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Eczema
ASSOCIATION



Types of
Eczema



Common
Triggers



Controlling
Flares



Treatments



Related
Conditions

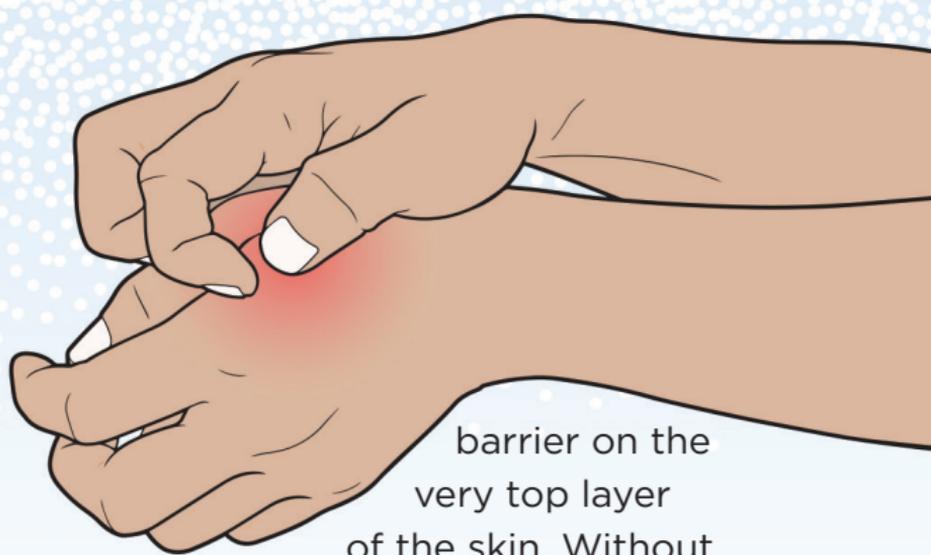
Eczema Basics for CHILDREN

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 that impact children, including atopic dermatitis, contact dermatitis, dyshidrotic eczema, nummular eczema and seborrheic 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 a trigger. 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 most often appears on the edges of the fingers, toes, palms of the hands and soles of the feet. Seborrheic dermatitis happens where the skin is oily, like the face, scalp and back.

For most types of eczema, managing flares comes down to these basics:

- Know your child's triggers
- Implement a regular bathing and moisturizing routine
- Use over-the-counter (OTC) and prescription medication consistently and as prescribed
- Watch for signs of infection — pus-filled bumps, pain, redness, heat — on the skin

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) products, prescription topical, oral and injectable medications, and phototherapy.

However, many parents and caregivers find that even when they do all the “right” things, their child’s 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 still 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.

TYPES OF ECZEMA IN CHILDREN

There are several distinct types of eczema in children, and it is possible to have more than one type at a time. Certain types of eczema can 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). About 13% of all children in the U.S. have atopic dermatitis.

Atopic dermatitis usually starts in infancy or early childhood. Children 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 bumps.” Your child’s skin may also become thicker from too much scratching and rubbing.

With infants and toddlers, atopic dermatitis typically appears on the face or on the elbows and knees — places that are easy to scratch and rub as they are crawling. It may spread to other areas of the body, but not in the diaper area, where moisture protects the skin.

In older children, AD usually appears in the folds of the elbows, hands and/or knees. Rashes or redness behind a child's ears, on their feet or scalp, may also be a sign of atopic dermatitis.

Depending on the severity of symptoms, atopic dermatitis in children can be treated with OTC products; topical steroids; topical calcineurin inhibitors (TCIs); topical PDE4 inhibitors; phototherapy; or immunosuppressant drugs.

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 fragrance or nickel, it is called allergic contact dermatitis. If the reaction is caused by an irritation — for example, if the child frequently licks their lips or sucks their thumb — it is called irritant contact dermatitis. 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 located on the body, can provide clues as to what may have triggered the reaction.

Symptoms of contact dermatitis include:

- Itchy skin
- Redness
- Rash and swelling
- Bumps and blisters

For persistent CD symptoms, a provider may prescribe topical steroids, 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) is a type of eczema characterized by small, itchy, clear fluid-filled blisters appearing on the hands and feet. It is twice as common in females and rarely affects children under the age of 10. Common causes of dyshidrotic eczema include exposure to nickel (including nickel in foods), sweat and water.

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.

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 also 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, chest and back. In infants, seborrheic dermatitis usually appears on the scalp and is commonly known as cradle cap. In older children, it's known as dandruff.

Along with genes and hormones, an overgrowth of the yeast that lives on the oily parts of the skin naturally can contribute to the development of seborrheic dermatitis.

In addition to the scalp, seborrheic dermatitis can appear on the face, especially around the eyes, eyebrows and nose area. It can also appear in the diaper area and in the folds of babies' skin including the neck, thighs and armpits.

Symptoms of seborrheic dermatitis include:

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

Seborrheic dermatitis in babies typically goes away by 12 months of age. Dandruff can persist into adulthood. If the condition is bothersome, it can be treated.

Try the following home remedy for cradle cap:

1. Apply plain mineral oil or petroleum jelly to your baby's scalp about an hour before bathing to loosen scales.



2. Gently massage shampoo into the scalp for a few minutes to remove the scales. A dandruff shampoo works best but can sting if it gets into the eyes.
3. Rinse well and gently pat dry.

If this doesn't work or the condition worsens, consult your health care provider, especially if you suspect infection. Signs of infection include skin tenderness, increased redness, warmth, swelling and drainage, unpleasant odor or hair loss.

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. It is OK to leave untreated if your child is not uncomfortable.

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

IDENTIFYING YOUR CHILD'S ECZEMA TRIGGERS

Working to keep 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 child's triggers may not be the same as another's. Children with eczema might experience symptoms at certain times of the year or on different areas of their 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
- Paraphenylene-diamine, which is used in leather dyes and temporary tattoos, among others

PHYSICAL

- Stress
- Skin germs
- 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
- 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 valuable tool to diagnose potential eczema triggers in your child. In this test, the provider puts selected chemicals 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 child’s 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 or chemical 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 FOR CHILDREN

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

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

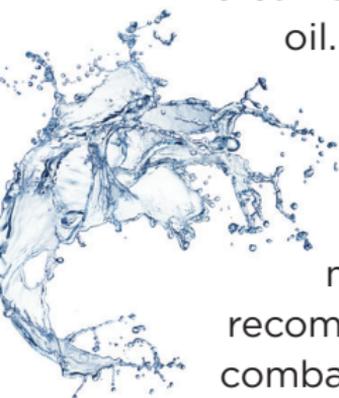
Bathing and Moisturizing

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 combatting 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 those 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, have your child Soak and Seal often and follow these steps in order:

Instructions to Soak and Seal:

1. Put the child in a bath using lukewarm 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 child’s body. It is 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 your child throughout the day whenever their skin starts to itch or feel dry.

Bleach Baths

For children 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); 1/4 cup for a half bath (about



20 gallons); or 1 tablespoon for a baby bathtub (about 4 gallons).

Have your child soak in the water for about 10 minutes. If desired, rinse the child in warm tap water and then apply your child's usual moisturizer.

If your child has a bleach sensitivity or allergic asthma that might be aggravated by chlorine fumes, consult your child's 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 your child's health care provider prior to starting wet wrap therapy.

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

Instructions for Wet Wrap Therapy:

1. Moisten the clothing or gauze in warm water until slightly damp
2. Wrap the moist dressing around the area of your child's skin affected by eczema
3. Gently wrap the dry layer over the wet one
4. Carefully put on nighttime 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 doctor may recommend treatments available for purchase at your 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 eczema symptoms in children. Read the labels carefully, as some of these products may contain ingredients that could increase the risk of contact dermatitis.

Visit EczemaProducts.org to view a directory of OTC 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

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 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.

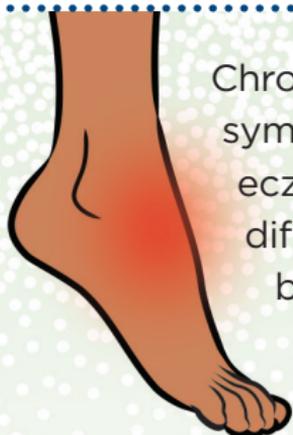


IMMUNOSUPPRESSANT MEDICATIONS

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.



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 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 child's skin in the form of a paste.

While antihistamines do not stop the itch sensation caused by eczema, they may be recommended to help children with eczema fall asleep. Cotton gloves or cutting finger nails short can help protect the skin during nighttime scratching. OTC steroids 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, encourage your child to avoid excessively scratching 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” whereby the scratching leads to more itchiness.

Help the child gain control over their urge to scratch by having them draw pictures or recite lyrics from their favorite song. For an older child, try meditation exercises or counting out 10 deep, long breaths — anything to get their mind off scratching at that moment.

Go to nationaleczema.org to find more tips on how help your child avoid scratching through games, art and other fun distractions.



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

Go to EczemaProducts.org for the full list

RELATED CONDITIONS

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 child 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 and hay fever is unknown.

About 50% of children with moderate to severe atopic dermatitis develop allergic asthma. Symptoms of allergic asthma include:

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

If you think your child is showing symptoms of allergic asthma, please contact your health care provider.

About 75% of children with moderate to severe atopic dermatitis 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 child's doctor if you cannot control these symptoms with OTC medications or the symptoms have become severe.

Up to one-third of children with AD also have food allergies. A food allergy is defined by a reaction that occurs within 30 minutes of exposure. It can cause symptoms ranging from hives and swelling of the lips all the way to breathing troubles, vomiting and diarrhea. Common food allergies for children with AD include peanuts, eggs, milk, soy and wheat. If you suspect your child has a food allergy, please see a health care provider who specializes in identifying allergies in children. It is unknown if food allergies are a trigger or contribute to the severity and duration of atopic dermatitis symptoms.

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 your child has a skin infection.

Eczema and Mental Health

Research suggests that children with eczema, particularly atopic dermatitis, have higher rates of depression and anxiety. They are more likely to experience bullying in school and social isolation because of activity restrictions due to the disease.

Some symptoms of depression in children include:

- Irritability or anger
- Continuous feelings of sadness and hopelessness
- Social withdrawal
- Changes in appetite and sleep
- Outbursts or crying
- Difficulty concentrating
- Low energy, tiredness

Not all children have these symptoms. If you suspect your child is experiencing depression, talk to a health care provider or pediatric mental health specialist.

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

ECZEMA AND YOUR CHILD'S BEHAVIOR

The symptoms of eczema may impact your child's behavior. For example, nearly 30% of children with atopic dermatitis experience disrupted sleep five or more nights a week, which can lead to daytime sleepiness, irritability, inattention and moodiness.

You can help your child sleep by keeping eczema symptoms under control through regular bathing and moisturizing and the use of OTC and/or prescription treatments as recommended by your health care provider.

HELPING YOUR CHILD AT SCHOOL

It's a good idea to discuss your child's eczema diagnosis with the teacher at the start of the school year. A teacher who is familiar with eczema can help your child cope with the practical aspects of the condition and any social or emotional issues that may arise in the classroom.

You can make eczema less of an issue — and make school easier — by putting together a kit with



everything your child may need during the school day. Suggestions for the kit include moisturizing lotion, alcohol-free hand sanitizer, gauze, bandages and protective clothing.

In severe cases, a 504 plan may be considered for a student. A 504 plan is a provision of the Federal Rehabilitation Act of 1973, and can be used to address physical, medical or learning issues. All schools, school administrators and teachers must comply with a 504 plan. Parents work with the school to map out the details particular to their child. Every 504 plan is unique.

For more information on working with your child's school, download NEA's Tools For School, www.nationaleczema.org/tools-for-school.

TALKING WITH YOUR CHILD ABOUT ECZEMA



Communication is as important as medical treatment in helping your child cope with eczema. As you learn about eczema, teach your child what you know. Encourage your child to communicate with you,

particularly when it comes to their feelings or experiences outside the home and in school.

The effects of eczema go beyond symptoms like itching and rash to impact every aspect of your and your child's life. By keeping the lines of communication open, you will not only help your child cope with the challenges that come with an eczema diagnosis, but also teach them how to be self-sufficient at caring for their disease as they get older and more independent.

WHERE TO GET MORE INFORMATION ABOUT ECZEMA

The National Eczema Association offers a range of programs and services to help you understand your child's 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 trigger trackers, and catch-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 a health care provider near near you:

[EczemaProviderFinder.org](https://www.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](https://www.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.

Join us at:

www.nationaleczema.org

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