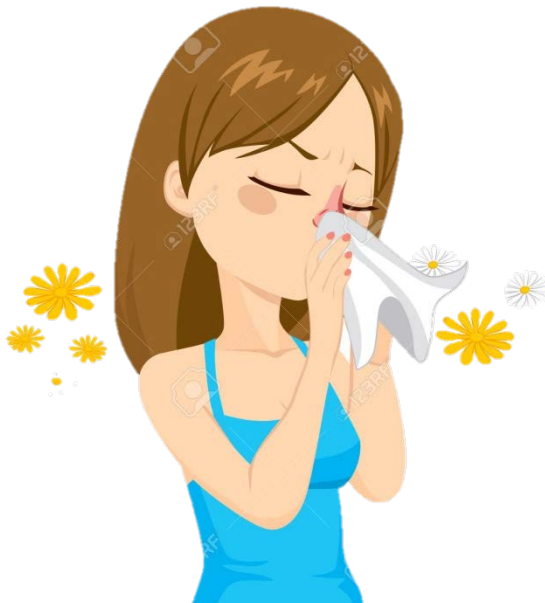


Allergies



What Is An Allergy?

Allergies are caused by an abnormal response of the immune system. The immune system reacts to a usually harmless substance in the environment. This substance can be pollen, mold, dust, animal dander, certain foods, insect stings, etc. and is referred to as an *allergen*.



Types of Allergies

- Food Allergy
- Skin Allergy
- Dust Allergy
- Insect Sting Allergy
- Pet Allergies
- Eye Allergy
- Drug Allergies
- Allergic Rhinitis
- Latex Allergy
- Mold Allergy
- Cockroach Allergy



Food Allergies

Food allergies are estimated to affect 4%-6% of children, and 4% of adults. It is most common in babies and children, but can appear at any age. The most common type of food allergens include:

- Eggs
- Milk
- Peanuts
- Tree nuts
- Fish
- Shellfish
- Wheat
- Soy



What Is An Allergic Reaction?

A person is exposed to an allergen by inhaling it, swallowing it, or getting in on their skin. After a person is exposed, there is a sequence of events that create an *allergic reaction*:

- The body produces an antibody, IgE, to bind the allergen
- These antibodies attach to a mast cell, which can be found in the airways, intestines, and elsewhere
- Allergens bind to the IgE, which is attached to the mast cell, which causes the mast cells to release a variety of chemicals into the blood such as histamine. Histamine causes most of the symptoms of an allergic reaction

What Are Symptoms of an Allergic Reaction?

Common symptoms of an allergic reaction to inhaled or skin allergens include:

- Itchy, watery eyes
- Sneezing
- Itchy, runny nose
- Rashes
- Feeling tired or ill
- Hives

Food allergies can cause:

- Stomach cramps
- Vomiting
- Diarrhea

Insect sting allergies can cause:

- Swelling
- Redness
- Pain

Allergy Diagnosis

If you or someone you know has allergy symptoms, an allergist or immunologist can help with a diagnosis. You must first find out what you are allergic to in order to have effective treatment. Allergy testing can identify the specific allergens that trigger your reactions.

There is skin testing, as well as allergy blood tests. Skin tests give fast results and usually cost less than blood tests. Blood tests are helpful because it only involves a single needle prick, however it costs more. All test results must be interpreted with the medical history.

Allergy Treatment

There are two types of allergy treatment:

1. Medication – Decongestants and antihistamines are the most common. They help to reduce a stuffy nose, runny nose, sneezing or itching.

Corticosteroids treat inflammation in the nose.

2. Immunotherapy – A preventive treatment for allergic reactions that involves giving gradual increase doses of the allergen. The slow increase of the allergen allows the immune system to become less sensitive to the allergen.



What is Anaphylaxis?

Anaphylaxis is a serious, life-threatening allergic reaction. The most common anaphylactic reactions are to food, insect stings, medications, and latex.

Anaphylaxis requires immediate medical treatment, including an injection of epinephrine along with a trip to an emergency room. If not treated properly, anaphylaxis can be fatal.



Anaphylaxis Symptoms

Symptoms of anaphylaxis typically start within 5-30 minutes of coming into contact with the allergen.

Warning signs may include:

- Red rash, with hives/welts, usually itchy
- Swollen throat or areas of the body
- Wheezing
- Passing out
- Chest tightness
- Trouble breathing
- Hoarse voice
- Vomiting
- Diarrhea
- Stomach Cramping
- Pale or red color to the face or body
- Trouble swallowing

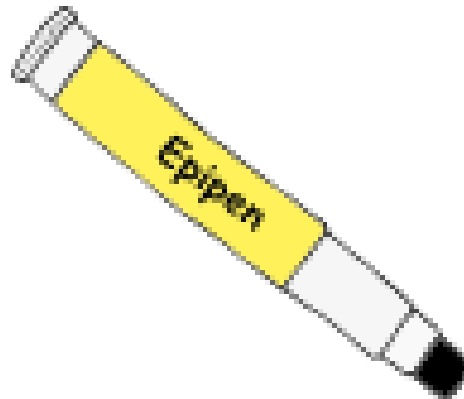


Anaphylaxis Treatment

The best way to manage anaphylaxis is:

- Avoid allergens
- Be prepared for an emergency

If you are at risk for anaphylaxis, carry auto-injectable epinephrine (often referred to as an *epi-pen*).



References

- <http://www.webmd.com/allergies/guide/allergy-basics>
- <http://www.aaaai.org/conditions-and-treatments/allergies.aspx>
- <http://acaai.org/allergies/types>