



## Pediatric Allergy and Hay Fever

### Insight Into Causes, Treatment, And Prevention

Forty-five million Americans suffer from a recurring problem called allergy. Allergic rhinitis was once known as hay fever because workers would sneeze and develop nasal and sinus congestion when they worked around hay in the fields. Hay fever, asthma, and eczema are the most common symptoms of an allergic reaction.

Allergy symptoms appear when the body's immune system begins to respond to a substance as though it were a dangerous invader (called an antigen or allergen). It does this by sending specific defenders called antibodies to the entry site. The battle between allergen and antibody results in a release of chemical mediators, such as histamine, into the bloodstream. Those chemical mediators cause changes in the body, which produce the symptoms that we feel.



Symptoms that may be caused by allergy are itching eyes, sneezing, nasal stuffiness, nasal congestion and drainage, and sometimes headache. Some people experience hearing changes, scratchy sore throats, hoarseness, and cough. Other less common symptoms include balance disturbances, swelling in face or throat tissues, skin irritations, and even respiratory problems and asthma.



Some allergy sufferers experience symptoms all year. Others find certain seasons bring on attacks. Allergy symptom control is most successful when multiple management approaches are used simultaneously. Minimizing exposure to allergens, managing symptoms with medications, and desensitization with allergy shots are all methods that can be useful in controlling allergic symptoms.

Medications properly used can be very helpful. Over the counter drugs can be beneficial, but some cause drowsiness. Sometimes prescription medications offer the best chance for good control.

Immunotherapy, or allergy shots, provide the only treatment method that can offer lasting relief or cure from allergies. Before beginning a series of such shots, allergy testing must be performed.

### Beware Of The Allergens

Anything can be an allergen. Some substances, because of their chemical make-up, are more prone to generate an allergic response in humans. Pollens, food, mold, dust, feathers, animal dander, chemicals, drugs such as penicillin, and environmental pollutants commonly cause many to suffer allergic reactions.

Hay fever is caused by pollens. The most significant cause of hay fever in the United States is ragweed. It begins pollinating in late August and continues until the first frost. Late springtime pollens come from the grasses, i.e., timothy, orchard, red top, sweet vernal, Bermuda, Johnson, and some bluegrasses. Early springtime hay fever is most often caused by pollens of trees such as elm, maple, birch, poplar, beech, ash, oak, walnut, sycamore, cypress, hickory, pecan, cottonwood, and alder.

Certain allergens are always present. These include house dust, household pet danders, foods, wool, various chemicals used around the house, and more. Symptoms from these are frequently worse in the winter when the house is closed up. Mold spores cause at least as many allergy problems as pollens.

Molds are present all year long, and grow outdoors and indoors. Dead leaves and farm areas are common sources for outdoor molds. Indoor plants, old books, bathrooms, and damp areas are common sources of indoor mold growth. Molds are also common in foods, such as cheese and fermented beverages.

Colorful or fragrant flowering plants rarely cause allergy because their pollens are too heavy to be airborne.

### Can Allergies Be Serious?

Allergies are rarely life threatening, but often cause lost workdays, decreased work efficiency, poor school performance, and less enjoyment of life. It is common for allergy sufferers to develop sinus or respiratory infections if allergy symptoms are not controlled. Considering the millions of dollars spent in anti-allergy medications and the cost of lost work time, allergies cannot be considered a minor problem.

### Treatment and Prevention

A number of medications are useful in the treatment of allergy including antihistamine, nasal decongestant sprays, steroid sprays, and saline sprays. The medical management of allergy also includes counseling in proper environmental control. Based on a detailed history and thorough examination, your doctor may advise testing to determine the specific substances to which you are allergic.

Medicine	Symptoms	Possible Side Effects
Antihistamines	Sneezing, runny nose, stuffy nose, itchy eyes, congestion	Drowsiness, dry mouth and nose
Decongestants	Stuffy nose, congestion	Stimulation, insomnia, rapid heart beat
Steroid sprays	Sneezing, runny nose, stuffy nose, itchy eyes, congestion	Headaches, throat irritation and nasal bleeding
Combinations	All of the above	Any of the above

The treatments employed will depend on the materials to which you are allergic and the degree of your sensitivity to them. The only "cure" available for inhalant allergy is the administration of injections that build up protective antibodies to specific allergens (pollens, molds, animal danders, dust, etc.). We will oversee your progress and care for any other nasal and sinus disorders that may contribute to your symptoms.

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