

Guide to Environmental Allergies

What are allergies?

- Allergies are reactions that are usually caused by an overactive immune system in response to a normally harmless substance, such as pollen or animal dander.
- These reactions can occur in a variety of organs in the body, resulting in diseases such as asthma, hay fever, and eczema.
- Allergies and asthma typically start in childhood and are the most common chronic diseases among children in the U.S.
- If one parent or sibling has allergies, there is a 25% chance that a child/sibling will as well.
 - This risk more than doubles to 60% to 70% if both parents have allergies. The child, however, will not necessarily be allergic to the same substances or always show the same type of allergic disease.

Common Triggers

- Outdoors:
 - Tree or grass pollen
 - Plant pollen
 - Ragweed
 - Insect bites or stings
- Indoors:
 - Pet or animal dander, fur, or saliva
 - Dust mites
 - Mold

Signs and Symptoms

Eyes, Ears, Nose, Mouth

- Red, teary, or itchy eyes
- Puffiness around the eyes
- Sneezing
- Runny nose
- Itchy nose, nose rubbing
- Postnasal drip
- Nasal swelling and congestion
- Itchy ear canals
- Itching of the mouth and throat

Lungs

- Hacking dry cough or cough that produces clear mucus
- Wheezing (noisy breathing)
- Feeling of tightness in the chest
- Low exercise tolerance
- Rapid breathing; shortness of breath

Skin

- Eczema (patches of itchy, red skin rash)
- Hives (welts)

Intestines

- Cramps and intestinal discomfort
- Diarrhea
- Nausea or vomiting

Miscellaneous

- Headache
- Feelings of restlessness, irritability
- Excessive fatigue

Allergy Symptoms	Cold Symptoms
Symptoms can develop immediately after exposure to you allergy trigger	Symptoms develop slowly and are milder at the beginning
Clear, watery,runny nose. Nose and eyes may also be itchy.	Runny nose that starts clear and becomes thick and colored. Patient may also have a mild fever and sore throat.
Symptoms can last more than 2 weeks or be recurrent	Lasts 7-10 days
Symptoms can appear at the start of the season (like Spring)	Symptoms can appear at any time.

Management

- An important step in finding the right treatment is knowing what your child is allergic to. Allergy testing should be performed to determine whether your child is allergic to any environmental allergens.
- One effective step in managing allergy symptoms is avoidance of the allergens that trigger the symptoms. Follow the tips in this handout to help limit exposure to common allergens.
- Some children may require medications to help manage the symptoms.
 - Antihistamines (i.e., Zyrtec, Claritin, Benadryl) - block histamine, which is the main chemical that causes common allergy symptoms.
 - Taken by mouth; help with itchy watery eyes, runny nose, and sneezing, as well as itchy skin and hives; some types (i.e., Benadryl) cause drowsiness. (see next page for dosing of common antihistamines.)
 - Nasal Corticosteroids (i.e., Flonase) - highly effective for allergy symptom control and widely used to stop chronic symptoms; must be used daily for maximal effectiveness.
 - Eye drops (i.e., Zaditor, Pataday)

Tips for Outdoor Triggers

- Allergy symptoms may be worse on hot, dry, windy days and milder on rainy, cloudy, and windless days.
- Avoid being outside in the morning when pollen counts are typically high.
- For patients with grass pollen allergy, remaining indoors when the grass is mowed and avoiding playing in fields of tall grass may be helpful during grass pollen season. See the pollen seasons below.
 - Tree pollen - highest until about Memorial Day
 - Grass Pollen - highest until about Labor Day
 - Ragweed Pollen - highest until about the first frost of the season
 - **If there is a mild winter, the trees may pollinate earlier.
- Showering at the end of the day to remove allergens from body surfaces and hair can also be helpful. Change clothes after being outside.
 - To cleanse on the go, consider using face wipes to remove particles as small as pollen, dust, dirt, and other impurities.
- Children with allergies to molds should avoid playing in piles of dead leaves in the fall.
- Pets tracking in and out of the house can also bring pollen and mold indoors.
- Keep house and car windows closed. Use air conditioners and air purifiers.
- Don't hang clothes outside to dry.
- If any rugs or carpets, ake sure to clean regularly.

Tips for Indoor Triggers

- Dust Mites:
 - Dust mites congregate where moisture is retained, and food for them (human skin scales) is plentiful. They are especially numerous in bedding, upholstered furniture, and rugs.
 - Padded furnishings such as mattresses, box springs, and pillows should be encased in allergen-proof, zip-up covers.
 - Wash linens weekly and other bedding, such as blankets, every 1 to 2 weeks in hot water. (The minimum temperature to kill mites is 130 degrees Fahrenheit. If you set your water heater higher than 120 degrees, the recommended temperature to avoid accidental scald burns, take care if young children are present in the home.)
- Pet Dander:
 - Pet allergies are usually caused by cats and dogs. Symptoms are typically triggered by pet dander (found in the skin) or saliva.
 - Minimize contact with pets and keep them out of the bedrooms.
 - Vacuum your carpets regularly and avoid upholstered furniture.
- Mold
 - Indoor mold and mildew live on damp indoor surfaces.
 - Clean mold growth that can develop in areas such as shower curtains, on walls in the bathroom, around the sink and countertops, and water-damaged carpet.
 - Fix leaky pipes.



Antihistamine Medication Dosing

If using allergy medicine that is not listed below, or store brand medications, please follow the dosing on the package.

Zyrtec (Cetirizine) Dosing

Age	Liquid (1mg/mL)	Chewable (2.5 mg)	Chewable (10mg)	Dissovable Tablets (10mg)
< 2 years	Ask Doctor	Ask Doctor	Ask Doctor	Ask Doctor
2-6 years	2.5 mL	1 tablet	Ask Doctor	Ask Doctor
6-12 years	5-10 mL*	2-4 tablets*	1 tablet	1 tablet

*Depends on symptoms severity

Claritin (Loratidine) Dosing

Age	Liquid (5mg/5mL)	Chewable (5 mg)	Chewable (10mg)	Dissovable Tablets (10mg)
< 2 years	Ask Doctor	Ask Doctor	Ask Doctor	Ask Doctor
2-6 years	5 mL	1 tablet	Ask Doctor	Ask Doctor
6-12 years	10 mL	2 tablets	1 tablet	1 tablet

Benadryl (Diphenhydramine) Dosing

Weight	Children's Liquid (12.5mg/5mL)	Children's Chewable Tablets (12.5 mg)	Tablets (25 mg)	Capsules (25 mg)
20-24 lbs	4 ml			
25-37 lbs	5 ml	1 tablet	½ tablet	
38-49 lbs	7.5 ml	1 ½ tablets	½ tablet	
50-99 lbs	10 ml	2 tablets	1 tablet	1 capsule
>100 lbs		4 tablets	2 tablets	2 capsules

