

Eczema

The word eczema originated in 543 AD and is derived from the Greek word *ikzein*, meaning “to boil forth” or “to effervesce.” **More than 15 million Americans suffer from eczema.** In its modern use the term refers to a broad range of conditions from allergic causes such as atopic dermatitis to environmental causes such as **dyshidrotic** (hand) or **nummular** (coin shaped lesions) eczema. In areas such as Nevada, exposure to dry environmental conditions are major contributing factors, resulting in **asteatotic (xerotic)**, **nummular** and **dyshidrotic** eczema predominating. Under such conditions the skin is easily irritated and dried out by frequent water exposure, perfumes, dyes, harsh soaps, and other irritants. Eczematous skin is more prone to infections than normal skin. Weeping and crusting skin may be a sign of infection and requires evaluation and treatment. Itching is a common symptom of eczema and scratching makes the condition worse.

What does eczema look like?

There are various stages of eczema. **Subacute** lesions are the earliest form having erythematous (red) plaques with scale or crusting. The **acute** stage generally presents as a red edematous plaque which may have grossly visible small grouped vesicles. Later, lesions may be covered by a dryer scale or become thickened with increased prominence to the skin markings (**lichenification**) resulting from scratching or itching the sites. In cases of nummular eczema, that forms discrete circular plaques, the disorder is frequently misdiagnosed as “ring worm.”



Dyshidrotic Eczema



Nummular Eczema

What causes eczema?

The exact causes of eczema remains unknown and in many cases may simply be an inability of the skin to withstand overwhelming environmental challenges. In some cases there is a strong family correlation, such as atopic dermatitis and certain forms of nummular eczema. It may also be related to other skin conditions, such as the eczema observed in patients with keratosis pilaris, a follicular-scaling condition that is very common, involves the triceps and thigh regions commonly and may progress to facial and back involvement. Keratosis pilaris is autosomal dominantly inherited and patients will have a 50% chance of spreading the condition to their children. The following may facilitate the development and progression of eczema:

- > Low humidity, desert living. During cold weather the heated air inside homes and other buildings can make skin dry and itchy. Exposure to chlorine and salt water also can trigger eczema.
- > Heat, high humidity and sweating can also exacerbate eczema and make the itching worse.
- > Harsh soaps, such as deodorant and antibacterial soaps, may be contributing factors. Avoid scrubbing the skin with a wash cloth, luffa or scrunge. Be gentle to your skin, use your hands. Scratchy clothing, like wool, should be avoided.
- > Emotional stress, feeling upset can cause the itching to worsen, resulting in worsening of the eczema.
- > In patients with atopic dermatitis some foods may be implicated, along with allergens like pollens, pet hair or dander, feathers, and dust mites.

What kind of skin care should I do?

- > Shower in warm water once a day for less than 10 minutes, avoid hot water exposure. Babies may have a short bath.
- > Wash with a mild soap like Dove, Tone, Purpose or Neutrogena. If you are not too dirty or sweaty, use soap only on the genital area, armpits, hands and feet. If frequent hand washing is required, consider using a moisturizing cleanser as a soap substitute—there are many available, such as Aquanil, CeraVe (cleanser), Aveeno (cleanser), and Neutrogena (cleanser).
- > Pat your skin dry with a soft towel. Do not buff.
- > Use a bland moisturizer frequently throughout the day. In the more severe forms treatment may require 5-10 applications a day. This may sound troublesome but it can be managed, and the improvement will be worth it. When you are home at night, set an egg-timer for 30-60 minute intervals. When the timer sounds, moisturize head-to-toe. We recommend bland products such as Cetaphil, DML, CeraVe, Aquaphor, Aveeno, and Lubriderm. Don't forget to reset the timer.
- > For severe hand and/or foot involvement, at bedtime generously moisturize the troubled areas and place on fine white cotton gloves and/or cotton socks. Leave them on over night. Do not use latex or vinyl gloves, since this will trap moisture and worsen the condition. Cotton breathes, but also offers some occlusion that allows the moisturizer to penetrate better.
- > Wear protective gloves, such as Platex gloves, when you work with cleaning products that might irritate your skin.
- > Aveeno oatmeal soaks may help lessen itching symptoms, but don't stay in too long. Ten minutes should suffice.

Can medicines help eczema?

There are a host of medicines that can dramatically help treat your eczema. Topical **glucocorticoids** are very therapeutic and there are a variety of strengths, creams, lotions, ointments and sprays available. Research has shown that **lipids** may help repair the skin, and a variety of prescription treatments such as Mimyx, Eleton, and Atopiclair are available. Topical **biologic immunosuppressants** such as Protopic and Elidel are helpful in treating individuals with atopic dermatitis. Some patients may develop secondary skin infections—an oral antibiotic may be required. Antihistamines may be beneficial in patients with atopic dermatitis, but are generally not helpful for other forms of eczema. Consult your dermatologist about which of these treatment options are best for you.

What can I do about itching?

It is a good idea to try not to scratch your itchy skin, because scratching feeds into the “itch-scratch cycle” making the itching even worse. Vigorous scratching may lead to skin infections, further worsening the condition. Here are some things that might help:

- > There are a variety of antipruritic (anti-itch) lotions available on the market—Sarna, Aveno and Eucerin have forms available.
- > Cut your fingernails short. Wearing cotton gloves at night may also be helpful. If the lower legs are involved use tube socks or knee-high socks to help provide occlusion and prevent damage from itching during the night.
- > Symptoms of itching are often worse at night, when you are trying to sleep. Normal daily activity is often a welcome distraction and itch sensations are less. Taking Benadryl at bedtime may help you to sleep due to the hypnotic effects of the medication—again, antihistamines are often ineffective in treating eczema unless it is caused by atopic dermatitis.
- > Studies show that eczema can flare up in tense times. Stress management, and at times antidepressants, can be beneficial in profound cases.

Where can I get more information about eczema?

Consult your local dermatologist about the treatment options discussed in this handout. A medical regimen will likely be very beneficial for you. You can contact the National Eczema Association at 1-800-818-7546 or their Web address is: www.nationaleczema.org. You may also find useful information at the American Academy of Dermatology, their Web address is: www.aad.org.

Disclaimer: This handout is given as useful information about eczema. It is provided to patients in my office that have undergone an evaluation—it is a reference guide for them upon completion of their visit. This handout is not intended to substitute for a clinical evaluation by a physician.