

Hay Fever

What is HAY FEVER?

The term hay fever is a misnomer. First of all, it is not caused by hay, and secondly it does not produce fever! But it does produce stuffed-up, runny/itchy nose and eyes, sneezing, itchy throat, and excess mucus in the nose and throat. And it is caused by allergy to airborne particles that are inhaled.

And summer colds are not colds in the usual sense of the word (e.g. virus infections). Instead, they are, like hay fever, allergies to airborne particles. Hay fever and summer colds are common terms for the medical condition known as allergic rhinitis. (Rhinitis means inflammation of the nose.)

More than 14 million Americans suffer from allergic rhinitis. For some it is a mere nuisance. But for others, it is debilitating. It interferes with work and recreation, and it significantly detracts from the quality of their lives.

What Causes ALLERGY?

When a plant or animal substance, which is foreign to the human, invades the body (through the membranes of the eyes, nose or throat) an immune reaction occurs which is intended to counteract such invasion. Under ordinary circumstances that is a helpful, natural protection. However, some individuals exhibit an exaggerated inflammatory response to certain substances. Those substances are termed allergens, and those persons are called allergic. It is a trait that tends to run in families.

The allergens stimulate the body to form sensitizing antibodies which then combine with the allergens, and the combination causes the body to release a number of chemicals that produce undesirable effects. Histamine is the best known of those chemicals; it causes swelling of the nasal membranes, itching, irritation and excess mucus production.

What Allergens Cause RHINITIS?

Particles of plant or animal protein that are small enough and light-weight enough to be carried through the air can be deposited on to membranes of our eyes, nose and throat. Common sources of such particles are pollens, mold spores, animal danders, and house dust.

What Pollens Cause Trouble?

Early springtime hay fever is most often caused by pollens or common trees such as elm, maple, birch, poplar, beech, ash, oak, walnut, sycamore, cypress, hickory, mountain cedar, pecan, cotton-wood and alder. Late springtime pollens come from the grasses, i.e. timothy, orchard, red top, sweet vernal, Bermuda, Johnson and some bluegrasses. Colorful or fragrant flowering plants rarely cause allergy, because their pollens are too heavy to be airborne. They rely on insects (bees and butterflies) to carry their pollens from one plant to another. Therefore the term rose fever is another misnomer.

The most significant hay fever producing pollen in the United States comes from ragweed. It begins pollinating in late August and continues through September, even into October or until the first frost. Other allergenic weeds of lesser importance also pollinate in this season.

What About MOLDS?

Molds are fungi which spoil bread, rot fruit, and mildew clothing. They also grow on dead leaves, grass, hay, straw, grains, and on other plants and in the soil. Since they are not killed by frost, the mold allergy season is long and mold spores may be in the outside air all year except when snow covers the ground.

Indoors, molds grow on houseplants and in their soil. They also grow in damp places such as basements and laundry rooms, and molds can also be found in cheeses and fermented alcoholic beverages.

What About Year-Round HAY FEVER?

Allergens that are present through all seasons include animal danders (cats, dogs, horses and other pets, wool and feathers), cosmetics, molds, foods and house dust. House dust is a complex mixture of disintegrating cellulose (furniture stuffing), molds, danders (i.e. from household animals) and insect parts and small mites. Allergies that become worse in wintertime, when the hot air furnaces are turned on, are usually due to house dust.

Can Allergies Be Serious?

Allergic persons have a decreased resistance to colds, "flu," sinus infections and ear infections. Furthermore, they are more uncomfortable with such infections than people without allergies, and even more seriously, they may also develop asthma.

What Can You Do?

Ideally, you would choose to live away from where your allergies occur, i.e. on some beach where you breathe only sea breezes or in an extremely dry climate where almost nothing can grow. Unfortunately such ideas are rarely practical, but the following self-help suggestions may be worth trying.

- 1. Wear a pollen mask** when mowing grass or houses cleaning (most drugstores sell such masks).
- 2. Change air filters monthly** in the heating and air conditioning system, or install an air purifier.
- 3. Keep windows and doors closed** during heavy pollination seasons.
- 4. Rid home of indoor plants including mildew and animals which produce dander.**
- 5. Change feather pillows, woolen blankets and woolen clothing** to cotton or synthetic materials such as Dacron
- 6. Enclose mattress and box springs** in plastic "barrier" cloth.
- 7. Use antihistamines and decongestants** as necessary and as tolerated (see pamphlet entitled "Antihistamines, Decongestants & Cold Remedies")
- 8. Sleep with head of bed tilted upwards.** Place a brick or two under bedposts at head of bed.
- 9. Observe general good health practices:**

- a. **Exercise** daily.
- b. **Stop smoking** and avoid other air pollutants.
- c. Eat a **balanced diet**, minimizing carbohydrates.
- d. Supplement diet with **vitamins**, especially

10. Seek your physician's advice.

11. Consider a good humidifier in the winter as dry indoor heat aggravates many allergic people, but beware of possible mold growth in the humidifier.

What can Doctors do for you?

Your otolaryngologist will perform a complete examination of your ears, nose, throat, head and neck. Careful evaluation of the nose and sinuses will enable him to determine if infection or structural abnormality (deviated nasal septum, polyps) are contributing to your symptoms, and render proper treatment for such complicating factors.

A number of medications are useful in the treatment of allergy, and your physician will choose those best suited for your situation, including antihistamines, decongestants, cromolyn and cortisone-type preparations. The medical management of suspected allergy also includes counseling in proper environmental control. Finally, based on a detailed history and thorough examination, your specialist may advise testing to determine the specific substances to which you are allergic.

The only "cure" available for inhalant allergy is the administration of injections which build up protective antibodies to specific allergens (pollens, molds, animal danders, dust). This must be preceded by identification of the specific causes of your sensitivity. Allergy testing can be done using either skin tests or blood tests. The methods employed by modern otolaryngologists will indicate not only the materials to which you are allergic, but the degree of your sensitivity to them. This allows allergy injections, if they are necessary, to be started at the highest safe dosage, shortening the time required for benefits to become apparent.

Allergy injections may produce identifiable symptom improvement within a few weeks of starting therapy, but must be continued on a regular basis for three to five years to afford a more permanent relief. Your otolaryngologist can give you more specific details of an expected treatment schedule based on your circumstances. Although allergy injections produce improvement in allergic symptoms, the use of various medications will continue to be necessary if the patient is exposed to large amounts of allergen, or if complicating factors occur. Thus, your physician will monitor your progress throughout the course of your treatment, as well as caring for any other nasal and sinus disorders which may contribute to your symptoms.