

# Allergies in Children



*Allergy* describes a condition involving the immune system that causes sneezing and itching, chronic rashes, wheezing, or even life-threatening allergic reactions. Whether minor or serious, there are things you can do to prevent or control most allergic problems. The more you know about allergies—the symptoms, causes, and treatments—the more prepared you will be to help your child. Read on to find out more.

## What is an allergy?

Allergies happen when the part of the body that fights off illnesses (the immune system) overreacts to a usually harmless substance (called an allergen) that is eaten, breathed in, injected, or touched. An allergy is not a disease but a description of a way that the immune system reacts. This allergic reaction can affect different parts of the body, resulting in diseases or conditions such as

- **Anaphylaxis**—a severe and possibly life-threatening allergic reaction.
- **Asthma**—when the airways swell and spasm and cause air passages in the lungs to narrow. This may be triggered by an allergic reaction, although nonallergic triggers can also be the cause (such as an infection or exercise).
- **Contact dermatitis**—an itchy rash caused by skin coming in contact with things like poison ivy or oak and certain chemicals in items like creams, cosmetics, and jewelry.
- **Eczema**—also called *atopic dermatitis*; a chronic, itchy rash.

- **Food allergy**—an allergic reaction to food that can range from stomachache, to skin rash, to a serious medical emergency.
- **Hay fever**—an allergic reaction in the nasal passages causing a runny, itchy, and stuffy nose and sneezing. It can occur at certain times of the year or all year long. Symptoms like itchy, red, and watery eyes often occur along with the nose symptoms.
- **Hives**—itchy welts that may be caused by foods, a virus, medicines, or other triggers.
- **Insect sting allergy**—potentially severe reactions from the stings of yellow jackets, wasps, fire ants, or other stinging insects.
- **Medication allergy**—symptoms such as rashes or more severe problems from various prescription or nonprescription medicines or vaccines.

## What causes allergies?

Children get allergies from coming into contact with allergens. Allergens can be inhaled, eaten, or injected (from stings or medicine) or they can come into contact with the skin. Some of the more common allergens are

- Pollens from trees, grasses, and weeds
- Molds, both indoor and outdoor
- Dust mites that live in bedding, carpeting, and other items that hold moisture
- Animal dander from furred animals such as cats, dogs, horses, and rabbits
- Some foods and medicines
- Venom from insect stings

## What is anaphylaxis?

*Anaphylaxis* is a serious allergic reaction. It comes on quickly and can be fatal. Your child will need to be treated right away followed by a call to 911 or your local emergency number.

### How it's treated

The main medicine used to treat anaphylaxis is *epinephrine*. Your child's pediatrician will need to prescribe it. If your child has had anaphylaxis or is at high risk, epinephrine should be kept on hand at all times. Children who are old enough can be taught how to give themselves epinephrine if needed. The medicine comes in auto-injector syringes (EpiPen or Twinject) to make this easier. Children at risk should have this medicine at school with instructions from their pediatrician or allergist about how and when to use it. Antihistamines like Benadryl are secondary to epinephrine and should not be relied on to treat anaphylaxis.

### Symptoms

Anaphylaxis includes a wide range of symptoms often happening quickly. The most common symptoms may affect the following:

- **Skin**—itching, hives, redness, swelling
- **Nose**—sneezing, stuffy nose, runny nose

- **Mouth**—itching, swelling of lips or tongue
- **Throat**—itching, tightness, trouble swallowing, hoarseness
- **Chest**—shortness of breath, cough, wheeze, chest pain, tight feeling
- **Heart**—weak pulse, passing out, shock
- **Gut**—vomiting, diarrhea, cramps
- **Nervous system**—dizziness, fainting, feeling that you are about to die

### Causes

The following are the most common allergens that can trigger anaphylaxis:

- **Foods**, especially peanuts, tree nuts (such as almonds, Brazil nuts, cashews, pecans, and walnuts), shellfish, fish, milk, and eggs. In rare cases, anaphylaxis may be related to a certain food followed by exercise.
- **Insect stings** such as from bees, wasps, hornets, yellow jackets, or fire ants.
- **Medicines** such as antibiotics and anti-seizure medicines. However, any medicine, even aspirin and other nonsteroidal anti-inflammatory drugs, has the potential to cause severe reactions.

Allergies tend to run in families. If a parent has an allergy, there is a higher chance that his or her child also will have allergies. This risk increases if both parents are allergic.

## How can I tell if symptoms are from allergies or a cold?

### Allergies affecting the nose can result in the following symptoms:

- An itchy, runny nose with thin, clear nasal discharge and/or a stuffy nose
- Itchy, watery eyes
- Repeated sneezing and itching of the nose, eyes, or skin that last for weeks or months
- No fever
- Often seasonal (for example, spring, summer, fall before frost)

Although nasal allergies can sometimes cause sleepiness, usually children with nasal symptoms caused by allergies do not “act sick.”

### Cold symptoms include

- Stuffy nose
- Nasal discharge that is clear or colored and thick that lasts 3 to 10 days, with or without fever, usually at times of the year such as the “cold and flu” season
- Occasional sneezing
- Feeling sick, tired, or listless and having a poor appetite

## When do allergic symptoms in children first show up?

Some allergic conditions show up early in life. For example, eczema often occurs in the first few years of life while hay fever usually appears during preschool or early grade school. For some children, allergies lessen around the time of puberty. Others will continue to have problems into adult years.

## Do drug treatments help?

There are many medicines to treat allergic conditions. Medicines include antihistamine pills or syrup, eyedrops, nose sprays, asthma treatments, and creams or ointments. Some are available over the counter. These medicines can help relieve symptoms such as itching, sneezing, congestion, runny nose, wheeze, cough, and rashes and asthma. Allergy medicines may have minor side effects such as sleepiness or irritability. Before using any allergy medicines, care-fully read the warnings on the label. If any of these medicines does not relieve your child’s symptoms or if the side effects are too strong, call your pediatrician. Your child may need a different medicine or dose. Although medicines can be helpful, it is also important to identify allergy triggers and remove them when possible.

## Common allergic conditions

Condition	Triggers	Symptoms
<b>Anaphylaxis</b>	Foods, medicines, insect stings, latex, and others	Skin, gut, and breathing symptoms that may get worse quickly. Severe symptoms could include trouble breathing and poor blood circulation.
<b>Asthma</b>	Cigarette smoke, viral infections, pollen, dust mites, furry animals, cold air, changing weather conditions, exercise, airborne mold spores, and stress	Coughing, wheezing, trouble breathing (especially during activities or exercise); chest tightness
<b>Contact dermatitis</b>	Skin contact with poison ivy or oak, latex, household detergents and cleansers, or chemicals in some cosmetics, shampoos, skin medicines, perfumes, and jewelry	Itchy, red, raised patches that may blister if severe. Most patches are found at the areas of direct contact with the allergen.
<b>Eczema (atopic dermatitis)</b>	Sometimes made worse by food allergies or coming in contact with allergens such as pollen, dust mites, and furry animals. May also be triggered by irritants, infections, or sweating.	A patchy, dry, red, itchy rash in the creases of the arms, legs, and neck. In infants it often starts on the cheeks, behind the ears, and on the chest, arms, and legs.
<b>Food allergies</b>	Any foods, but the most common are eggs, peanuts, milk, nuts, soy, fish, wheat, peas, and shellfish	Vomiting, diarrhea, hives, eczema, trouble breathing, and possibly a drop in blood pressure (shock)
<b>Hay fever</b>	Pollen from trees, grasses, or weeds	Stuffy nose, sneezing, runny nose; breathing through the mouth because of stuffy nose; rubbing or wrinkling the nose and face to relieve nasal itch; watery, itchy eyes; redness or swelling in and under the eyes
<b>Hives</b>	Food allergies, viral infections, and medicines such as aspirin or penicillin. Sometimes the cause is unknown.	Itchy skin patches, bumps (large and small) commonly known as welts that are more red or pale than the surrounding skin. Hives may be found on different parts of the body and do not stay at the same spot for more than a few hours.
<b>Insect sting allergy</b>	Primarily aggressive stinging insects such as yellow jackets, wasps, and fire ants	Anaphylaxis
<b>Medication allergy</b>	Various types of medicines or vaccines	Itchy skin rashes, anaphylaxis

## When does my child need to see an allergist?

In some cases, your pediatrician may recommend that you see a board-certified allergist, a doctor who specializes in allergies. The allergist will most likely

- Look for triggers for your child's allergy.
- Suggest ways to avoid the cause of your child's symptoms.
- Give you a treatment plan to follow.

## What are allergy shots?

Allergy shots, also called *immunotherapy*, may be recommended. These shots contain small amounts of the substances to which your child is allergic. This allows your child's body to become less sensitive to these substances. Allergy shots can help decrease symptoms of hay fever and asthma and prevent anaphylaxis from insect sting allergies. However, they are not available for food allergies.

## How can I help my child?

Identifying and avoiding the things your child is allergic to is best. If your child has an allergic condition, try the following:

- Keep windows closed during the pollen season, especially on dry, windy days when pollen counts are highest.
- Keep the house clean and dry to reduce mold and dust mites.
- Avoid having pets and indoor plants.
- Avoid those things that you know cause allergic reactions in your child.
- Prevent anyone from smoking anywhere near your child, especially in your home and car.
- See your pediatrician for safe and effective medicine that can be used to help alleviate or prevent allergy symptoms.

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The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

## From your doctor

