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NEWSLETTER

ALLERGIES

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Allergies are a common health issue affecting millions of people worldwide. In this newsletter, we'll discuss the types of allergies, testing, management, and prevention.

WHAT IS ALLERGY?

Allergies are caused by 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 food insect sting, etc. and is referred to as allergens.



Allergies can be categorized into different types based on the trigger and the body part affected.

TESTING

If you suspect you have allergies, your healthcare provider may recommend allergy testing.

The most common types of allergy testing are skin tests and blood tests. Skin tests involve placing a small amount of the allergen on the skin and then pricking or scratching the skin to see if a reaction occurs. Blood tests measure the amount of antibodies in the blood that react to specific allergens.

Common types of allergies include:

- Respiratory Allergies: Allergies that affect the respiratory system such as allergic rhinitis, asthma, & hay fever.
- Food Allergies: Allergies triggered by certain foods such as peanuts, shellfish, dairy products, and wheat.
- Skin Allergies: Allergies that cause skin irritation or rash, such as eczema, hives, and contact dermatitis.
- Drug Allergies: Allergies that occur when the immune system reacts to a certain medication or drug.
- Other types include dusty allergy, insect sting allergy, pet allergy, eye allergy, latex allergy, cockroach allergy and mold allergy.
- Food allergies are estimated to affect about 5% of children's and 4% adults. It is common in babies and children but can appear at any age. The most common type of food allergen includes: Egg, Milk, Peanut, Fish, Shellfish, Wheat and Soy.

TYPES OF ALLERGIES



ALLERGIC REACTIONS

A person is exposed to 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 allergic reactions. The body produce antibody, Immunoglobulin E (IgE), to bind the allergen.

These antibodies attach to a mast cell, which can be found in the airways, intestine or elsewhere. Allergens bind to the IgE, which is attached to the mast cell, which cause mast cells to release a variety of chemical into the blood such as histamine. Histamine cause most of the symptoms of an allergic reaction

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

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

Insect Sting allergies can cause: Food Allergies can cause:

- Swelling
- Redness
- Pain
- Stomach cramps
- Diarrhoea
- Vomiting



ANAPHYLAXIS

Anaphylaxis is a serious life-threatening allergic reaction. The most common anaphylactic reactions are to food, insect stings, medication, and latex. Anaphylaxis requires immediate medical treatment. If not treated properly, anaphylaxis can be fatal. Symptoms of anaphylaxis typically start within 5 to 30 minutes of coming into contact with allergens.

Warning signs may include:

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



MANAGEMENT AND PREVENTION

Managing allergies involves avoiding triggers and taking medications to alleviate symptoms. In some cases, immunotherapy (allergy shots) may be recommended. Prevention involves identifying and avoiding triggers as much as possible. For respiratory allergies, this may involve using air purifiers, keeping windows closed, and avoiding outdoor activities during peak pollen seasons. For food allergies, it may involve reading food labels carefully and avoiding certain foods.

CONCLUSION

Allergies are a significant health issue affecting millions of people worldwide. If you suspect you have allergies, talk to your healthcare provider about testing, management, and prevention options. Stay safe and healthy!

REFERENCES

1. World Allergy Organization. (n.d.). Types of Allergies. Retrieved from https://www.worldallergy.org/educational_programs/world_allergy_forum/anaheim2005/blaiss.php
2. World Health Organization. (2019). Allergies. Retrieved from <https://www.who.int/news-room/questions-and-answers/item/allergies>
3. American Academy of Allergy, Asthma & Immunology. (2022). Allergy Testing. Retrieved from <https://www.aaaai.org/conditions-and-treatments/library/allergy-library/allergy-testing>
4. American College of Allergy, Asthma & Immunology. (2022). Allergies, Asthma and Immunology. Retrieved from <https://acaai.org/allergies/management-and-treatment>