

The Mold Reporters, Inc.

Direct 503-887-4800

Toll Free 866-313-MOLD

www.moldreporters.com



DUST MITES 101

What you can't see *can* hurt you

Presented by

Amy Siedlecki, CRMI, IEP

- The EPA ranks **indoor air pollution** among the **top five environmental risks to public health**
- According to the American College of Allergists, **50% of all illnesses** are either caused by, or aggravated by, **polluted indoor air**
- **42,000 house dust mites can live in one ounce of dust!**

The Basics

1. **What are House Dust Mites?** The house dust mite is a member of the Arachnid class and Acari subclass, and as such they are similar to spiders and cousins to lice and ticks. There are two species of house dust mites that are found in North America belonging to the genus *Dermatophagoides* (literally translated: “skin-eating mites”). These virtually invisible mites cannot be seen without magnification, about six of them will fit on the tip of a pin. They are transparent and consist of about 80% water. They have 8 legs, no eyes and by volume are mainly a walking stomach and respiratory system (*Mites and Allergens, MADD 1, 1993*). They pass through six developmental stages and have a life span of 3-4 months. Females lay 25-30 eggs every three weeks.

2. **What do House Dust Mites eat?** Unlike other kinds of mites, house dust mites are not parasites of living plants, animals or humans. Both species of house dust mites primarily feed on the discarded skin scales of humans, cats, dogs and birds. They also thrive on pollen, fungi, bacteria, and lepidopteran (moth and butterfly) scales. Dust mites do not drink water but they absorb it from the air and the environment. Mites survive best at relative humidity levels of 70-80%.
3. **Where do House Dust Mites live?** House dust mites love warm, soft dark places. They are found in bedding, carpets, upholstery, curtains, stuffed toys and clothing.



4. **Are House Dust Mites dangerous?** House dust mite droppings and molted skin are recognized to be a main cause for asthma, sneezing, and chronic rhinitis (hay fever). People with dust mite allergy are allergic to both the organism and its feces. In severe cases house dust mites cause serious health problems such as bronchitis, eczema, rashes, irritated eyes, chronic secretory otitis media or “glue ear” (a condition which often causes hearing loss), and chronic dermatitis. Mite droppings are water-soluble, the enzymes are released from dissolved pellets and nasal passages and lungs can be vulnerable, especially to people sensitive to mites. Each mite produces about 20 fecal pellets each day, which means approximately 2000 during its lifetime. Mite droppings are so small that they easily become airborne and can remain suspended (and potentially inhaled) for up to 20 minutes before dropping to a surface.

More Fun Facts

- The average mattress can have as many as 2-million house dust mites
- 25% of the weight of an average pillow is dead and living dust mites
- You spend 1/3 of your life in bed
- Research confirms that 44-million homes in the US have a very serious dust mite problem (that’s about 45% of all homes)
- While asleep your body sheds millions of dead skin flakes and you perspire 75ml of fluid. A perfect diet for hungry house dust mites!
- House dust mite allergy can be determined by undergoing skin testing by an Allergist
- Jumping up and down on a bed or vacuuming without HEPA filtration can push mite pellets into the air
- **You have the power to control house dust mites!**

Now for the good news...

The War on Mites



With just a little effort, you can significantly decrease your exposure to dust mites and therefore decrease the allergy symptoms related to them.

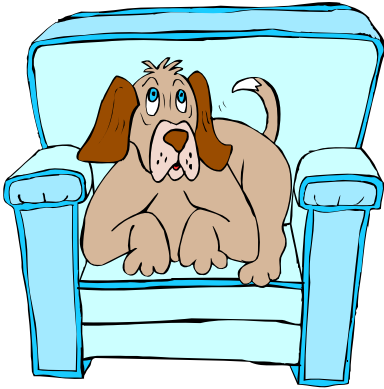
When waging war on house dust mites you must concentrate on the area where your attack will be most effective. And that means the battleground is in the bedroom.

Your enemy hates sunlight, has an aversion to dryness, and can't tolerate extreme heat or freezing temperatures.

So here's your **Plan of Action**:

- Wash all bedding in hot water (at least 140°) weekly
- Place Pillows, soft toys and blankets in a hot tumble dryer for 10 minutes (make sure dryer is vented to the outside) at least once a month
- Replace pillows every few years
- Thoroughly vacuum mattresses using a vacuum equipped with a micro-porous bag or HEPA filter attachment – discard dust after vacuuming
- Dry cleaning kills all mites
- If heat exposure or washing is impractical, place soft items in a plastic bag and send to the freezer for an overnight visit
- If outdoor temperatures drop to freezing or below, blankets and furniture can be placed outside for a day or two to kill mites
- Use washable curtains or consider replacing heavy curtains with blinds
- Reduce nest sites by keeping clutter at a minimum
- Let the sun in – open shades during the day
- Dust regularly and dust before vacuuming
- Vacuum floors regularly using a vacuum equipped with a micro-porous bag or HEPA filter attachment – discard dust after vacuuming
- Replace thick piled carpeting with short piled covering or hard surface flooring
- If wall-to-wall carpeting cannot be removed, consider using products that kill house dust mites, such as benzyl benzoate or tannic acid
- Cover mattresses and pillows with mite resistant material or micro-porous covers

BUT DON'T FORGET...



If you experience allergy symptoms in the indoor environment, other possible sources of allergy can include domestic animals, rodent droppings, carpet fibers, cockroaches and mold spores.

The Mold Reporters Inc. also offers diagnostic testing and reporting services for:

- ▶ DUST MITE ALLERGEN
- ▶ POLLENS & MOLD SPORES
- ▶ CAT & DOG DANDER
- ▶ COCKROACH ALLERGEN
- ▶ CARPET FIBER ANALYSIS
- ▶ RODENT ALLERGEN

The Mold Reporters, Inc.

Direct 503-887-4800

Toll Free 866-313-MOLD

www.moldreporters.com