

Asthma Triggers: Gain Control

Breathing Freely: Controlling Asthma Triggers

Breathing Freely: Controlling Asth...



This video features medical professionals, families and children living with asthma. (00:09:57)

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Introduction

Americans spend up to 90 percent of their time indoors. Indoor allergens and irritants play a significant role in triggering asthma attacks. Triggers are things that can cause asthma symptoms, an episode or attack or make asthma worse. If you have asthma, you may react to just one trigger or you may find that several things act as triggers. Be sure to work with a doctor to identify triggers and develop a treatment plan that includes ways to reduce exposures to your asthma triggers.

For more information, view EPA Asthma Resources and Publications.

Secondhand Smoke

- About Secondhand Smoke and Asthma
- Actions You Can Take
- Additional Resources

About Secondhand Smoke and Asthma



Secondhand smoke is the smoke from a cigarette, cigar or pipe, and the smoke exhaled by a smoker. Secondhand smoke contains more than 4,000 substances, including several compounds that cause cancer.

Secondhand smoke can trigger asthma episodes and increase the severity of attacks. Secondhand smoke is also a risk factor for new cases of asthma in preschool-aged children. Children's developing bodies make them more susceptible to the effects of secondhand smoke and, due to their small size,

they breathe more rapidly than adults, thereby taking in more secondhand smoke. Children receiving high doses of secondhand smoke, such as those with smoking parents, run the greatest relative risk of experiencing damaging health effects.

Actions You Can Take

- Don't let anyone smoke near your child.
- If you smoke until you can quit, don't smoke in your home or car.

Additional Resources

 Secondhand Tobacco Smoke and the Health of Your Family Brochure [EPA 402/F/09/004]

Dust Mites

- About Dust mites and asthma
- Actions you can take
- Additional resources

About dust mites and asthma



Dust mites are tiny bugs that are too small to see. Every home has dust mites. They feed on human skin flakes and are found in mattresses, pillows, carpets, upholstered furniture, bedcovers, clothes, stuffed toys and fabric and fabric-covered items.

Body parts and droppings from dust mites can trigger asthma in individuals with allergies to dust mites. Exposure to dust mites can cause asthma in children who have not previously exhibited asthma symptoms.

Actions you can take

- Common house dust may also contain asthma triggers. These simple steps can help: Wash bedding in hot water once a week. Dry completely.
- Use dust proof covers on pillows and mattresses.
- Vacuum carpets and furniture every week.
- Choose stuffed toys that you can wash. Wash stuffed toys in hot water. Dry completely before your child plays with the toy.
- Dust often with a damp cloth.
- Use a vacuum with a HEPA filter on carpet and fabric-covered furniture to reduce dust buildup. People with asthma or allergies should leave the area being vacuumed. Read more about Air Filters - Available Guide for their Comparison.

Additional resources

- An Introduction to Indoor Air Quality: Biological Pollutants
- Help Your Child Gain Control Over Asthma

Molds

- About Molds and Asthma
- Actions You Can Take
- Additional Resources

About Molds and Asthma



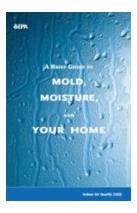
Molds create tiny spores to reproduce, just as plants produce seeds. Mold spores float through the indoor and outdoor air continually. When mold spores land on damp places indoors, they may begin growing. Molds are microscopic fungi that live on plant and animal matter. Molds can be found almost anywhere when moisture is present.

For people sensitive to molds, inhaling mold spores can trigger an asthma attack.

Actions You Can Take

- If mold is a problem in your home, you need to clean up the mold and eliminate sources of moisture.
- If you see mold on hard surfaces, clean it up with soap and water. Let the area dry completely.
- Use exhaust fans or open a window in the bathroom and kitchen when showering, cooking or washing dishes.
- Fix water leaks as soon as possible to keep mold from growing.
- Dry damp or wet things completely within one to two days to keep mold from growing.
- Maintain low indoor humidity, ideally between 30-50% relative humidity. Humidity levels can be measured by hygrometers, which are available at local hardware stores.

Additional Resources

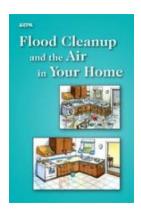


A Brief Guide to Mold, Moisture and Your Home

This Guide provides information and guidance for homeowners and renters on how to clean up residential mold problems and how to prevent mold growth.

• Printable Version of A Brief Guide to Mold, Moisture and Your Home

See also, EPA's Mold and Moisture Program



Flood Cleanup and the Air In Your Home

Indoor Air Facts No. 8 Use and Care of Home Humidifiers

Explains that some types of home humidifiers can disperse microorganisms from their water tanks into the indoor air. Describes the different types of humidifiers and provides recommendations for their use and maintenance.

Cockroaches and Pests

- About Cockroaches, Other Pests and Asthma
- Actions You Can take

• Additional Resources

About Cockroaches, Other Pests and Asthma



Droppings or body parts of cockroaches and other pests can trigger asthma. Certain proteins are found in cockroach feces and saliva and can cause allergic reactions or trigger asthma symptoms in some individuals.

Cockroaches are commonly found in crowded cities and the southern regions of the United States. Cockroach allergens likely play a significant role in asthma in many urban areas.

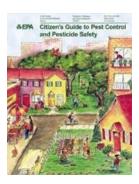
Actions You Can Take

- Insecticides and pesticides are not only toxic to pests they can harm people too. Try to use pest management methods that pose less of a risk. Keep counters, sinks, tables and floors clean and free of clutter.
- Clean dishes, crumbs and spills right away.
- Store food in airtight containers.
- Seal cracks or openings around or inside cabinets.

Additional Resources



<u>Home Safe Home Poster</u> - Identify possible pest habitats in your home where pests may reside; eliminate the source while reducing pesticide risks.



<u>Citizen's Guide to Pest Control and Pesticide Safety</u> - This booklet summarizes what a pest is, what pesticides are and the many factors that should be considered when faced with pest challenges in your home and other environments. [EPA 735-K-04-002]



<u>Cockroach Prevention Activity Website for Kids</u> - This website educates kids about cockroaches; their anatomy and where they like to set up their homes. Learn how to control these pests while reducing pesticide risks; roaches are often asthma triggers and shouldn't be inside where you're at.



Oregon State University and EPA: National Pesticide Information Center (NPIC) EXIT - The NPIC is open from 6:30AM to 4:30PM Pacific time, daily. Call toll-free at 1-800-858-7378 or contact them via e-mail NPIC.

Pets

· About Pets and Asthma

- Actions You Can Take
- Additional Resources

About Pets and Asthma



Proteins in your pet's skin flakes, urine, feces, saliva and hair can trigger asthma. Dogs, cats, rodents (including hamsters and guinea pigs) and other warm-blooded mammals can trigger asthma in individuals with an allergy to animal dander.

The most effective method to control animal allergens in the home is to not allow animals in the home. If you remove an animal from the home, it is important to thoroughly clean the floors, walls, carpets and upholstered furniture.

Some individuals may find isolation measures to be sufficiently effective. Isolation measures that have been suggested include keeping pets out of the sleeping areas, keeping pets away from upholstered furniture, carpets and stuffed toys, keeping the pet outdoors as much as possible and isolating sensitive individuals from the pet as much as possible.

Actions You Can Take

- Find another home for your cat or dog.
- Keep pets outside if possible.
- If you have to have a pet inside, keep it out of the bedroom of the person with asthma.
- Keep pets off of your furniture.
- Vacuum carpets and furniture when the person with asthma is not around.

Additional Resources

• Help Your Child Gain Control Over Asthma

Nitrogen Dioxide

- · About Nitrogen Dioxide and Asthma
- Actions You Can Take

About Nitrogen Dioxide and Asthma



Nitrogen dioxide (NO₂) is an odorless gas that can irritate your eyes, nose and throat and cause shortness of breath. NO₂ can come from appliances inside your home that burn fuels such as gas, kerosene and wood. NO₂ forms quickly from emissions from cars, trucks and buses, power plants and off-road equipment. Smoke from your stove or fireplace can trigger asthma.

In people with asthma, exposure to low levels of NO₂ may cause increased bronchial reactivity and make young children more susceptible to respiratory infections. Long-term exposure to high levels of NO₂ can lead to chronic bronchitis. Studies show a connection between breathing elevated short-term NO₂concentrations, and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma.

Actions You Can Take

If possible, use fuel-burning appliances that are vented to the outside. Always follow the manufacturer's instructions on how to use these appliances.

- Gas cooking stoves: If you have an exhaust fan in the kitchen, use it when you cook. Never use the stove to keep you warm or heat your house.
- Unvented kerosene or gas space heaters: Use the proper fuel and keep the heater adjusted the right way. Open a window slightly or use an exhaust fan when you are using the heater.

Outdoor Air Pollution

- About Outdoor Air Pollution and Asthma
- Actions You Can Take
- Additional Resources



About Outdoor Air Pollution and Asthma

Outdoor air pollution is caused by small particles and ground level ozone that comes from car exhaust, smoke, road dust and factory emissions. Outdoor air quality is also affected by pollen from plants, crops and weeds. Particle pollution can be high any time of year and are higher near busy roads and where people burn wood.

When inhaled, outdoor pollutants and pollen can aggravate the lungs, and can lead to:

- Chest pain
- Coughing
- Digestive problems
- Dizziness
- Fever
- Lethargy
- Sneezing
- Shortness of breath
- Throat irritation
- Watery eyes

Outdoor air pollution and pollen may also worsen chronic respiratory diseases, such as asthma.

Actions You Can Take



Get more information about Ozone Maps, Air Quality Forecasts, Ozone Action Days and more.

- Monitor the Air Quality Index on your local weather report.
- Know when and where air pollution may be bad.
- Regular exercise is healthy. Check your local air quality to know when to play and when to take it a little easier.
- Schedule outdoor activities at times when the air quality is better. In the summer, this may be in the morning.
- Stay inside with the windows closed on high pollen days and when pollutants are high.
- Use your air conditioner to help filter the air coming into the home. Central air systems are the best.
- Remove indoor plants if they irritate or produce symptoms for you or your family.
- Pay attention to asthma warning signs. If you start to see signs, limit outdoor activity. Be sure to talk about this with your child's doctor.

Additional Resources



Why is Coco Orange?

A picture book for children with asthma and their caretakers.





The EnviroFlash EXIT website provides air quality information such as forecasts and action day notifications via email for your area of interest.

Chemical Irritants

- · About Chemical Irritants and Asthma
- Actions You Can Take
- Additional Resources

About Chemical Irritants and Asthma



Chemical irritants are found in some products in your house and may trigger asthma. Your asthma or your child's asthma may be worse around products such as cleaners, paints, adhesives, pesticides, cosmetics or air fresheners. Chemical irritants are also present in schools and can be found in commonly used cleaning supplies and educational kits.

Chemical irritants may exacerbate asthma. At sufficient concentrations in the air, many products can trigger a reaction.

Actions You Can Take

If you find that your asthma or your child's asthma gets worse when you use a certain product,

consider trying different products. If you must use a product, then you should:

- Make sure your child is not around.
- Open windows or doors, or use an exhaust fan.
- Always follow the instructions on the product label.

Additional Resources

• Develop an Asthma Action Plan

Wood Smoke

- About Wood Smoke and Asthma
- Actions You Can Take
- Additional Resources

About Wood Smoke and Asthma



Smoke from wood-burning stoves and fireplaces contain a mixture of harmful gases and small particles. Breathing these small particles can cause asthma attacks and severe bronchitis, aggravate heart and lung disease and may increase the likelihood of respiratory illnesses. If you're using a wood stove or fireplace and smell smoke in your home, it probably isn't working as it should.

Actions You Can Take

• To help reduce smoke, make sure to burn dry wood that has been split, stacked, covered and stored for at least 6 months.

- Have your stove and chimney inspected every year by a certified professional to make sure there are no gaps, cracks, unwanted drafts or to remove dangerous creosote build-up.
- If possible, replace your old wood stove with a new, cleaner heating appliance. Newer wood stoves are at least 50% more efficient and pollute 70% less than older models. This can help make your home healthier and safer and help cut fuel costs.

Additional Resources



Burnwise: Learn Before You Burn

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