

## Atopic dermatitis (Eczema) in children: Causes and Irritation Prevention

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### What is atopic dermatitis (eczema)?

**Atopic Dermatitis** (also called eczema) is a skin disorder that affects 3% of the United States population. It causes itchy, sensitive skin. The appearance of the rash is variable. The skin may be:

- Red
- Rough
- Scaly
- Bumpy

At other times, there might be bleeding, weeping or crusting from scratched or infected areas. With continued scratching or rubbing, the skin can darken and become thick. In areas of a previous rash, the skin color can lighten or darken but these color changes eventually return to normal over time. In general, the skin loses moisture easily and is usually dry. Eczema does not usually cause permanent scars.

### What causes eczema?

The cause is unknown. It is often seen in families whose members have had:

- Eczema
- Allergies
- Asthma
- Hay fever

It usually appears during the first 2 years of life, but it may begin in later in childhood or adulthood. Eczema is not contagious.

### Will it go away?

Most children improve by preschool age. In some cases, eczema may last a long time, requiring lifelong management. Since it cannot be cured (although it does

go away over time in many cases), the goal is to keep the condition under control. Because each child is different, skin care treatment is individualized.

## **What can cause irritation to eczema?**

The following can make eczema worse:

- Contact with water. Irritation can be avoided by **immediately** sealing the moisture with a thick balm.
- Use of soaps.
- Contact with perfumed, unscented or alcohol-containing creams and other skin care products.
  - **Note on the difference between unscented and fragrance-free:**  
Unscented products should not be used. **Unscented** generally means that the product may contain chemicals that neutralize (or mask) the odors of other ingredients. Fragrance-free products are best to use. **Fragrance-free** means that fragrance materials or masking scents are not used in the product.
- Extreme humidity or sudden temperature changes.
- Wool, acrylic, fur, or any rough material in clothing, including seams, tags, ruffles, elastic, etc.
- Carpeting and furniture.
- Exposure to pillows, comforters or mattresses filled with feathers or down, which collect large amounts of dust mites.
- Exposure to known allergens such as cats, dogs, rabbits, airborne dust or pollen.
- Skin contact with tomatoes or citrus fruits.
- Sweating from physical activity overheating.
- Exposure to sand boxes.
- Fatigue, illness or emotional frustration.

## **How do allergies affect eczema?**

Some people with eczema are sensitive to certain environmental substances, such as dust, pollen and pets. These substances are called allergens. The most

common reaction to allergens is nose and eye itching, but there is not usually an eczema skin reaction.

Certain foods may seem to worsen eczema, especially in infants and young children, but eliminating foods rarely leads to a lasting improvement. Recent data shows that avoiding food is not recommended to manage eczema **unless** a specific food has caused an allergic reaction. An **allergic reaction** means a person immediately develops a combination of the following symptoms:

Tearing or itchy red eyes

- Sneezing
- Nasal congestion
- Runny nose
- Tongue swelling
- Drooling
- Noisy breathing
- Cough
- Wheezing
- Hives
- Eye swelling
- Lip swelling
- Vomiting
- Diarrhea
- Abdominal cramps
- Dizziness
- Passing out

Eliminating foods for long periods of time could contribute to malnutrition, and could even cause a food allergy to develop.

It is important to discuss food elimination with a medical provider. You should also discuss any allergy test results with your medical provider. Allergy testing is not always reliable, and many children with eczema have “false positive” test

results (skin and blood tests), especially to foods. **False positive** means the test result shows they have an allergy when they actually do not.

### **What can I do to avoid things that irritate eczema?**

- Check product labels and avoid products with fragrances, formaldehyde and formaldehyde releasers. Visit the American Cancer Society website for more information about formaldehyde: <https://www.cancer.org/cancer/cancer-causes/formaldehyde.html>
- Wash all new clothes with free and clear (fragrance-free) detergent.
- Do not use fabric softeners or dryer sheets (not even the free and clear ones). Use tennis balls in the dryer.
- Dry clothes on the lowest setting to prevent puckering of seams.
- Wear 100% soft cotton against the skin.
  - Wear seamless if possible, or wear inside out.
  - Cut all tags out.
  - May cut out neck line.
- Dust mite-proof covers on pillows, comforters or mattresses filled with feathers or down are essential to prevent contact with their feces, which promotes inflammation, allergic reaction and skin breakdown.
- Some foods irritate the skin when they come in contact: to prevent this apply petroleum jelly before eating to create a barrier.

### **What should I watch for?**

#### **Monitor for bacterial infection:**

Children with eczema are more likely to develop skin infections that can appear as:

- Pus-filled bumps
- Blisters
- Oozing
- Crusting

These skin infections may be caused by bacteria, viruses or fungus (yeast). A child with eczema is more likely to catch infections from other people. For example: if a child with eczema is exposed to someone with a cold sore, the child may develop a widespread herpes virus infection. This is not very common but it is a serious infection that needs immediate care. Notify your provider or nurse if you think your child has any infection since it may be necessary to treat this with oral medicine.

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