Eczema Basics FOR ADULTS

- Types of Eczema
- Common Triggers
- Controlling Flares
- Treatments
- Related Conditions
Eczema (EK-suh-muh) is the name for a group of conditions that cause the skin to become red, itchy and inflamed. It is also known as dermatitis. There are several types of eczema, including atopic dermatitis, contact dermatitis, dyshidrotic eczema, nummular eczema, seborrheic dermatitis and stasis dermatitis. It is possible to have more than one type of eczema at once.

Eczema is not contagious. You can’t “catch it” from someone else. While the exact cause of eczema is unknown, researchers do know that people develop eczema because of a combination of genes and triggers. People with eczema tend to have an over-reactive immune system that, when triggered by something outside or inside the body, responds by producing inflammation. It is this inflammation that causes the red, itchy and painful skin symptoms common to eczema.

Research also shows that some people with eczema have a mutation of the gene responsible for creating filaggrin. Filaggrin is a protein that helps our bodies maintain a healthy, protective
barrier on the very top layer of the skin. Without enough filaggrin to build a strong skin barrier, moisture can escape and bacteria, viruses and more can enter. This is why many people with eczema have very dry and infection-prone skin.

Atopic dermatitis, contact dermatitis and nummular eczema can appear almost anywhere on the body, especially the hands, feet, face and torso. Dyshidrotic eczema appears on the feet and hands. Seborrheic dermatitis happens where there are a lot of oil-producing glands like the face, scalp, back and chest. Stasis dermatitis generally appears on the lower legs.

There is no cure for eczema but there are treatments, and more are coming. Depending on the type of eczema and severity, treatments include lifestyle changes, over-the-counter (OTC) remedies, prescription topical, oral and injectable medications, phototherapy and biologic drugs.
For most types of eczema, managing the condition comes down to these basics:

• Know your triggers
• Implement a regular bathing and moisturizing routine
• Use OTC and/or prescription medication consistently and as prescribed
• Watch for signs of infection — pus-filled bumps, pain, redness, heat — on the skin

However, some people find that even when they do all the “right” things, their eczema still flares. Eczema can be an unpredictable disease, and there is much still to learn about it. Having an eczema flare “out of the blue” is common and can happen despite your best efforts.

KNOW THE FACTS

• It’s common. More than 30 million people in the United States have some form of eczema.

• It’s not contagious. You can’t catch eczema or spread it to others through physical contact.

• It’s treatable. Although there is no cure for eczema, there are effective treatments available now, and more are on the way.

• It’s more than skin deep. Eczema is an immune system over-reaction, and for millions, a serious, life-changing disease.
ECZEMA BASICS FOR ADULTS

There are several distinct types of eczema. Certain types of eczema may look different based on location on the body and if the affected area was scratched or rubbed.

**Atopic Dermatitis**

Atopic dermatitis (AD) is the most common form of eczema and is chronic (long-lasting). More than 18 million adults in the U.S. have atopic dermatitis.

Children with atopic dermatitis usually develop the condition in infancy or early childhood. However, AD can appear at any stage of life. People who come from families with a history of atopic dermatitis, asthma or hay fever are at greater risk of developing AD.

Symptoms of atopic dermatitis include:

- Itch
- Redness
- Rash (often with scratch marks)
- Skin that is very dry or scaly
- Open, crusted or weepy sores

If the skin becomes infected, it may form a yellow crust or small pus-filled bumps. The skin may also become thicker from scratching and rubbing.
Depending on the severity of symptoms, atopic dermatitis can be treated with OTC products, topical steroids, topical PDE4 inhibitors, topical calcineurin inhibitors (TCIs), phototherapy, immunosuppressant drugs, or biologics.

**Contact Dermatitis**

Contact dermatitis (CD) occurs when the skin is exposed to an allergen or irritant. If the reaction is caused by an allergen, such as from pollen or dust mites, it is called allergic contact dermatitis. If the reaction is caused by an irritant, such as from household cleaners or nickel-based metals, it is called irritant contact dermatitis.

Symptoms of contact dermatitis include:
- Itchy skin
- Redness
- Rash and swelling
- Bumps and blisters

The best treatment for contact dermatitis is avoiding the substance that caused the reaction. A patch test (not a blood test or skin prick test) can help identify specific allergens causing the dermatitis. Sometimes the pattern of the rash on the skin, or where it is located on the body, can provide clues as to what may have triggered the reaction.
For persistent CD symptoms, a provider may prescribe a topical steroid, TCIs or phototherapy to calm the inflammation.

The skin signs and symptoms of contact dermatitis may appear similar to those of atopic dermatitis.

Dyshidrotic Eczema
Dyshidrotic eczema (dis-hi-DROT-ik EK-suh-muh) appears as small, itchy, clear fluid-filled blisters on the hands and feet. It is believed to be twice as common in women as it is in men.

The blisters may last up to three weeks before they begin to dry. As the blisters dry, they may turn into skin cracks or cause the skin to feel thick and spongy, especially if the area was scratched repeatedly.

Symptoms of dyshidrotic eczema include:
- Deep-set blisters on the edges of the fingers, toes, palms and soles of the feet
- Itching
- Redness
- Flaking
- Scaly, cracked skin
- Pain

At-home treatment for dyshidrotic eczema includes soaking hands and feet in cool water or applying compresses to the affected area two to four times a day followed by a rich moisturizer.
For more severe cases of dyshidrotic eczema, a provider may prescribe topical steroids, TCIs or phototherapy. Additionally, the provider may drain the blisters in-office, and/or give a dose of Botox in the hands and feet to reduce sweating and wetness, which are known triggers (in addition to nickel, including nickel-containing foods) for this form of eczema.

Atopic dermatitis and contact dermatitis may look like dyshidrotic eczema.

**Nummular Eczema**

Also known as discoid eczema, nummular dermatitis (NUM-yuh-ler dur-muh-TIE-tis) appears as itchy, coin-shaped spots. It can be difficult to treat because it seems to affect people differently.

Nummular eczema can sometimes be mistaken for ringworm, so a health care provider may do a fungal test to rule out that possibility.

Symptoms of nummular eczema include:

- Coin-shaped lesions on arms, legs, torso and/or hands
- Itching and burning
- Lesions that are oozing liquid or have crusted over
- Red, scaly and inflamed skin around the lesions
Depending on severity, prescription treatment for nummular eczema includes topical steroids, coal-tar creams or phototherapy. Topical or oral antibiotics may be used when there is a bacterial infection on the skin.

Atopic dermatitis may look like nummular eczema, especially on people of African-American or Asian descent.

**Seborrheic Dermatitis**

Seborrheic dermatitis (seb-uh-REE-ick dur-muh-TIE-tis) occurs in areas of the body that tend to be oily, such as the face, upper chest and back. It often appears on the scalp as dandruff, where symptoms may range from dry flakes to yellow, greasy scales with reddened skin.

In addition to genes and hormones, an overgrowth of the yeast that lives on the skin can contribute to the development of seborrheic dermatitis. It is slightly more common in men than women.

People with certain diseases that affect the immune system, such as HIV/AIDS, and the nervous system, such as Parkinson’s disease, are believed to be at an increased risk of developing seborrheic dermatitis.
Symptoms of seborrheic dermatitis include:

- Redness
- Greasy, swollen skin
- White or yellowish crusty flakes
- Itch
- Pink-colored patches, most prominent in people with dark skin

In mild cases, an OTC topical antifungal cream or medicated shampoo with ketoconazole, selenium sulfide, coal tar or zinc pyrithione may be enough to control symptoms.

In more severe cases, a provider may prescribe topical steroids or TCIs to calm the inflammation. Oral antifungal agents may also be used.

**Stasis Dermatitis**

This type of eczema is sometimes called venous stasis dermatitis. It usually occurs where there is a problem with blood flow in the veins due to poor circulation. In stasis dermatitis, pressure develops in the lower legs, causing fluid to leak out of the veins and into the skin, resulting in swelling, redness, scaling, itching and pain.

In recurrent cases, there may be permanent changes such as thickened or hardened skin, scarring, changes in skin color and swelling of the lower legs.

Symptoms of stasis dermatitis include:

- Swelling
- Redness
- Scaling
- Itching or pain
In severe cases of stasis dermatitis, there may be:

• Oozing
• Open areas (cracking or larger ulcers)
• Infection
• Contact dermatitis

Having varicose veins, high blood pressure, numerous pregnancies, heart disease, kidney disease, obesity and/or a blood clot may increase the risk of developing stasis dermatitis.

Stasis dermatitis treatment includes use of compression stockings or Unna Boots to reduce swelling. Elevating the legs at heart level once every two hours for 15 minutes will also help with swelling. For open sores or skin ulcers, a special dressing may need to be applied to promote healing.

In addition to managing the swelling, a health care provider may prescribe a topical steroid or TCI to reduce inflammation. The provider may also review medications that are known to have edema (swelling from fluid in the tissues) as a side effect, which can contribute to stasis dermatitis.

For stubborn cases of stasis dermatitis, a provider may recommend minimally invasive surgery to remove varicose veins from the lower legs.
IDENTIFYING ECZEMA TRIGGERS

Working to keep your symptoms under control is important to staying healthy and comfortable while living with eczema. When trying to identify potential triggers, keep in mind that an eczema flare can appear some time after exposure. This lag time can make some triggers challenging to detect.

It’s important to remember that eczema affects everyone differently, and that one person’s triggers may not be the same as another’s. You might experience eczema symptoms at certain times of the year or on different areas of your body.

Here are some everyday things that can trigger an eczema flare or make it worse:

**IRRITANTS**
- Metals, in particular, nickel
- Soaps and household cleaners
- Fragrances
- Certain fabrics such as wool and polyester
- Antibacterial ointment like neomycin and bacitracin
- Formaldehyde, which is found in household disinfectants, some vaccines, glues and adhesives
• Isothiazolinones, an antibacterial that is found in personal care products like baby wipes
• Cocamidopropyl betaine used to thicken shampoos and lotions
• Paraphenylenediamine, which is used in leather dyes and temporary tattoos, among other things

PHYSICAL
• Stress
• Bacteria on the skin
• Sweat
• Hormones
• Long, hot baths or showers (especially when not immediately followed by a moisturizer)
• Infection
• Excessive scratching or rubbing of the skin

CLIMATE
• Change in season
• Hot weather
• Cold, dry weather
• Low humidity
• High humidity
AIRBORNE ALLERGENS
• Pollen
• Pet dander
• Mold
• Dust mites
• Cigarette smoke (including second-hand smoke)

OTHER
• Insect bites
• An excess of sebum (oil) on the skin
• Overgrowth of naturally occurring yeast on the skin

Patch Testing
Patch testing is a tool to diagnose potential eczema triggers. In this test, the provider puts select substances on adhesive strips — the “patches” — and applies them to the back.

The patches are left on for 48 hours. After that time, the patches are removed and the skin is evaluated for reactions. After one or more days, the patch sites are again evaluated for signs of a reaction on the skin. If there is a reaction, the allergy to that substance is confirmed. However, lack of a reaction does not exclude the possibility of a contact allergy.

A patch test is not the same as the blood allergy tests and the “prick testing” commonly done to identify food and environmental allergens.
OVERVIEW OF ECZEMA TREATMENTS

The cornerstone of eczema treatment is the daily practice of good skincare: bathing, moisturizing, using OTC and prescription medications as prescribed, and avoiding triggers if possible.

There is no single medication that is effective for all people and all types of eczema. You may have to go through several treatments, or combinations of treatments in partnership with your health care provider, before finding one that helps manage your symptoms. Be patient but persistent, as treating eczema can take several weeks or longer before you see real progress.

Bathing and Moisturizing
It is important to have a regular schedule with eczema care that includes bathing with a gentle cleanser and moisturizing to lock water into the skin and repair the skin barrier. Moisturized skin helps control flares by combating dryness and keeping out irritants and allergens.

Moisturizers are classified based on the amount of oil and water they contain. The more oil in a moisturizer, the better it usually is for eczema. The best moisturizers to use are the
ones that feel “greasy” (ointments and creams) because they contain more oil. These are very effective at keeping moisture in and irritants out.

The “Soak and Seal” method of treating eczema is recommended by many providers to combat dry skin and reduce flares. To get the full therapeutic benefit, Soak and Seal often and follow these steps in order.

**Instructions to Soak and Seal:**

1. Take a bath using lukewarm (not hot) water for five to 10 minutes. Use a gentle cleanser (no soaps) and avoid scrubbing the affected skin.

2. After bathing, pat the skin lightly with a towel leaving it slightly damp.

3. Apply prescription topical medication to the affected areas of skin as directed.

4. Within three minutes, liberally apply a moisturizer all over the body. It’s important to apply the moisturizer within three minutes or the skin may become even drier.

5. Wait a few minutes to let the moisturizer absorb into the skin before dressing or applying wet wraps.

Don’t limit moisturizing to just bath time. Slather it on throughout the day whenever the skin starts to itch or feel dry.
**Bleach Baths**
For people with moderate to severe atopic dermatitis, bleach baths can calm inflammation and may reduce the risk of skin infections. The concentration of chlorine in a bleach bath is about equal to that of a swimming pool. Let your health care provider know you are doing bleach bath treatments.

To prepare a bleach bath, fill the tub with lukewarm water. Be sure to use standard, **unconcentrated** bleach (5.25% to 6% sodium hypochlorite). Add 1/2 cup bleach for a full standard-size bathtub of water (about 40 gallons); or 1/4 cup for a half bath (about 20 gallons).

Soak in the water for 10 minutes. If desired, rinse with warm tap water and then apply your usual moisturizer.

People with bleach sensitivities or allergic asthma that might be aggravated by chlorine fumes should consult with their health care provider before starting bleach bath therapy.
Wet Wrap Therapy

Wet wrap therapy rehydrates and calms the affected skin and can boost the effectiveness of topical medications. Consult with a health care provider prior to starting wet wrap therapy.

Wet wraps are best done after bathing, moisturizing and applying medication. Use clean, preferably white, cotton clothing or gauze from a roll for the wet layer, and pajamas or a sweat suit on top as a dry layer. If the eczema is on the feet and/or hands, you can use cotton gloves or socks for the wet layer with vinyl gloves or food-grade plastic wrap as the dry layer.

To do wet wrap therapy, first moisten the clothing or gauze in warm water until they are slightly damp. Next, wrap the moist dressing around the affected area. Then gently wrap the dry layer over the wet one. Lastly, carefully put on night-time clothing so as not to disturb the dressing. Leave wet wraps on for several hours or overnight, taking care not to let them dry out.
Over-the-Counter Remedies
Your health care provider may recommend treatments available for purchase at a local drug store, including gentle cleansers, mild steroids, moisturizers, petroleum jelly, mineral oil or coal-tar-based products. There are many OTC products available that may help prevent and control your eczema symptoms. Read labels, as some of these products may contain ingredients that increase the risk of contact dermatitis.

Visit EczemaProducts.org to view a directory of over-the-counter products that have received the National Eczema Association Seal of Acceptance™.

Prescription Therapies

ECZEMA TYPES

- Atopic Dermatitis
- Contact Dermatitis
- Dyshidrotic Eczema
- Nummular Eczema
- Seborrheic Dermatitis
- Stasis Dermatitis

TOPICAL MEDICATIONS

Topical steroids work by reducing inflammation in the skin. They also make blood vessels near the surface of the skin tighter, which helps decrease redness. Topical steroids come in varying strengths
and formulations. They should be used sparingly to control flares. When using steroids, follow the provider’s directions closely and do not apply on sensitive areas such as the eyelids or genitals.

Note: Routine use of oral or injectable steroids is generally discouraged and should be reserved for special circumstances.

Protopic and Elidel are topical calcineurin inhibitors (TCIs). Once absorbed in the skin, TCIs are anti-inflammatory and work by stopping a piece of the immune system from “switching on.” They do not contain steroids and can be used for extended periods of time to control symptoms and reduce flares.

Eucrisa is a non-steroidal, topical phosphodiesterase 4 (PDE4) inhibitor that works by blocking the PDE4 enzyme, which in turn reduces inflammation on and below the surface of the skin. A topical PDE4 inhibitor can be used for extended periods of time to control symptoms and reduce flares.

Prescription skin barrier protection medications, usually made from lipids and ceramides, help prevent moisture loss and guard against irritants.
entering the skin. Lipids and ceramides are made from fats, oils and waxes. People with eczema have a deficiency of natural lipids, which contributes to intense dry skin and itching.

PHOTOTHERAPY
Also known as light therapy, phototherapy exposes the skin to a special type of light called ultraviolet B (UVB) using a walk-in or hand-held machine. Phototherapy treatment is done several times a week in the doctor’s office over a period of several weeks or even months. Phototherapy is thought to work on certain types of eczema by slowing inflammation and cell division.

IMMUNOSUPPRESSANT MEDICATIONS
Immunosuppressants work by controlling, or suppressing, the immune system. Suppressing the immune system can slow down AD symptoms by reducing inflammation. Immunosuppressants are typically in pill form but can also be taken by injection. Methotrexate, cyclosporine and mycophenolate are all considered immunosuppressants. These medications are prescribed “off-label,” which means that they’re not approved by the U.S. Food and Drug Administration (FDA) to treat atopic dermatitis.
**BIOLOGICS**

Biologic drugs or “biologics” are engineered from proteins derived from living cells or tissues and are taken by injection. The biologic Dupixent works by targeting a part of the immune system thought to contribute to the symptoms of moderate to severe atopic dermatitis. By slowing the immune system reaction, Dupixent reduces inflammation, which in turn reduces skin redness, itch and rash associated with atopic dermatitis.

**MANAGING ITCH**

Chronic itch is a universal symptom of most types of eczema. Itch from eczema is different than itch from a bug bite or poison ivy. Because of this, common medications used for itch, such as antihistamines, do not work well on the itch associated with most types of eczema.

The first step to managing itch is to reduce the risk of it happening in the first place. This can be done through a daily bathing and moisturizing routine and using prescription medications as prescribed. Wet wrap therapy also helps control itch.
Outside of bathing, apply moisturizers that replenish the skin barrier consistently and liberally throughout the day.

Home remedies for itch include soaking in a bath with oatmeal or baking soda. These can also be applied directly to the skin in the form of a paste.

While antihistamines do not stop the itch sensation, they may be recommended to help people with eczema fall asleep. Cotton gloves or cutting fingernails short can help protect the skin from night-time scratching. OTC corticosteroids can also help with mild itch.

Topical and immunosuppressant medications reduce symptoms of itch as does phototherapy. In severe cases, health care providers may prescribe mirtazapine, an antidepressant that is effective at relieving itch at night; pramoxine, a topical anesthetic; or certain oral antibiotics used for skin infections.

As much as possible, try not to excessively scratch the skin affected by an eczema flare. Too much scratching can lead to more
rashes, thickened skin and infections if the surface of the skin is broken. Scratching also can trigger the “itch-scratch cycle” where the scratching leads to more itchiness.

For some adults with eczema, the intense itching can lead to a diagnosis of the skin disorder, neurodermatitis (nur-OH-dur-muh-TIE-tis), sometimes called lichen simplex chronicus (LIE-ken SIM-plex KRON-ik-cus).

Neurodermatitis is fueled by the itch-scratch cycle. The affected patch of skin becomes thick, leathery and even itchier the more it is rubbed or scratched because of irritated nerve endings in the skin. The affected skin may also appear darker than the skin around it and have pronounced lines. Once the itching is brought under control and the skin heals, the symptoms of neurodermatitis typically improve.

Looking for the right product for your eczema? Look for ones with the NEA Seal of Acceptance™

Go to: EczemaProducts.org for the full list
Eczema, especially atopic dermatitis, can exist with other known medical conditions. These other conditions are called “comorbidities.”

**Allergic Conditions**

Atopic dermatitis is part of a group of allergic conditions. In fact, “atopic” means allergy. These include asthma, hay fever and food allergies. If a person has one of these conditions, the likelihood of developing another atopic condition is increased. Contact dermatitis is also considered atopic, though its connection to asthma, food allergies and hay fever is unknown.

More than 20% of adults with atopic dermatitis have allergic asthma. Symptoms of allergic asthma include:

- Coughing
- Wheezing
- Shortness of breath
- A tight feeling in the chest

If you are experiencing any symptoms of allergic asthma, please contact your health care provider.

Adults with atopic dermatitis may also develop allergic rhinitis or hay fever. Symptoms of hay fever include itchy, watery eyes, nose and throat; stuffy, runny nose; ear pressure; and fatigue.
Contact your provider if the symptoms cannot be controlled with OTC medications or if they are affecting your everyday life.

Many adults with atopic dermatitis have food allergies. A food allergy is defined by a reaction that occurs within 30 minutes of exposure and causes symptoms ranging from hives and swelling of the lips, all the way to breathing troubles, vomiting and diarrhea. Common foods that trigger an allergic reaction include peanuts, eggs, milk, soy and wheat. It is unknown if food allergies are a trigger or contribute to the severity and duration of atopic dermatitis symptoms.

**Eczema and Mental Health**
Research suggests that people with eczema, particularly atopic dermatitis, have higher rates of depression and anxiety. Much is unknown about the relationship between these conditions.

According to the National Institute of Mental Health, if a person has experienced some of these symptoms for two weeks or longer, they may have depression and should consult a health care provider:

- Feeling sad, empty and/or anxious
- Feeling hopeless
- Lost of interest in hobbies or other activities
• Decreased energy, feeling tired more often
• Difficulty concentrating
• Restlessness, unable to sit still
• Problems sleeping
• Weight change
• Thoughts of death or suicide

It’s important to be aware that atopic dermatitis and depression may be connected. Talk to a health care provider or mental health specialist if you are experiencing symptoms of depression.

Mood changes, including anxiety and depression, are side effects of the asthma medication montelukast. If you are taking montelukast and are experiencing symptoms of depression/anxiety, contact your health care provider right away.

**Infection**

Due to problems with the skin barrier and an increase of bacteria on the skin, people with eczema are prone to skin infections from both bacteria and viruses, especially staph and herpes.

Symptoms of a skin infection include redness, skin that is warm/hot to the touch, pus-filled bumps (pustules), and cold sores or fever blisters. Consult your provider if you suspect you have a skin infection.
WHERE CAN I GET MORE INFORMATION?

The National Eczema Association offers a range of programs and services to help you understand and manage eczema.

The NEA website provides in-depth information on managing eczema, the newest treatments available and the latest research findings. There you can sign up for NEA’s free educational webinars, download fact sheets and brochures, and keep up with all the happenings in the world of eczema at Eczema Matters, NEA’s online magazine.

LOOKING FOR A PROVIDER?
Check out NEA’s Eczema Provider Finder for an expert in eczema care near you: EczemaProviderFinder.org

SEARCHING FOR THE PERFECT PRODUCT?
The Seal of Acceptance product directory is designed to help you find products that have been created for eczema. Learn more at: EczemaProducts.org
Get support and trade ideas and information with other people just like you on the **NEA Facebook, Instagram, YouTube and Twitter pages**, or at **Eczema Wise** NEA’s online support group.

Connect in person through **NEA health events** held in different cities in the U.S. each year. Or join our group of advocates to push for fair and full access to care and treatments for everyone affected by eczema.

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