# Tips to Grow By A publication of Akron Children's Hospital 

Akron Children's Hospital

## Allergies

Up to 50 million Americans, including millions of kids, have some type of allergy. In fact, allergies account for the loss of an estimated 2 million school days per year.

## About allergies

An allergy is an overreaction of the immune system to a substance that's harmless to most people. But in someone with an allergy, the body's immune system treats the substance (called an allergen) as an invader and overreacts, causing symptoms that can range from annoying to serious or life threatening.

Allergies can be seasonal (happening only at certain times of the year, like when pollen counts are high) or can occur any time someone comes in contact with an allergen.

## Common airborne allergens

Some of the most common things people are allergic to are airborne (carried through the air):

- Dust mites
- Pollen
- Molds
- Pet dander, urine and salivia
- Cockroach feces


## Common food allergens

The American Academy of Allergy, Asthma and Immunology estimates that up to 2 million kids in the United States are affected by food allergies, and that eight foods account for most of those: cow's milk, eggs, fish, shellfish, peanuts, tree nuts, soy and wheat.

## Other common allergens

- Insect stings. For most kids, being stung by an insect means swelling, redness and itching at the site of the bite. But for those with insect venom allergy, an insect sting can cause more severe symptoms.
- Medicines. Antibiotics (used to treat infections) are the most common types of medicines that cause allergic reactions. Many other medicines, prescription and over-the-counter, also can cause allergic reactions. If your child reacts to a medicine, talk to your doctor before assuming the reaction is a sign of allergy.
- Chemicals. Sometimes, cosmetics or laundry detergents can cause an itchy rash. Usually, this is because someone has a reaction to the chemicals in these products. Dyes, household cleaners and pesticides used on lawns or plants also can cause allergic reactions in some people.

Some kids also have what are called cross-reactions. For example, kids who are allergic to birch pollen might have symptoms when they eat an apple because that apple is made up of a protein similar to one in the pollen.

## Signs and symptoms

The type and severity of allergy symptoms vary from allergy to allergy and child to child. Allergies may show up as itchy eyes or an itchy nose, sneezing, nasal congestion, throat tightness, trouble breathing, vomiting and even faintness or passing out. Severe allergic reactions (called anaphylaxis) can be fatal if not treated in time.

## Airborne allergy symptoms

Airborne allergens can cause something known as allergic rhinitis, which occurs in about $7 \%$ to $10 \%$ of Americans. Symptoms can include:

- sneezing
- itchy nose and/or throat
- nasal congestion
- coughing

These symptoms are often accompanied by itchy, watery, and/or red eyes, which is called allergic conjunctivitis. (When dark circles are present around the eyes, they're called allergic "shiners.") Those who react to airborne allergens usually have allergic rhinitis and/or allergic conjunctivitis. Those who have asthma may have wheezing and shortness of breath from airborne allergens.

## Symptoms of food, medicines or insect venom allergies

- wheezing
- trouble breathing
- coughing
- hoarseness
- throat tightness
- stomachache
- vomiting
- diarrhea
- itchy, watery or swollen eyes
- hives
- red spots
- swelling
- a drop in blood pressure, causing lightheadedness or loss of consciousness
Allergic reactions can differ. Sometimes the same person can react differently at different times. Some reactions are mild and involve only one system of the body, like hives on the skin. Other times the reaction can be more severe and


## Allergies (continued)

involve more than one part of the body. A mild reaction in the past does not mean that a future reaction will also be mild.

## About anaphylaxis

Kids with severe allergies (such as those to food, medication or insect venom) can be at risk for a sudden, potentially life-threatening allergic reaction called anaphylaxis. This reaction can be frightening - a child might faint or feel like his or her throat is closing, for example. But when treated properly, anaphylaxis can be managed.

If your child has been diagnosed with a life-threatening allergy, the doctor will want him or her to carry an epinephrine auto-injector in case of an emergency. Epinephrine is a drug injection that enters the bloodstream and works quickly against serious allergy symptoms; for example, it decreases swelling and raises blood pressure. Kids with severe symptoms or reactions to an allergen require an injection of epinephrine and a call to 911 for immediate medical attention.

Anaphylaxis can happen just seconds after being exposed to a triggering substance or can be delayed for up to 2 hours if the reaction is from a food. It can involve various areas of the body.

Fortunately, severe or life-threatening allergies occur in only a small group of kids. Those with asthma or a history of a previous anaphylactic reaction are at greater risk for these severe reactions.

## Diagnosing allergies

To find the cause of an allergy, allergists usually do skin tests for the most common environmental and food allergens. As an alternative test, blood tests may be used in children with skin conditions, those who are on certain medicines or those who are extremely sensitive to a particular allergen.

Even if a skin test and/or a blood test shows an allergy, a child must also have symptoms to be diagnosed with an allergy. For example, a toddler who has a positive test for dust mites and sneezes a lot while playing on the floor would be considered allergic to dust mites.

## Treating allergies

There is no real cure for allergies, but it is possible to relieve symptoms. The only real way to cope with them is to reduce or eliminate exposure to allergens.

If reducing exposure to environmental allergens isn't possible or is ineffective, medicines may be prescribed, including antihistamines (which you can also buy over-thecounter), eye drops and nasal sprays.

In some cases, an allergist may recommend immunotherapy (allergy shots) to help desensitize someone with an allergy. However, allergy shots are only helpful for allergens such as dust, mold, pollens, animals and insect stings. They're not used for food allergies.

Here are some things that can help kids avoid airborne allergens:

- Keep family pets out of certain rooms, like your child's bedroom.
- Remove carpets or rugs from your child's bedroom.
- Don't hang heavy drapes and get rid of other items that allow dust to build up.
- Clean when your child is not in the room.
- Use special covers to seal pillows and mattresses if your child is allergic to dust mites.
- For kids allergic to pollen, keep the windows closed when the pollen season is at its peak, change their clothing and bathe them after they've been outdoors and don't let them mow the lawn.
- Keep kids who are allergic to mold away from damp areas, such as some basements, and keep bathrooms and other mold-prone areas clean and dry.
Kids with food allergies need to completely avoid products made with their allergens. This can be tough as allergens can be found in many unexpected foods and products.

Always read labels to see if a packaged food contains your child's allergen. Manufacturers of foods sold in the United States must state in understandable language whether foods contain any of the top eight most common allergens.

Cross-contamination means that the allergen is not one of the ingredients in a product, but might have contaminated it during production or packaging. Companies are not required to label for cross-contamination risk, though some voluntarily do so. You may see advisory statements such as "May contain...," "Processed in a facility that also processes...," or "Manufactured on equipment also used for ...."

Since products without precautionary statements also might be cross-contaminated and the company simply chose not to label for it, it is always best to contact the company to see if the product could contain your child's allergen.

Cross-contamination also can happen at home or in restaurants when kitchen surfaces or utensils are used for different foods.

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