

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

**ECZEMA (Atopic Dermatitis)****WHAT IS IT?**

Eczema is a chronic inflammatory skin condition that can cause dry, itchy, scaly skin. It is also known as atopic dermatitis. “Atopic” refers to someone who is likely to develop allergies, and “dermatitis” refers to skin that is inflamed and irritated. Individuals prone to atopy are at higher risk for developing eczema, environmental allergies, and/or asthma.

**HOW COMMON IS IT?**

Eczema affects both adults and children but is more common in children. In the U.S., about 16% of children have this condition. Symptoms usually appear by the 5<sup>th</sup> birthday and improve with age. However, about 50% of individuals have symptoms that persist beyond childhood.

**WHAT CAUSES IT?**

The exact cause is not known, but genetics appears to play an important role. Research has found that most people with eczema have a genetic abnormality in the epidermis, the outermost layer of the skin, that results in decreased barrier function and increased water loss. Eczema also tends to run in families, with 70% of affected individuals reporting a family history of atopy. Other causative factors include changes in the immune response and in normal skin flora.

Contrary to popular belief, environmental and food allergies do not appear to be causative factors in the development of eczema. However, allergies may contribute to symptoms in a subset of patients with severe eczema.

**WHAT ARE COMMON TRIGGERS?**

**Dry skin** is the biggest culprit that triggers or aggravates eczema. Other common triggers include:

- Cold or dry environments
- Sweating
- Rapid changes in temperature
- Emotional stress or anxiety
- Household cleaners, soaps, detergents, etc.
- Perfumes, cosmetics
- Wool, lanolin (wool fat), synthetic fibers
- Dust, sand, cigarette smoke

**WHAT ARE THE SYMPTOMS?**

Eczema typically presents as patches of dry, itchy skin:

- The skin can become red, scaly, or crusted depending on the severity of symptoms.
- Repeated scratching can lead to thickening and darkening of the skin.
- Common sites for eczema include the back of the neck, elbow creases, the back of the knees, the backs of the hands and/or feet, wrists, forearms, and the face.
- Severe eczema may cover most of the body. However, it is uncommon to see symptoms in the armpit, groin, or buttocks areas.
- The rash may also occur in round coin-shaped patches (called nummular eczema) or as small bumps due to plugged hair follicles on the face, upper arms, and thighs.
- Eczema is not contagious. However, excessive scratching can lead to a bacterial skin infection, characterized by worsening redness, pain, swelling, fever, and/or pustular drainage.

**HOW IS IT DIAGNOSED?**

Eczema is usually diagnosed based upon its appearance and associated symptoms & conditions.

**WHAT IS THE TREATMENT?**

For most patients, eczema is a chronic condition, and treatment is aimed at limiting the number, duration, and severity of eczema flares. Symptoms can be controlled by developing a skin care plan specific to your needs. Key components of any plan include **keeping the skin well-moisturized** and **avoiding triggers**. Visit [www.eczemacareonline.org.uk](http://www.eczemacareonline.org.uk) for additional behavioral recommendations.

**SKIN CARE**

❖ **Bathing tips** to avoid dry skin and irritation:

- Don't bathe or shower more than once a day. Bathe less often if symptoms are severe.
- Limit baths and showers to 5-10 minutes. Use lukewarm water as hot water is too drying.
- Use a small amount of mild soap, such as unscented Dove, Oil of Olay, Cetaphil, or Basis.

- Do not scrub vigorously with a washcloth or sponge, as this can irritate the skin.
- After bathing, dry your skin by patting gently with a towel. Avoid rubbing the skin.
- ❖ **Moisturize, moisturize, moisturize!**
  - Apply moisturizer at least 2 times a day and immediately after a shower (ideally within 3 minutes) or handwashing. Moisturizers work by trapping water in the skin; therefore, they are most effective when applied to damp skin. Use a liberal amount multiple times daily.
  - Creams and ointments work better than lotions. Lotions have a high water content and may actually worsen dry skin as a result of evaporation. Also avoid products containing alcohol.
    - Thick creams, such as Cetaphil, Eucerin, and Nutraderm, are helpful because of their low water content.
    - Ointments are thicker and more effective because they have no water content. Examples include petroleum jelly, Vaseline, and Aquaphor.
    - Avoid products containing lanolin (ie. Aquaphor) if you are allergic to wool.
  - Wet dressings can be used if symptoms persist. Dampen & apply moisturizer to the problem area, then cover it with a damp cotton garment (eg. gauze, glove, sock, etc) covered by a dry garment. Change this dressing every few hours during the day, or keep it on overnight.
- ❖ **Avoid triggers.** In addition to avoiding potential triggers listed on the previous page:
  - Avoid fabric softeners, bubble baths, colognes, sprays, powders, etc.
  - Use “fragrance-free” (not just “unscented”) soaps and detergents.
  - Choose liquid laundry detergents, and use a smaller amount than the label recommends. Add an extra rinse to the wash cycle if needed.
  - Wear absorbent fabrics and clothing that is not rough on the skin. Cotton or a cotton blend is a good choice, while wool or silk may be more irritating.
  - Avoid tight clothing and waterproof fabrics. However, use rubber gloves when washing dishes to protect your skin. Wear cotton gloves under the plastic gloves to avoid skin irritation and to soak up sweat.
  - For extreme dryness, a humidifier or vaporizer may help (but keep it clean to avoid mold).
  - Try not to scratch! Instead pat, firmly press, or grasp itchy skin, and apply soothing lubricants. Cool wet compresses can also help.
  - Reduce stress, which can worsen eczema. If you need help managing your stress, talk to staff at Student Health, University Counseling Services, and/or the RecWell. Keep mental wellness resources at your fingertips by using VCU’s free TimelyCare app ([app.timelycare.com](https://app.timelycare.com)).

## MEDICATIONS

- ❖ Antihistamine medications can help reduce itching. Non-drowsy formulations (eg. Zyrtec, Claritin, Allegra) are good for daytime use. Sedating antihistamines (eg. Benadryl) are helpful at night.
- ❖ Topical corticosteroid treatments are the mainstay of therapy for controlling inflammation and itching during eczema flares. Steroid creams, lotions, and gels are available in different strengths.
  - It is best to use the lowest effective dose for as short a time as possible (eg. up to 2-4 weeks).
  - High-dose steroid creams should be limited to 2 weeks of use, then replaced by lower-dose creams until symptoms resolve.
  - Generally nothing stronger than a low-dose steroid cream should be used on the face and neck (a high-dose cream may be used briefly for 5-7 days for severe symptoms).
  - Only a thin layer of steroid medication is needed to be effective. Excessive or long-term use can cause thinning of the skin, which can lead to discoloration and stretch marks.
  - Medicated creams and ointments should be applied to affected areas only. Moisturizers are applied to the whole body. If both are being used, apply the moisturizer last.
- ❖ A short course of corticosteroid pills taken by mouth may be used to treat severe eczema flares.
- ❖ “Immunomodulator” medications (eg. Protopic, Elidel) are an alternative to steroid creams. Because they do not cause skin atrophy, these medications are commonly used to treat persistent symptoms on the face, neck, or skin folds. However, due to concerns about the long-term safety of these medications, it is important to follow your provider’s instructions for safe use.
- ❖ Maintenance therapy with mid- to high-potency steroids, Protopic, or Elidel may be used to prevent relapse once flares have resolved. The topical treatment chosen should be applied once daily to previously affected skin for 2 consecutive days per week, for up to 16 weeks.
- ❖ A dermatology referral to discuss other medications and ultraviolet light treatments may be recommended for patients with moderate to severe symptoms unresponsive to topical treatments.

**RECOMMENDED WEBSITES:** [www.aad.org](https://www.aad.org), [www.mayoclinic.org](https://www.mayoclinic.org), [www.nationaleczema.org](https://www.nationaleczema.org)