



## ALLERGIC RHINITIS

### What is allergic rhinitis?

Allergic rhinitis refers to the swelling of the inside lining of the nose that occurs when individuals inhale substances they are allergic to (allergens). Exposure to various allergens triggers an immune response which leads to swelling in the mucosal tissues of the nose. Allergic rhinitis is one of the most common illnesses that affects adults and is the most common long-lasting illness in children. Other terms for allergic rhinitis include “seasonal allergic rhinitis” or “hay fever.”

### What causes allergic rhinitis?

Allergic rhinitis is an inflammatory pathway that is triggered by exposure to various allergens. When an individual with allergic rhinitis becomes exposed to various allergens, such as pollen, mold, animal dander, dust, and many other environmental substances, this inflammatory pathway is activated leading to a variety of symptoms. Family history of allergic rhinitis may increase the likelihood of developing allergies.

### What are the symptoms of allergic rhinitis?

Individuals with allergic rhinitis may experience symptoms including the following:

- Frequent sneezing
- Nasal obstruction, runny/itchy nose
- Redness or itchy/watery eyes
- Itching of the throat, mouth, or ears

These symptoms may differ in degree according to the individual, and symptoms may occur at different times of the year depending on the allergen. For example, people who are sensitive to tree pollen may suffer in early spring when trees produce pollen, people who are sensitive to pollens produced by grasses may suffer in late spring/early summer when most grasses are pollinating, and people who are sensitive to ragweed may suffer in late fall.

### What causes the reaction?

“Sensitivity” is the term used to describe the process by which you develop an allergy. Sensitivity is established when the tissues that form antibodies (lymphoid tissues) are stimulated to make specialized antibodies to otherwise harmless pollens, dander, dust, etc. These antibodies attach to other specialized cells in the body that contain powerful defensive substances like histamine. When the individual is later exposed to the allergen, the antibodies trigger the cells to secrete their defensive substances. This release causes dilation of blood vessels, increased secretion of fluids, swelling of tissues, itching, sneezing, and other reactions.

### How can I manage my allergic rhinitis?

- Minimizing exposure to substances that cause a reaction is the best way to control allergic rhinitis. Using air conditioning and air purifying devices may help cut down on suffering during the allergy season. Those with allergies to pet dander should avoid pets, especially in the bedroom. Dust masks can be used during outdoor work if the work cannot be avoided.
- Oral antihistamines (e.g. Claritin, Allegra, Zyrtec, Benadryl) are medications that work to counteract the histamine released by the allergen-antibody reaction.
- Over-the-counter steroid nasal sprays (e.g. Flonase or Nasacort) work topically to decrease the inflammation caused by exposure to allergens and the release of histamine.
- Oral decongestants (e.g. Sudafed) may help, as well, to reduce inflammation caused by exposure to allergens, but care should be taken in patients with high blood pressure.
- For some, immunotherapy (allergy shots) may be recommended.