



Allergies



Allergies are caused by an overreaction of the immune system in which the body responds to a substance that it believes is harmful by creating antibodies against it. This reaction does not happen the first time a person is exposed to a substance, but the next time the person is exposed, the body's immune system releases chemicals, such as histamine, to protect itself from substances such as dust mites, pollen and even some foods. There are different kinds of allergies that affect different parts of the body. Allergic symptoms do not always require treatment unless the symptoms are severe, chronic or associated with other conditions like asthma or sinus infection.

Allergic rhinitis (Hay fever)

Allergic rhinitis, also known as "hay fever," is an irritation and inflammation of the inside of the nose due to exposure to an allergic trigger that is usually inhaled. Some children experience allergic rhinitis all year round while others are affected only at certain times of the year. The most common triggers are trees, grasses, and weeds and these usually cause seasonal allergies. Mold spores, dust mites, animals and cockroaches can also cause allergies that occur year-round. Common symptoms are watery eyes, sneezing, runny nose with constant sniffles, and itchy eyes/nose. Allergic rhinitis can contribute to other conditions such as sinus problems, ear problems, sleep problems, and learning problems. Some children may use the palm of their hand to push the nose up in an attempt to relieve itching. This is called the "allergic salute" and can create a horizontal crease across the nose in children with chronic allergies. Allergies can also cause dark circles under the eyes. Sometimes allergy symptoms may be attributed mistakenly to a cold, but there are key differences. While both cause runny noses, wheezing, sneezing and watery, itchy eyes, only colds cause fever, aches and pains.

Allergy symptoms occur almost immediately after exposure to an allergen, while it takes a few days to feel the full impact of a cold. And while allergy symptoms can be chronic, colds usually clear up within a week. Children with allergic rhinitis are more likely to develop asthma and allergies can make asthma worse. Avoiding environmental triggers can help prevent allergic symptoms. Children should stay inside when pollen levels are high. Peak pollen times are between 10 a.m. and 4 p.m. Children allergic to mold should avoid playing outside on rainy, windy days and playing in or raking leaves. Allergies can also be treated with medication that can improve a child's quality of life. If you suspect a child has allergies, talk with the parent about whether the child has been evaluated for allergies by a health care provider.

Food allergies

There is no cure for food allergies, but avoiding the food will prevent the allergic reaction. Some of the common foods that can cause food allergies are egg, milk, peanut, soy, and wheat. Peanut allergy is the most common cause of fatal food-induced anaphylaxis. Children may also have adverse reactions (food intolerances) to foods that are not allergies. Food allergies should be diagnosed by a health care provider. Children often outgrow food allergies, though allergies to peanuts, tree nuts and fish are rarely outgrown. Food allergies cause a reaction that may affect the gastrointestinal tract, respiratory system, skin and even cardiovascular system. Even eating a very small amount of, or smelling, a problem food can cause a reaction in some individuals. Children with atopic dermatitis are at increased risk of developing food allergies. Exclusive breastfeeding during the first 4–6 months of life might greatly reduce the incidence of food allergies and is strongly recommended.

Symptoms usually occur within minutes to two hours after contact with the allergy-causing substance, but there are also delayed reactions that occur 6–24 hours later. Allergic reactions can be mild to life-threatening. Sometimes a food allergy will cause an anaphylactic reaction—a sudden, severe, potentially fatal allergic reaction that can involve the body as a whole, including the skin, respiratory tract, gastrointestinal tract, and cardiovascular system. Peanuts, nuts, or seafood are the most common causes of food allergy anaphylaxis. The severity of the reaction depends on how allergic the child is to the food consumed and the amount of the food that was consumed. Anaphylaxis usually occurs soon after exposure to the food, but may occur up to two hours later and can re-occur again 8 hours later. Food-induced anaphylaxis is believed to cause about 30,000 trips to the emergency room and between 150 to 200 deaths each year. Children with food allergies should not share foods brought to the program by other children. Vague or inaccurate labeling and cross-contamination of packaged foods (especially with peanuts and tree nuts) make it difficult for even well-intentioned parents to determine if a food is safe for an allergic child. However, despite everyone's best intentions, accidental food exposures are common and unpredictable. Therefore, a written food allergy emergency action plan (see resources below), signed by the child's health care provider, should be in place for all at-risk children to ensure quick treatment of an allergic reaction. Child care programs should also have written policies in place that describe how children with food allergies will be protected from contact with foods they are allergic to. Policies should include:

- What staff need to know about reading food labels and how to avoid cross-contamination of foods.
- The prohibition of food or utensil sharing when allergic children are present.
- What staff supervision is required during student meals to protect allergic children.
- Emergency procedures to be followed if a child develops a severe allergic reaction.
- Who will be trained to administer epinephrine (in an EpiPen) in an emergency, if it has been prescribed by the child's health care provider.

Delay in the administration of injectable epinephrine (EpiPen) is a common feature of food allergic

reactions that result in death. Children with an identified food allergy should wear a MedicAlert bracelet. If you suspect a child is having an anaphylactic reaction, call 911 right away.

Atopic dermatitis

Atopic dermatitis, also known as eczema, is a red, very itchy, inflamed rash most often seen on the cheeks, fronts of knees, and backs of elbows in infants, and in areas of the body that bend in children. It may start in the first year of life. The itching may worsen with hot weather, warm clothes, illness, stress, climate changes, exposure to cigarette smoke, and the use of certain soaps and other products on the skin. Some foods may make atopic dermatitis worse but only a small number of children are helped by changes in diet. Excluding foods from the diet of a child with atopic dermatitis should only be done under the supervision of a health care provider. Chronic rash areas can become rough and thick from scratching. This is called "lichenification." Skin dryness can make the problem worse. Frequent application of a moisturizer to affected areas can help, but make sure that parents have provided written permission and approved or provided the product being used which should be in its original container and used according to the manufacturer's instructions. In many children, the rash symptoms will improve with age.

Resources

What Is Atopic Dermatitis? National Institutes of Health, www.niams.nih.gov/hi/topics/dermatitis/ffdermatitis.htm.

American Academy of Allergy, Asthma, and Immunology: www.aaaai.org.

The Food Allergy & Anaphylaxis Network www.foodallergy.org

FAAN has a sample Food Allergy Action Plan available on the web at: www.foodallergy.org/actionplan.pdf.

Chapman, J. et al Food allergy: a practice parameter. *Annals of Allergy, Asthma, & Immunology*. 96(3) Supplement 2:S1–S68, March 2006.

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