
Allergen Information Sheet

House Dusts and Dust Mites

Dust mites are the most common allergen in humans, dogs, and cats. Around 80 percent of year-round allergic dogs and cats skin-test positive to dust mites.

Dust mites (*Dermatophagoides farinae*, *Dermatophagoides pteronyssinus*) reside in textiles such as carpet, bedding, mattresses, upholstery, and cloth toys. They prefer specific temperatures and humidity to flourish. You cannot see dust mites without a microscope.

Dust mites feed on skin cells, bacteria, fungi, and other protein sources in the environment. The actual allergen of dust mites is the protein *Der p 1*, which is found in dust mite feces. Mite numbers increase seasonally in the spring and fall.

If a pet is allergic to this mite, decreasing exposure can be helpful in managing clinical signs. It is probably impossible to remove all exposure to this mite.

- Remove carpeting in the home and replace with a smooth surface. Carpets are dusty, and no amount of vacuuming can clean them well enough to remove enough allergens, even with HEPA filters. Removal of carpeting is not helpful in all cases because it does not eliminate all exposure to dust mites or other things pets may be allergic to.
- Use microporous mattress covers on human beds and wash human and pet bedding in hot water weekly. Polyester is the easiest fabric to care for as far as washing, drying, and tends to be less allergenic than cotton or wool. Do not use pet beds with wood chips inside, as this type of bedding is difficult to launder.
- Remove feather or wool materials as dust mites prefer these.
- Indoor air HEPA filtration is often helpful for people with allergies because these devices clean the air. It is rarely helpful for pets because most of their exposure to allergens is from the ground.
- Dust mite chemical treatments are often not helpful at all and expose pets to chemicals.
- Dust mites thrive in temperatures of 68 to 77 degrees Fahrenheit and relative humidity levels of 70 - 80 percent.
 - In Minnesota over the winter, turn the thermostat down when not at home or at night to discourage mite growth. In the winter, humidifiers can be turned down or off.
 - Maintain relative humidity of less than 51% year round. Mite numbers are 10 x lower in homes with humidity maintained at less than 51% after 17 months.