

Dust Mites and Indoor Mold May Make Your Child Sick

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We don't often think of our lungs as having contact with the outside world in the same way our skin does, and yet our delicate lung surfaces are constantly "touched" by invisible allergens as we breathe. Certain people are particularly vulnerable: those with allergies and asthma, the elderly, and the young. Parents of kids with allergies or asthma face a special task in working to reduce their children's exposure to mold spore and dust mite allergens. Tracking such allergens is difficult, because they are microscopic and are carried by the air from their sources, such as moldy basement carpeting, into our lungs. I have worked with many families who were worried that their indoor air might be making them sick. They were right to be worried, and their stories are often dramatic.

In one family, a baby had serious mite and cat allergies. The house was immaculately clean, and the baby's room had a wood floor and only two pieces of furniture: a crib with a plastic-encased mattress, and a cushioned chair, a gift from the grandmother. Little did the parents know that the chair had been stored in a basement, where it was the cat's favorite napping spot. The cushion was full of mold, mites, and cat dander. A cloud of invisible airborne contaminants surrounded the baby every time the mother sat down to nurse.

In another home, a toddler with serious food allergies spent many hours playing in the family room, where his treasured toy garage was a fixture on a small oriental rug. Sampling proved that the expensive rug was full of mold, and as the little boy bounced on its surface, spores were released into the air.

One set of parents I worked with took turns at night treating their asthmatic four year old with a nebulizer. They had removed much of the carpeting from their house and encased all mattresses and pillows with allergen control covers. They had even replaced most of their furniture, except for a couch and easy chair: both contaminated with mold and bacteria. Every time someone sat down, allergens became airborne. As an experiment, the parents encased the couch and chair in plastic drop cloths and sealed the joints with tape. Within days, the child's symptoms were so reduced that she no longer needed the nebulizer.

One ninth grader experienced chronic asthma symptoms. As a small child, he spent hours on his favorite down-filled couch, watching TV. In elementary school, he played video games while nestled in the feather-filled cushions. In middle school, he did his Algebra homework there. The skin scales and moisture from his body had for years nurtured a mite colony in the couch, and whenever his body compressed the cushions, allergens were released.

What can families do to protect their allergic or asthmatic children from these invisible allergens?

Here are some tips:

1. Furniture and Carpeting

- Encase not only the allergic child's mattress and pillows in allergen control covers, but also all the mattresses and pillows in the house, because children sit on other people's beds.
- To reduce the likelihood of mite infestations, wash sheets in hot water weekly; wash quilts and blankets at least monthly but tumble them in a dryer weekly.
- Avoid upholstered furniture. Choose leather furniture, or buy futon couches and cover the mattresses with allergen control covers.
- Because mites love down, and because feather aerosol by itself can be irritating, avoid using feather-stuffed bedding, clothing and furniture.
- Discard carpeting that smells musty or that has gotten wet from flooding and has remained wet for more than a day.
- Avoid wall-to-wall carpeting in bedrooms.
- Be cautious about used furniture, even if antiques, and always check the bottoms and backs for mold, because you never know where such items have been stored. Avoid used rugs, and NEVER use second-hand mattresses or couches.

2. Heating and Air Conditioning

- If you have central air conditioning, keep the ducts clean, use adequate filtration (not the usual fiberglass furnace filter but a pleated media filter), and keep the relative humidity under 60% (thermohygrometers are available in most hardware stores).
- Portable air conditioners should be removed and cleaned of all dust yearly and should have adequate filtration.
- If you have forced hot air heat or a heat pump, keep the ducts clean and only use a pleated media filter.

3. Below-Grade/Basement Spaces

- Up to a third of the home air comes from the basement, whether finished or not. Because basements are susceptible to mold growth, keep them dehumidified (below 50% if possible) during the warmer seasons.
- Finished, below-grade spaces should also be heated (at least 62 to 65 degrees) during the colder seasons.
- Do not install wall-to-wall carpeting in below-grade spaces.
- If possible, avoid having your allergic or asthmatic child spend time in moldy, below-grade finished spaces, whether in your home or in a school setting.
- If you are thinking of finishing your basement, don't.

- To minimize mold growth, do not store goods in the basement up against foundation walls, or directly on top of the concrete floor.

4. Appliances

- Keep your refrigerator drip tray clean and the area under and around it (including the coils) free of dust.
- Purchase a HEPA vacuum. It's expensive, but worth it, because regular vacuums emit microscopic allergens in their exhaust. If you hire cleaners, insist that they use your HEPA vacuum.

Sometimes simple steps like these can make an enormous difference in your battle for a healthful home for your children.