Allergic rhinitis is an inflammation of the mucous membranes that occurs when allergens touch the lining of the nose. It is characterized by sneezing, congestion, itching and dripping of the nose and itchy, watery eyes. Common allergens associated with allergic rhinitis are dust mites, pollens from weeds, grasses and trees, animal dander and molds.

Allergic rhinitis may be seasonal or perennial. When symptoms are worse during warmer months, they are likely triggered by pollens and/or molds and indicate a case of seasonal allergic rhinitis. Seasonal allergic rhinitis, sometimes referred to as hay fever, affects more than 35 million Americans. People who suffer from perennial rhinitis have symptoms year-round, usually triggered by dust mite and cockroach droppings, indoor molds and/or animal dander.

### **Causes of Allergic Rhinitis**

Chemical substances, such as histamine, are normally stored in mast cells found in tissues of the body, including the nose, eyes and skin. Allergic people form antibodies, called IgE, against pollens and other allergens. The antibodies attach to mast cells and combine with the allergen to cause the release of histamine and other chemicals from the mast cells. These chemical substances cause the allergic responses of itching, sneezing, congestion and dripping nose.

Allergic rhinitis often appears before the age of 20 but may be diagnosed as early as the first year of life, particularly if there is a history of maternal allergy or if the mother is a heavy cigarette smoker.

#### **Diagnosis and Treatment**

An allergist will take a thorough patient history and conduct skin testing to determine which specific allergens are triggering reactions. Once someone is aware of the substances causing their symptoms, avoidance of triggers is very important. Although complete avoidance is usually impossible, there are steps patients can take to control their environment and reduce exposure to allergens. Depending on the patient's allergies, control measures may include using air conditioning, encasing pillows and mattresses in allergen-proof covers and removing furry pets from the home. An allergist may prescribe a nose spray, oral medications such as nonsedating antihistamines, decongestants or inhaled medications such as corticosteroids or bronchodilators to relieve symptoms. If symptoms continue, immunotherapy, also called allergy vaccines or shots, may be a treatment option. This involves periodic injections of small amounts of allergen over a period of three to five years in an effort to make the immune system more resistant to specific allergens and lessen the need for medications.

More ····→



# Allergic Rhinitis continued

## Allergies vs. Colds

Many people may not realize they have allergies, often attributing their congestion and runny nose to a cold. Left untreated, allergies can cause more serious conditions like sinusitis or ear infections. It is important to decipher between allergies and colds:

	Allergies	Colds
Symptoms	Runny nose with thin, watery dis- charge; sneezing; congestion; wheezing; itchy nose, throat and eyes.	Runny nose with watery to thick yellow discharge; sneezing; low grade fever; weakness and fatigue.
Onset	Symptoms begin almost immediately after exposure to allergen(s). If seasonal allergies, symptoms occur at the same time every year. If perennial allergies, symptoms are present year- round.	Symptoms develop within one to three days of exposure to the cold virus.
Duration	Symptoms last as long as you are exposed to the allergen.	Five to seven days.

## **Allergic Rhinitis Statistics**

- At least 35.9 million people in the United States have seasonal allergic rhinitis (hay fever). Nathan, R.A., Meltzer, E.O., Selner, J.C., Storms, W. "Prevalence of Allergic Rhinitis in the United States." Journal of Allergy and Clinical Immunology (1997) 99:S808-14.
- Over eight million visits to office-based physicians each year are attributed to allergic rhinitis. United States. Centers for Disease Control and Prevention. National Center for Health Statistics. <u>Advance Data 195</u>. 1996.
- Immunotherapy is ultimately successful in up to 90% of patients with seasonal allergic rhinitis, and in 70 to 80% with perennial allergic rhinitis. Fireman, P. "The Most Common Allergy: Allergic Rhinitis." *The Allergy Report 1998*; <u>Discover Magazine</u> (March 1998) S-13-14.
- In 1993, it was estimated that the total cost associated with allergic rhinitis in the United States was \$3.4 billion, of which \$2.3 billion represents medications and \$1.1 billion represents physician billing. Storms, W., Meltzer, E., Nathan, R., Selner, J. "The Economic Impact of Allergic Rhinitis." Journal of Allergy and Clinical Immunology (1997) 99:S820-4.
- It is estimated that in 1998, increased absenteeism and reduced productivity due to allergies cost U.S. companies more than \$250 million. Hewitt Associates LLC. <u>The Effects of Allergies in the Workplace.</u> 1998.