# **Allergic Rhinitis**

## What is allergic rhinitis?

Allergic rhinitis is an allergic reaction of the lining of the nose. Seasonal allergic rhinitis is also called hay fever.

#### How does it occur?

Allergic rhinitis occurs when the nose and usually also the ears, sinuses, and throat come into contact with allergy-causing substances. The allergy-causing substances are called allergens. The most common allergens are pollens, molds, dust, and animal dander. Some allergens are present only during certain seasons for example, ragweed in the fall. Others are present year-round, for example, mold and dust.

When the lining tissues of the nose and sinuses come into contact with allergens, a chemical called histamine is released from cells in these tissues. Histamine causes the nose lining to swell, itch, and produce excess mucus.

## What are the symptoms?

Common symptoms of allergic rhinitis are

- Itchy, runny nose
- Sneezing
- Nasal and head congestion
   Other possible symptoms include
- Fatigue and lethargy
- Itchy throat
- Postnasal drainage

## How is it diagnosed?

Your medical history is usually the basis for the diagnosis of allergic rhinitis. Knowledge of a family history of allergic problems is also helpful. However, it may take some detective work to figure out exactly what you are allergic to.

Your health care provider may swab the lining of your nose to obtain a sample of mucus. About 50% of people with allergies have cells in their mucus that indicate allergy.

Tests for specific allergies may be performed. For most people the best tests are skin scratch or prick tests. In these tests your health care provider or allergy specialists places tiny amounts of suspected allergens under your skin and looks for reactions. These allergy tests will identify which of many possible allergens are causing your symptoms. In some cases blood tests may be done to look for antibodies or suspected allergens.

Because allergy tests are expensive, your health care provider will probably recommend that you try treating your symptoms with medication first. If medications do not control your symptoms, allergy testing may be needed.

### How is it treated?

The first principle of allergy treatment is to avoid the allergy-causing substance. Air conditioners and special filters can minimize the amount of pollen and mold that circulates indoors. Try not to use an attic fan if you are allergic to pollen. Putting plastic covers on mattresses may help you avoid dust and mold. Pillows may also be covered with plastic. Look for "hypoallergenic" pillows/comforters.

Antihistamines may relieve many hay fever symptoms by inhibiting the action of histamine on nasal and eye tissues. When a person first starts to take these medications they often cause drowsiness, but this usually goes away after a day or two of taking antihistamines on a regular basis. It can be helpful to **take these medications at night**. If drowsiness continues, then using a newer antihistamine is recommended. Be careful not to drive or operate dangerous machinery until you know how you are affected by an antihistamine. Of note, antihistamines can thicken the mucus in your nose. If you have a bacterial sinus infection, rather than an allergy, your doctor may not want you to take your antihistamine because we want the infected pus to drain from your nose.

Nasal decongestants act to decrease the swelling of the nasal tissue and the resulting feeling of stuffiness. Oral decongestants may cause sleeplessness and jitteriness. Topical nasal decongestants cause "rebound" congestion and irritation of the nasal passages if used more than 2-3 days. This means the stuffiness returns, but the nose spray doesn't help as much. Often, antihistamines are given with a decongestant (pseudophed). These will have the name of the antihistamine plus "-D" (ie. Allegra-D, Claritin-D, Zyrtec-D, etc...).

**Nasal corticosteroids** (Nasonex, Veramyst, Omnaris) are effective in treating allergic symptoms and are best used locally to minimize side effects. It often takes several days to become effective. Corticosteroids are not related to androgenic steroids sometimes taken by athletes.

**Eye drops** (Naphcon-A, Opcon-A, Vasocon-A): Antihistamine decongestant eye drops act similarly to oral preparations and given quick relief of allergic symptoms of red, itchy, watery eyes.

Saline (salt water) nose rinses are often helpful in relieving nasal symptoms. You may purchase these already mixed (Entsol, Simply Saline) or you may make your own by mixing 1 cup of distilled water or boiled water, 1/2 teaspoon salt, and a pinch of baking soda. Use with a neti-pot or other nasal device. Try to get the saline into the nooks and crannies of your paranasal sinuses. Discard the home-made solution after twenty-four hours because it contains no preservative.