

As many as 18,875 dust mites can live in one gram of dust, but the usual population is about 100 to 500 mites per gram. (A gram is about the weight of a paper clip). Each mite produces about 10-20 waste particles each day and lives for 30 days. Egg-laying females can add 25-30 new mites to the population.

University of Oregon Health Center



# AI Informant

## *The Allergen Overview: Dust Mites*

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Did you know that dust in the home or house dust is actually made of a mixture of many substances including dust mites and their waste, animal allergens and mold spores?

The most common substances to cause allergic reactions within that nasty mixture is dust mites and particles. At least 45 percent of young people with asthma are allergic to dust mites. Dust mites are all around us. In fact, you could spend one-third of your life with your nose in direct contact with a pillow loaded with dust mites particles. What a nightmare!

So what are dust mites? Dust mites are actually microscopic creatures that prefer to live in humid places verses dry places.

When you sneeze inside your home, chances are you might be experiencing a reaction to particles or waste from dust mites. These particles live in pillows, mattresses, carpeting and upholstered furniture (yuck!). When you vacuum, walk on a carpet or move around bedding these particles float into the air. You can experience allergic reactions when you breathe in these particles.



### Tips For Managing Dust Mite Allergies

First and foremost, we recommend consulting your allergist if you suffer from house dust allergies. Remember, just because your house is clean does not mean you will get rid of dust mites altogether, but the below tips might also help you manage exposure to these little guys:

**Don't Let Dust Get Too Comfortable!** If you suffer from allergies, cleaning the home is incredibly important in managing exposure to dust mite allergens. Use a cyclonic vacuum or a vacuum with a HEPA filter and wash items such as bedding and mattress pads in hot water or bleach as directed every 10 days. Wear a NIOSH rated N95 dust mask when you clean.

**Couches, Curtains, and Cushions, Oh My!** Allergens make themselves at home in fabrics throughout the house, like upholstered couches and chairs, bedding, carpets and more. If you can't tear up the carpet or remove the curtains, look for cleaning products that will denature or deactivate dust mite matter and cat and dog dander in fabrics in the home.

**Go Carpet Free!** Aim to limit the amount of carpeting you have in your bedroom or in your home. Dust mites love to hide in carpets! Hardwood floors, seamless vinyl or

linoleum floor coverings are easier to clean and are your best options.

**Nothing is Wrong with a Little AC!** Use your air conditioning to keep humidity low. A little AC helps slow down dust mite growth during warmer months. When shopping for an air conditioning filter, try to look for a high efficiency disposable pleated media filter with a MERV rating of 8 to 12 in the heating and air conditioning system. (A higher MERV means it is more effective in removing particles that can be triggers.) Don't forget to change those air conditioning and furnace filters every three months.

**Next Time You Go Furniture Shopping!** Try shopping for furniture with a smooth, nonporous surface, such as leather. It is less likely to hide allergy-causing substances than some other couch materials out there.

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**Sleep Comfortably!** Cover mattresses, pillows and box springs with removable allergen-resistant coverings.

**Bedtime Bliss!** Avoid bedding stuffed with kapok or foam rubber.

**Out of Site, Out of Allergies!** Keep stuffed animals and toys in plastic containers for easy access. Get fun, brightly colored containers and enlist kids in a “game” of clean-up after every play session.

**Read it and Toss it... In a Box, That Is!** Store items like books and knickknacks in containers, and get rid of the dried-flower arrangements in straw baskets, which can all collect a lot of dust in the home.

**Just Say No!** Limit use of humidifiers because dust mites thrive in humid places.

**When Possible Make Washable!** Attempt to replace the heavy curtains or Venetian blinds with ones that are washable, like curtains or window shades.

*Courtesy of the American College of Allergy, Asthma & Immunology*



## *Do you have eczema or atopic dermatitis?*

Have you used PROTOPIC® (tacrolimus) ointment before you were 16 years of age to treat your eczema? Would you be interested in participating in a long-term program that will monitor your health? You may be eligible to participate in an observational research study. Talk to your physician if you would like to learn more about this important program.

## *Have asthma? Do allergies make it worse?*

ASTHMA, Inc. is conducting a research study for people 12 years and older with asthma who have symptoms around dogs, cats, trees, grass or dust. Only 6 visits over 4 weeks! Qualified participants will receive compensation for time and travel. All study-related diagnostic testing, investigational medication and medical care provided at no charge to you.



## *Do you frequently use a rescue inhaler despite being on inhaled steroids?*



ASTHMA, Inc. is looking for people to participate in a clinical research study on asthma rescue medication. Study consists of up to 9 visits over 3 1/2 months. Qualified participants must have moderate to severe asthma, be 18 years or older, and be non-smokers. Benefits include all study-related diagnostic testing, investigational medication and medical care provided at no charge to you. Qualified participants will receive compensation for time and travel.

## *Do allergies affect your asthma?*

ASTHMA, Inc. is conducting a 26 week research study on allergic asthma! Participants must be 18 to 75 years old with moderate to severe asthma and have poorly controlled symptoms despite using high levels of inhaled steroids. Non-smokers only. Benefits to qualified participants include all study-related diagnostic testing, investigational medication and medical care provided at no charge. Qualified participants will also receive compensation for time and travel.



## *Does your child cough, wheeze, or lose breath while playing or exercising?*

ASTHMA, Inc. is looking for children 4-14 years of age to participate in a clinical research study on the investigational use of Singulair! Study consists of 7 visits over 3 weeks. Qualified participants receive compensation for time and travel, all study-related medical care, diagnostic testing, and investigational medication at no cost. For more information please contact ASTHMA, Inc.



# Resolve to Control Asthma First, Then Focus on Weight Loss

By Gary J. Stadtmauer, MD, FAAAAI, and Y. Claire Wang, MD, ScD

Each New Year, millions of Americans commit to lose weight. But for many, asthma may stand in the way of reaching their goals.

Obesity is a growing epidemic in the United States, with as many as 30 percent of adults and 15 percent of children considered obese. Millions more are overweight.

For a person with asthma, losing weight has extra challenges. When asthma acts up, you can't exercise. But even when asthma is under control, you may feel short of breath minutes into a workout. That's because the excess weight you carry compresses your lungs, limiting how much air you can breathe in and narrowing your airways.

Obese asthma patients tend to have more severe asthma and are more likely to be hospitalized. Research suggests that this increased severity is due to greater airway inflammation and reduced effects of asthma medications in obese patients.

Obesity also increases risk for sleep apnea, which leads to daytime fatigue and inactivity, further challenging efforts to lose weight. Sleep apnea also provokes inflammation and irritability in the bronchial tubes — leading to increased asthma symptoms. More research is needed, but there appears to be a vicious cycle between asthma, obesity and sleep apnea.

Exercise is an important part of any weight loss program, but if asthma is not well controlled it is impossible to work out to your full potential. If you are obese, then not only can proper asthma management help you with weight control but weight loss can in turn improve your asthma.

*Courtesy of the American Academy of Allergy Asthma and Immunology*

## Bleach Baths

Itching, scratching and the immune dysregulation of atopic dermatitis lead to an increased risk of infection from superficial skin flora, especially *Staphylococcus aureus*. One technique that can help decrease the number of infections and possibly reduce the need for antibiotics in patients with eczema is called "Bleach Baths." Here are our simple recommendations:

Explain to the patient that swimming pools are chlorinated to help cut-down on microbes living in the water. Together, you will "make your very own swimming pool" right in the bathtub! This special water will help cut down on microbes on the skin.

### STEPS:

1. Start by adding lukewarm water to fill a tub for a normal bath (about 40 gallons).
2. Put 1/4 to 1/2 cup of common liquid bleach (for example, Clorox) into the bath water. Check the bleach bottle to make sure that the concentration of bleach (also known as sodium hypochlorite) is about 6%.
3. Completely mix the added bleach in the water. This should create a solution of diluted bleach (about 0.005%), which is just a little stronger than chlorinated swimming pool water.
4. Soak in the chlorinated water for about 10 minutes.
5. Thoroughly rinse the skin clear with lukewarm, fresh water at the end of the bleach bath.
6. As soon as you're finished rinsing off, pat dry. Do not rub dry as this is the same as scratching!
7. Immediately apply any prescribed medication and/or emollients.
8. Repeat bleach baths 2 to 3 times a week or as prescribed by the physician.

### The following restrictions may apply:

Do not use undiluted bleach directly on the skin. Even diluted bleach baths can potentially cause dryness and/or irritation.

Do not use bleach baths if there are many breaks or open areas in the skin (for fear of intense stinging and burning)

Do not use bleach baths in patients with a known contact allergy to chlorine.



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*Help Katie get to the playground ready to have fun. Don't go near the things that could make her asthma worse.*



*Courtesy of National Heart Lung and Blood Institute*

## *When You and Your Child are Sick*

You're sick and now your child is sick, too. What do you do when you're not feeling well, yet your child needs you? Most of us drag ourselves out of bed and do what we need to do.

***But you can't take care of your child if you don't also take care of yourself.***

How do you do that? First, create a space in the house where both of you can hang out and rest, like the living room couch. Bring toys, books, movies, and games into the space.

After that...

- ***Curl up together on the couch.*** Cuddle under a blanket. Watch a movie or read one of your child's favorite books. Make a tent out of the blanket, add a flashlight, and read together.
- ***Sleep when your child sleeps.*** Forget about household chores. Take advantage of your child's nap time to get your own needed rest.
- ***Have a tea party.*** Fix some soothing herbal tea or hot water and lemon and honey. Make sure that whatever you serve is not too hot for your child to drink. These warm liquids can soothe a sore throat and have a calming effect.
- ***Play Doctor.*** Put a few M&M candies in an empty pill bottle. Gather together items like band-aids, cotton swabs, play syringes, and a pretend thermometer. Take turns being the doctor and the patient.
- ***Get some fresh air.*** If the weather is nice, go outdoors. Take a short walk around the neighborhood. If either one of you is too sick for that, just try sitting on the stoop for 10 minutes. A little fresh air and sunlight can make a big difference in how you feel.
- ***Ask for help when you need it.*** This can be hard for many of us. We're supposed to be the ones who take care of everyone else, but when you're sick, know it's OK to ask friends and family for help.



*Courtesy of Study of Atopic March Newsletter*