Food Allergies:

- Affect 6 to 8% of children 4 years of age and under.
- Affect almost 4% of adults.
- Are the most frequent cause of emergency room visits for anaphylaxis.
- Cause about 30,000 episodes of anaphylactic shock with 100 to 200 deaths per year.

What are food allergies and why do they occur?

A food allergy is an abnormal response triggered by the body’s immune system to an otherwise harmless food. These reactions can cause serious illness and, in some cases, death. According to the National Institutes of Health, the first time a person with food allergy is exposed to the food, no symptoms occur; but the first exposure primes the body to respond the next time. The next time the person is exposed, an allergic response can occur. A first exposure to the allergen can be when the person eats the food, or it can occur without their knowledge. For example, a person who experiences anaphylaxis on the first known exposure to peanut may have previously touched peanuts, used a peanut-containing product or breathed in peanut dust in the home or when close to other people eating peanuts. The parts of a food (normally a protein) that trigger the immune response in a person are called “allergens.” In people with these allergies, the immune system in their bodies produce an allergic antibody which is also a type of protein that works against a specific “allergen.” These antibodies circulate throughout the body. With the next exposure, when the person eats or comes in contact with the food, the antibodies jump into action and recognize the allergen. This signals the body to release chemicals that cause physical signs of an allergic reaction.

What are the symptoms of a food allergy?

*Allergic reactions can include:*
- Hives
- Flushed skin or rash
- Tingling or itchy sensation in the mouth
- Face, tongue, or lip swelling
- Vomiting and/or diarrhea
- Abdominal cramps
- Coughing or wheezing
- Dizziness and/or lightheadedness
- Swelling of the throat and vocal cords
- Difficulty breathing
- Loss of consciousness
- Anaphylaxis ("anaphylactic shock")
What is the difference between a food intolerance and a food allergy?
Sometimes a reaction to food is not an allergy, but instead it is another type of reaction called a “food intolerance.” A food intolerance is an adverse reaction to food that does not involve the immune system. The symptoms can be the same as food allergies, but it develops through different mechanisms. Food intolerances are more common than food allergies. There are several types of food intolerances. The most common food intolerance is lactose intolerance, which is caused by the lack of the enzyme lactase and results in the inability to properly digest the sugar in milk and milk products. Common symptoms of lactose intolerance include gastrointestinal cramping and pain, bloating, nausea, gas, and diarrhea. Gluten intolerance is a food intolerance that is associated with celiac disease. Celiac disease is an inherited autoimmune disorder that affects the digestive process of the small intestine. In celiac disease foods containing gluten cause damage to the intestines and can prevent the proper absorption of nutrients. Sources of gluten include wheat, rye, barley, and sometimes oats.

How do you know if you have a food allergy?
If you suspect you may have had an allergic reaction to a food, see a physician. A physician can use diet histories, diet elimination, skin tests and blood tests to determine if you have a food allergy.

What foods cause food allergies?
The “big 8” allergens that cause 90% of all food allergies include peanuts, tree nuts (such as almonds, pecans, walnuts, etc.), milk, eggs, soy, wheat, fish (such as bass, cod, flounder) and crustacean shellfish (such as crab, lobster, shrimp, etc.).

What is the treatment for food allergy?
Currently, there is no cure for food allergies. The best treatment for food allergies and celiac disease is strict avoidance of the allergen. People with food allergies need to carefully read food labels for unexpected ingredients and to prevent cross contact with the allergen. Antihistamines can relieve gastrointestinal symptoms, hives, sneezing or runny nose. Bronchodilators, which open air pathways to the lungs to make it easier to breath, can relieve asthma symptoms. Anyone with symptoms that suggest possible anaphylaxis should be treated immediately with epinephrine administered through an auto-injector, 911 should be called and the person be given emergency medical treatment.

What can be done to help manage food allergies in schools and child care settings?
It is important for foodservice employees, teachers and caregivers to wash their hands thoroughly and often. Studies have shown that bar and liquid soaps are effective for removing allergens from your hands, while alcohol-based sanitizer is not. To wash hands properly, wet hands, apply soap, rub hands together for at least 20 seconds paying special attention to cleaning around fingernails, rinse thoroughly under warm, running water and dry hands on a clean paper towel or using a hot air dryer. Clean utensils, equipment, surroundings, toys, using hot water and dish detergent or commercial cleaning compounds. Dish detergent alone did not remove allergens in the study. A sanitizing solution can be applied using one tablespoon of chlorine bleach per gallon of water.
Advice for pregnant women?
If you are not allergic to a food, then there is no need to avoid that food even if it is one of the major causes of food allergies. There is no conclusive evidence that avoiding these foods will prevent food allergy from developing in the infant in the future.

Advice for mothers of infants?
Feed babies only breast milk, if possible, for the first 4 months of life because of the health benefits of breastfeeding. Unless the mother herself is allergic, those who breastfeed do not need to avoid foods that are considered to be highly allergenic. There is no conclusive evidence that avoiding these foods will prevent food allergy from developing in infants, according to the National Institute of Allergy and Infectious Diseases. Current recommendations are to wait until 4 to 6 months of age to introduce solid foods. There is no conclusive evidence to suggest that introduction of solid foods should be delayed beyond 4 to 6 months of age. There is no conclusive evidence to suggest that introduction of the most common potentially allergenic foods (milk, egg, peanut) should be delayed beyond 4 to 6 months of age. Delay will not prevent a child from developing an allergy in the future.

Resources available?
The Food Allergy and Anaphylaxis Network (FAAN) has many great resources. Check them out at www.foodallergy.org.

References:
www.niaid.nih.gov/topics/foodallergy/understanding/Pages/default.aspx