

Allergic Skin Conditions

What are allergic skin conditions?

- There are different types of allergic skin conditions.
 - Eczema (atopic dermatitis) is a chronic skin condition that causes the skin to be overly sensitive to many things. It can affect older children and younger children. In older children, it most often affects the inside of the elbows, the back of the knees, the wrists, and the neck. In younger children, it may cause just dry, rough patches of skin, particularly on the face and trunk. Sometimes, the patches become open or even infected. These patches may appear thickened and leathery.
 - Hives (urticaria) are itchy, swollen papules (like bumps or pimples) or plaques that can move to various parts of the body. Urticaria is an acute condition that happens quickly and usually resolves in a few hours to several days. Occasionally, hives can be chronic and can last months. Hives can be small and look like insect bites, or the papules can coalesce to form bigger areas. Hives are always very itchy and are sometimes made worse by pressure, heat, or stress. Hives do not scar or leave marks; however, scratching the hives can lead to a secondary infection, which may require further treatment.
 - Contact dermatitis is caused by a reaction to something touching the skin. Two common examples are poison ivy and a rash around the belly button of a person who is allergic to nickel (which is often found in fasteners on waistbands and belt buckles). It may occur in the diaper area if a baby is allergic to the scent or dye used in the diaper. Contact dermatitis usually goes away when the irritant is removed.
- None of these conditions are contagious.

How common are they?

Estimations are that up to 20% of infants and toddlers in the United States may be affected by eczema at some point. It is unclear how frequently hives and contact dermatitis occur.



Child with eczema patch

AAP



Child with urticaria wheals with multiple shapes

AAP



Child with contact dermatitis

AAP

Allergic Skin Conditions *(continued)*

What are some common characteristics of children who have allergic skin conditions or of allergic skin conditions as children present with them?

- Children with eczema tend to have allergies and may have other signs of hay fever such as nasal congestion, sneezing, and itchy eyes. Children with hives or contact dermatitis do not always have other allergic symptoms.
- Food allergies, nasal allergies (allergic rhinitis), and asthma are more common in children with eczema.
- Eczema can be mild or severe.
- Eczema and hives may come and go, especially during allergy season, but are commonly present all year long.
- Children may scratch their skin and cause a skin infection, and they can be irritable if their skin feels itchy.
- Eczema can be a lifelong condition but tends to have periods during which it is either better or worse. It often improves by school age.
- Hives can be caused by food, pets, pollen, medication, a chemical or perfume, infection, or any of many other triggers. Sometimes, they are caused by exposure to hot or cold or pressure (such as scratching).
- Hives can occur periodically but tend to resolve within a week or two.

Who might be on the treatment team?

- The pediatrician/primary care provider in the medical home.
- Allergists and dermatologists may be consulted in difficult cases.



PedFACTs

Child with hives



AAP

Child with contact dermatitis from the nickel in an earring

What adaptations may be needed?

Medications

- Medications can be given to relieve the symptoms. Some of these medications require a prescription, and others are available over the counter.
- Moisturizers. Eczema is helped by frequent moisturizing of the skin.
- Antihistamines.
 - Classic antihistamines include diphenhydramine (Benadryl), hydroxyzine (Atarax), and others. These medications can cause drowsiness in some children. Some children, though, become hyperactive with these medications, and it is often difficult to predict what the reaction will be beforehand in each child.
 - Nondrowsy antihistamines include cetirizine (Zyrtec), loratadine (Claritin), and fexofenadine (Allegra). These medications tend to cause less drowsiness but do not control the itch as well.
- Steroids can be applied as a cream or an ointment. They can also be given orally in severe cases. The skin can change if strong steroids are used for prolonged periods. Side effects of oral steroids include appetite and mood changes, especially if used for more than a few days.
- Immune modulators such as tacrolimus (Protopic) and pimecrolimus (Elidel) creams are sometimes used to treat children with eczema.
- Medications to prevent the release of histamine, such as montelukast (Singulair), might be used for allergy symptoms.

Allergic Skin Conditions *(continued)*

- Epinephrine (EpiPen) may be prescribed if the child has more-serious associated allergies (anaphylaxis).
- Antibiotics (oral or topical) are used if a bacterial skin infection is worsening the eczema.
- All staff who will be administering medication should have medication administration training (see Chapter 6).
- Caregivers should be given information about any medications being used to control symptoms for children with eczema.

Dietary Considerations

Avoid food allergens.

Physical Environment and Other Considerations

- Children may need to avoid things that aggravate their allergies such as latex, food, creams, metals, and perfumes.
- Extremes of temperature can aggravate some skin conditions but have to be balanced with the child's need to play. Avoid dust, perfumes, chemicals, and furry animals. Avoid wetting and drying the child's skin. Special precautions may be necessary for swim activities.
- Avoid contact with other blistering skin conditions such as herpes (specifically, cold sores) and chickenpox.
- Try to relieve itching with cool compresses.
- Avoid dressing the child in tight-fitting clothing and scratchy clothing such as wool. Sand or dust may worsen itching.
- Avoid vigorous rubbing of the child's skin when drying after cleaning.
- It can be frustrating for children to hear "Don't scratch!" all day, so try a distraction; that is, read a story or do a special activity.

What should be considered an emergency?

- Acute hives can be a sign of anaphylaxis, or they can be just a localized skin problem. Be very aware of other symptoms such as breathing difficulty, throat swelling, color changes, and stomach cramps in a child who has hives. Call emergency medical services (911) if these or any other serious symptoms develop.
- If the child has been prescribed injectable epinephrine, use it as directed.
- Eczema and contact dermatitis are not emergencies.

What types of training or policies are advised?

- Avoiding triggers
- First aid for rashes, including methods to reduce itching
- Washing and dressing children who have rashes

What are some resources?

- American Academy of Dermatology: www.aad.org, 1-888-462-DERM (1-888-462-3376)
- National Eczema Society: www.eczema.org
- National Institute of Arthritis and Musculoskeletal and Skin Diseases: www.niams.nih.gov, 1-877-22-NIAMS (1-877-226-4267)

