Allergy Awareness

Food Allergies

Food allergies are a growing food safety and public concern that affect an estimated 4-6% of children in the US. Allergic reactions can be life threatening and have far-reaching effects on children and their families, as well as on the schools or early care and education programs they attend.

- Children with food allergies are two to four times more likely to have asthma or other allergic conditions than those without food allergies.
- The prevalence of food allergies among children increased by 18% during 1997-2007, and allergic reactions to foods have become the most common cause of anaphylaxis in community health settings.
- In 2006, about 88% of schools had one or more students with a food allergy.

What is a Food Allergy?

A food allergy occurs when the body has a specific and reproducible immune response to certain foods. The body's immune response can be severe and life threatening, such as anaphylaxis. Although the immune system normally protects people from germs, in people with food allergies, the immune system mistakenly responds to food as if it were harmful.

Eight foods or food groups that account for 90% of serious allergic reactions in the US are:

- Milk
- Eggs
- Fish
- Crustacean shellfish
- Wheat
- Soy
- Peanuts
- Tree nuts

Symptoms of Food Allergies in Children

Children might describe having a reaction by saying:

- "It feels like something is poking my tongue."
- "My tongue (or mouth) is tingling (or burning)."
- "My tongue (or mouth) itches."
- "My tongue feels like there is hair on it."
- "My mouth feels funny."
- "There's something stuck in my throat."
- "My tongue feels full (or heavy)."
- "My lips feel tight."

The symptoms and severity of allergic reactions to food can be different between individuals, and can also be different for one person over time. Anaphylaxis is a sudden and severe allergic reaction that may cause death. Not all allergic reactions will develop into anaphylaxis.

Treatment and Prevention of Food Allergies

There is no cure for food allergies. Strict avoidance of the food allergen is the only way to prevent a reaction. If a child has a known food allergy, an Epinephrine pen should be at school to be used if an allergic reaction occurs to prevent serious health problems or death.
Bee Sting Allergy

Bee stings are a common outdoor nuisance. In most cases, home treatment is all that is necessary to ease the pain of bee stings. But if someone is allergic to bee stings or is stung numerous times, a person may have a more serious reaction that requires emergency treatment.

**Symptoms**

Bee stings can produce different reactions ranging from temporary pain and discomfort to a severe allergic reaction. Having one type of reaction does not mean the person will always have the same reaction every time they are stung.

**Mild Reaction**

Most of the time, bee stings are minor and include:

- Instant, sharp burning pain at the sting site
- A red welt at the sting area
- A small, white spot where the stinger punctured the skin
- Slight swelling around the sting area

In most people, swelling and pain go away within a few hours.

**Moderate Reaction**

Some people who are stung by a bee or other insect have a stronger reaction, with signs and symptoms such as:

- Extreme redness
- Swelling at the site of the sting that gradually enlarges over the next day or two

Moderate reactions tend to resolve over 5-10 days. Having a moderate reaction does not mean a person will have a severe allergies reaction the next time they are stung. Some people develop similar moderate reactions each time they are stung.

**Severe Allergic Reactions**

A severe allergic reaction (anaphylaxis) to bee stings is potentially life-threatening and requires emergency treatment. A small percentage of people who are stung by a bee or other insect quickly develop anaphylaxis. Signs and symptoms of anaphylaxis include:

- Skin reactions, including hives and itching and flushed or pale skin
- Difficulty breathing
- Swelling of the throat and tongue
- A weak, rapid pulse
- Nausea, vomiting, or diarrhea
- Dizziness or fainting
- Loss of consciousness

People who have a severe allergic reaction to a bee sting have a 30-60% chance of anaphylaxis the next time they are stung.

**Multiple Bee Stings**

Generally, insects such as bees and wasps are not aggressive and only sting in self-defense. In most cases, this results in one or a few stings. However, in some cases, a person will disrupt a hive or swarm of bees and have multiple stings. If a person is stung more than a dozen times, the accumulation of venom may induce a toxic reaction and make the person feel quite sick. Signs and symptoms include:

- Nausea, vomiting, or diarrhea
- Headache
- Vertigo
- Feeling faint or fainting
- Convulsions
- Fever

Multiple stings can be a medical emergency in children, older adults, and people who have heart or breathing problems.

**Treatments**

**Minor Reactions**

- Remove the stinger as soon possible using your fingernails or tweezers
- Wash the sting area with soap and water
- Apply a cold compress or ice to relieve pain and ease swelling

**Moderate Reactions**

- Remove the stinger as soon as possible
- Wash area with soap and water
- Apply cold compress or ice
- Apply hydrocortisone cream or calamine lotion to ease redness, itching, or swelling
- If itching or swelling is bothersome, take an oral antihistamine that contains Benadryl
- Avoid scratching the sting area – this will worsen itching and swelling and increase the risk of infection
**Severe Reactions**
During an anaphylactic attack, an emergency medical team may perform cardiopulmonary resuscitation (CPR if a person stops breathing or their heart stops beating. A person may be given medications such as:
- Epinephrine (adrenaline) to reduce the body's allergic response
- Oxygen, to help the person breathe
- Intravenous (IV) antihistamines and cortisone to reduce inflammation of the air passages and improve breathing
- A beta agonist (such as albuterol) to relieve breathing symptoms

**Prevention**
Prevention strategies can help minimize the chance of being stung by bees.

**Minimize Exposure**
- Take care when drinking sweet beverages outside. Wide, open cups are best due to being able to see if a bee is inside
- Tightly cover food containers and trash cans
- Clear away garbage, fallen fruit, and dog or other animal feces
- Wear close-toed shoes when walking outside.
- Do not wear bright colors or floral prints, which can attract bees
- So not wear loose clothing, which can trap bees between the cloth and skin
- When driving, keep the windows up
- Be careful when mowing the lawn or trimming vegetation, activities that might arouse insects in a beehive or wasp nest.
- Have hives and nests near your home removed by a professional

**Know What to Do**
- If a few bees are flying around, stay calm and slowly walk away from the area. Swatting at an insect may cause it to sting.
- If stung by a bee or wasp, or many insects start to fly around, cover your mouth and nose and quickly leave the area. When a bee stings, it releases a chemical that attracts other bees. If possible, go into a building or a closed vehicle.

**Seasonal Allergies**
Seasonal allergies result from exposure to airborne substances (such as pollens) that appear only during certain times of the year.
- Spring: usually trees (oak, elm, maple, aider, birch, juniper, and olive)
- Summer: grasses (Bermuda, timothy, sweet vernal, orchard, and Johnson grass) and weeds (Russian thistle and English plantain)
- Fall: Ragweed

**Symptoms**
- Itchy nose, roof of the mouth, back of the throat, and eyes
- Runny or stuffy nose
- Clogged sinuses
- Sneezing
- Allergic conjunctivitis (red eyes)

**Treatment**
- Oral antihistamines – help to relieve sneezing, itching, runny nose, and watery eyes
- Decongestants – oral or nasal sprays – provide temporary relief from nasal stuffiness
- Combination medications – antihistamine and decongestant
- Nasal irrigation – using distilled, sterile saline solution to relieve nasal congestion

**Prevention**
- Stay indoors on dry, windy days – the best time to go outside is after it rains, which helps to clear pollen from the air.
- Delegate lawn mowing, weed pulling, and other gardening chores that stir up allergens.
- Remove clothes worn outside. Shower to rinse pollen from skin and hair.
- Do not hang laundry outside – pollen can stick to sheets and towels.
- Wear a dust mask if you do outside chores.
- Check local TV or radio stations, the local newspaper, or Internet for pollen forecasts and current pollen levels.
- If high pollen counts are forecasted, start taking allergy medications before symptoms start.
• Close doors and windows at night or any other time when pollen counts are high.
• Avoid outdoor activity in the early morning when pollen counts are highest.
• Use the air conditioning in the house and car.
• Use high-efficiency filters and follow regular maintenance schedules with forced air heating or air conditioning.
• Keep indoor air dry with a dehumidifier.
• Use a portable high-efficiency particulate air (HEPA) filter in bedrooms.
• Clean the floors often with a vacuum cleaner that has a HEPA filter.

Anaphylactic Reaction
• Difficulty breathing
• Hives or swelling
• Nausea and vomiting
• Wheezing
• Drop in blood pressure
• Dizziness
• Loss of consciousness
• Confusion
• Rapid or weak pulse

Risk Factors
• Having spina bifida – exposed through early and frequent health care
• Undergoing multiple surgeries or medical procedures
• Health care worker
• Rubber industry workers
• Personal or family history of allergies
• Eating certain foods that contain some of the same allergens found in latex – avocados, bananas, chestnuts, kiwis, and passion fruits

Latex Allergy
Latex allergy is a reaction to certain proteins found in natural rubber latex, a product made from a milky fluid from rubber trees. Understanding latex allergy and knowing common sources of latex can help prevent allergic reactions.

Symptoms
A reaction occurs after being in contact with the latex in rubber gloves or by inhaling airborne latex particles released when someone removes latex gloves. A reaction can worsen with repeated latex exposure.

Mild Reaction
• Itching
• Skin redness
• Hives or rash

Moderate Reaction
• Sneezing
• Runny nose
• Itchy, watery eyes
• Scratchy throat
• Difficulty breathing
• Wheezing
• Cough

Treatment
Although medications are available to reduce the symptoms of latex allergy, there is no cure. Treatments include:
• Antihistamines
• Epinephrine pen
• Oxygen
• Corticosteroids

Prevention
Many common products contain latex, but most have suitable alternatives. Prevent an allergic reaction to latex by avoiding:
• Dishwashing gloves
• Some types of carpeting
• Clothing waistbands
• Balloons
• Rubber toys
• Hot water bottles
• Baby bottle nipples
• Some disposable diapers
• Rubber bands
• Erasers
• Swim goggles
• Some medical equipment – blood pressure cuffs, stethoscopes, syringes, surgical masks

Many health care facilities use non-latex gloves. However, because other medical products may contain latex or rubber, be sure to tell doctors, nurses, dentists, and other health care workers about an allergy before any exams or procedures.