

Wheezes & Sneezes

What are respiratory allergies?

Respiratory allergies are when a substance in the environment triggers your immune system. We call these triggers **antigens**, which stands for **antibody generator**.

Antigens bind to a special type of white blood cell called a Mast Cell, which then releases inflammatory factors and causes local symptoms.

Mast Cells overreact when they come into contact with the antigen, and they become sensitive to it.

What are the symptoms?

Symptoms vary depending on where the Mast Cell releases the inflammatory factors

They can include:

- Itchy, watery eyes
- Itchy nose
- Watery nose
- Cough
- Postnasal drip
- Shortness of breath
- Wheezes
- Itching or hives
- Repeated sinus infections

Did you know anyone can develop allergies at any age?

Allergies usually start after the age of 2, but they can happen any time after that.



What does it mean when Mast Cells 'overreact'?

It means the Mast Cells think the allergen is a bacteria and are trying to kill it. To do this, they will release inflammatory factors and cause symptoms such as itching, pain, swelling, mucus buildup, wheezing and shortness of breath.

While your immune system is distracted, bacteria can sometimes use this opportunity to grow in the sinuses and cause a secondary infection.

What are common antigens?

Common antigens include dust mites, animal dander, tree pollen, grass, and molds.

How do I get treated?

Options for treatment include inhibiting the inflammatory factors released, which is done by drugs like antihistamines and leukotriene inhibitors. Various nasal sprays and eye drops help decrease the symptoms in the nose and eyes. Inhalers may help decrease the symptoms in the throat.

Is there a cure for these allergies?

Immunotherapy is an option that tries to retrain the Mast Cell so it stops overreacting. One option is commonly called allergy shots, or allergen immunotherapy, in which a little amount of the antigen is added over time so your immune system slowly adapts. Another is sublingual immunotherapy, or allergy drops. These may be the only options for those in whom the medications don't work.

Allergies require special training to create shots and drops, and each patient receives a customized treatment plan, so you'll want to see a specialist for your allergies.

How old do I or my child need to be for Immunotherapy?

We can do allergy shots after someone is 6 years old, we can do allergy drops sooner for most patients.

How does this relate to the Atopic Tolerance Program (ATP)?

The Atopic Tolerance program aims to decrease overall body allergenicity by introducing various natural elements to decrease the immune system's overreaction and retrain it for the environment. While desensitization of respiratory allergens occurs, we introduce cross-reactive foods into your diet that mimic the respiratory allergens and gear the immune system toward tolerance. This would involve introduction of fresh uncooked fruits while undergoing Allergen Immunotherapy.