried great distances by air currents. Pollen exposure most often occurs through inhalation of airborne particles and/or absorption through the skin. Avoidance is impractical, but exposure can be minimized.

- If possible, limit exposure to certain conditions and times of day, such as during high pollen counts, windy days, high humidity and early morning or evening hours.
- Vacuum and dust regularly.
- Use air conditioning instead of opening windows.
- Keep pet off of lawn for 1–2 hours after mowing.
- Bathe pet regularly with hypoallergenic shampoos, leave-in conditioners that soothe skin and cool water rinses to decrease pollen accumulation.
- Dry bedding in dryer instead of hanging outside.

Common Fungi/Molds

Molds are a type of fungus found indoors and outdoors in moist organic materials. Included in this group are rusts, smuts, mushrooms, toadstools, yeast and slime molds.

Outdoor Spore Levels

Outdoor spore levels vary throughout the day and year. Because levels are often higher near the ground, lawn mowing and grain harvesting result in increased dispersion of mold/fungal particles. Mold allergic animals may develop clinical signs following exposure to leaf litter, peat moss, mulches, soil and rotting logs.

Indoor Mold Levels

Indoor mold levels are commonly elevated when indoor air quality is poor (*i.e.*, the house is closed off to fresh, outside air). Common locations for mold growth include bathrooms, laundry rooms, basements and closets. Specific equipment can also be contaminated; these include cool mist vaporizers, furnace humidifiers, air conditioners and swamp coolers.

Indoor Mold Control

Indoor mold control involves general cleanliness, reducing excessive indoor moisture (relative humidity less than 50%), and identification and remediation of known mold sources.

Common Molds and Their Locations

Principle outdoor, minor indoor – *Alternaria*, *Fusarium* and *Cladosporium*

Principle indoor, minor outdoor – *Aspergillus* and *Penicillium*

Minor outdoor and minor indoor – *Dreschleria* and *Stephyllium*

Ask your veterinarian for more tips on managing allergies based on your pet's history, location and test results.

For questions or further assistance, please call
Heska's Medical and Technical Support Services at **1-800-GO HESKA, option 5.**

