

What is asthma?

- Asthma is a chronic (long lasting) inflammatory lung disease that causes airways to swell up, tighten, and narrow.
- A single episode of wheezing is not asthma.

What causes asthma?

- Many children with asthma can breathe normally for a long time.
- Children with asthma have sensitive airways.
- When an asthma flare happens, airway muscles tighten up. The airway lining also swells and can fill with mucus. Both of these cause the airway to narrow.
- An asthma flare makes it hard for your child to breathe.
- Different things can cause a flare in different people. Sometimes, a flare is triggered by exercise, smoke, allergies, viral infections, breathing in cold air, and changes in the weather.

Who can get asthma?

- Anyone can get asthma, both children and adults.
- Children are more likely to get asthma if a parent has asthma.

What are the symptoms of asthma?

- A child with asthma has noisy breathing. Normal breathing is quiet.
- During an asthma flare, your child may cough, wheeze, sweat, feel tightness in his chest, and feel short of breath. His heart will probably beat faster.
- Your child may cough a lot at night but seem fine during the day.
- A child with asthma may get chest colds a lot.
- A child with asthma may tire more easily than other children or avoid activities and places that make it hard for him to breathe.

Is asthma contagious?

- No. Asthma is not contagious.

How is asthma treated?

- If you think your child has asthma, take him to the doctor.
- Your doctor will probably want to know your family's history of asthma and allergies.
- Also be prepared to tell your doctor about your child's condition. How bad are his symptoms? How long do they last? When do they begin? What seems to cause them? What seems to make them better or worse? How do they go away? What have you tried to do to improve it?
- The doctor may use a machine to test your child's breathing.
- If the doctor thinks that your child has asthma, your child will need a plan to control his symptoms and flares.
- Asthma is often treated with medication. Medication helps to both prevent flares and treat symptoms.
- Make sure your child gets enough rest and eats healthy.
- Talk to your child's school. Discuss your child's asthma. What can trigger a flare? What are his symptoms? What should be done? What medication is needed?
- A child with asthma can still be very active, if treated with the right medication.

How long does asthma last?

- Each person has a different experience with his or her asthma.
- For some, symptoms may improve as the child gets older. For others, symptoms may get worse. For others, symptoms may seem to go away but show up again later in life.

How can asthma be prevented?

- Avoid things that trigger your child's asthma, such as allergies and breathing in cold air.
- Look for signs that your child may be nearing a flare. Signs include change in appearance or mood, change in breathing, or your child might say he "feels funny."
- Follow the plan for managing your child's asthma. Make sure he takes medication as prescribed.
- **Avoid smoking around a child who has asthma.** Smoke can trigger a flare.

Environmental Control and Asthma

Children with asthma have unusually sensitive airways. Asthma symptoms can be triggered by many things in the environment. These triggers are unique to each child. Some common environmental triggers of asthma symptoms are cigarette smoke, pollens, house dust, molds, animal dander, perfume, strong odors, and cold air. Climate and weather changes can also affect asthma.

Try to limit your child's contact with these triggers, especially in places where your child spends a lot of time, such as at home and school.

Smoking

Pipe, cigarette, and cigar smoke are harmful to children and adults in general, but the smoke poses a special problem for all children with asthma. Even the smell of smoke on clothes can trigger asthma symptoms in a child with sensitive airways. Smoking in the home of a child with asthma can be life-threatening and is unacceptable.

Pollens

Pollens from grasses, weeds, and some trees are light and can be carried in the air for miles. These pollens land in the eyes, nose, and airways, causing the symptoms of asthma. Flower pollens are heavier and rarely cause allergies. Although it is difficult to avoid pollens totally, some suggestions are:

- Keep your child's bedroom windows shut and use central air conditioning during allergy season. If a room air conditioner is used, recirculate the indoor air rather than pulling outside air indoors. Wash or change air filters every 2 weeks.
- After working or playing outside during allergy season, your child should shower and change clothes immediately. Dirty clothes should be kept outside the bedroom.
- Mow the lawn frequently. This limits the amount of pollen released. Your child should not be in the immediate area when the lawn is being mowed.

Molds

Molds are found year-round throughout the house, outdoors, and in certain foods. They are especially found in areas with a lot of moisture. Molds make lightweight spores that can travel a long way in the air both outdoors and in the house.

Bathrooms and damp basements are two common areas for mold growth. Other common places include swamp coolers, humidifiers, and the refrigerator drip pan and crisper. Here are some suggestions to decrease mold growth:

- Light and ventilation prevent mold growth. In the bathroom, thoroughly clean the tile, floors, shower curtain, tub surround, and under plumbing fixtures on a routine basis. Use a fungicide such as a dilute household bleach (1 cup of bleach to 10 cups of water) if necessary.
- Enamel paint stops mold growth better than latex paint. An antifungal substance can be added to paints to keep mold from growing.
- Dehumidifiers can help keep mold from growing in damp areas such as basements. Areas that become damp from hard rains are ideal for mold growth and should be fixed.
- Evaporative coolers, vaporizers, and humidifiers with a reservoir are ideal places for mold and bacteria to grow. When these appliances are operating, molds and bacteria can be sprayed throughout the house. In general, these appliances are not recommended. If you do use one, then empty the reservoir daily, clean it with soap and water, and dry it thoroughly. The reservoir should be refilled just before use.
- Greenhouses, compost piles, and homes with many plants also frequently have molds. Cover the potting soil of houseplants with foil to decrease spreading of mold spores.
- Foam pillows and mattresses can be sites for mold growth. Replace foam pillows with washable polyester ones. Cover foam mattresses with a nonporous covering (such as, plastic).

House Dust

House dust is made of many things, including dirt, insect debris, dust mites, dead skin, crumbs, bacteria, and fungi. Dust collects on every item in the home, including mattresses, couches, clothes, rugs, drapes, and stuffed animals.

It is very difficult to avoid house dust, but the following ideas will help:

- Avoid clutter and dust catchers, especially in the bedroom. These include wall decorations (pictures, pennants, and fabric wall coverings), drapes, and blinds.
- Give your child washable, "nonallergenic" stuffed toys when possible. Store ordinary toys, dolls, and play equipment outside the bedroom or in the closet.
- Keep the bedroom closet door closed. Vacuum the closet floor often. Store only in-season clothes in the closet.
- Bare floors are best. If you have carpet, vacuum frequently and thoroughly. Vacuum and dust early every day to let dust settle before nap or bedtime. It is best to vacuum when your child is not home or to keep your child in another area of your home for 30 minutes to an hour after vacuuming. Be sure to clean under the furniture and in the closet.
- Mattresses, box springs, and pillows should be in allergen-proof coverings. Zippers or openings should be taped. Use only polyester pillows and wash them several times a year. Bed linens and covers should be washable cotton or synthetic fibers. Avoid using feather, wool, kapok, or foam products.
- Forced-air furnaces should have a dust-filtering system. Filters should be changed every 2 weeks during the heating season. Filters can be cut to cover room vents if the central furnace filters are not changed every 2 weeks. Cold and warm air ducts can be professionally cleaned at least every 4 to 5 years.

Animals

A substance in animal saliva, dandruff, and urine causes allergic reactions in many people. Children may be more sensitive to one type of animal (such as cats) than another. All furred animals have the potential to cause allergic reactions.

Removing a family pet is very difficult, but if your child has significant sensitivity, it may be necessary. Once the pet is removed from the house, animal residue may remain in the house for months. Thorough cleaning is essential. It is especially important to clean stuffed furniture, wall surfaces, rugs, drapes, and the heating/cooling system.

If your child is sensitive to animals and has a pet, the pet should live outside and NEVER be in the child's bedroom.

When should I call the doctor?

- Call the doctor if you think your child has asthma.

- Call the doctor if your child is having difficulty breathing.
- Call the doctor if you have questions or concerns about your child's condition.

Quick Answers

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- Anyone can get asthma, both children and adults.
- A child with asthma has noisy breathing. Normal breathing is quiet.
- Asthma is not contagious.
- Asthma is often treated with medication. Medication helps to both prevent flares and treat symptoms.
- For some, symptoms may improve as the child gets older. For others, symptoms may get worse.
- Avoid things that trigger your child's asthma, such as allergies or certain forms of exercise.
- Call the doctor if you think your child has asthma.

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