

Managing Eczema

Eczema Education Series



www.eczema-help.ca

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What is eczema?



Eczema refers to a chronic inflammatory skin condition, characterized by dry skin, with patches that are red and intensely itchy. These patches of eczema may ooze, become scaly, crusted, or hardened. Symptoms can range from mild to severe, and the condition can negatively impact quality of life. Eczema can occur anywhere on the skin and is commonly found on the flexors (bends of the arms, backs of the knees).

There are many types of eczema, with the most common one being atopic dermatitis. Atopy refers to a hereditary tendency toward eczema, asthma, and allergic rhinitis (hay fever). People with eczema may suffer with one of the other atopic diseases.

What Causes Eczema?

The exact cause of eczema is unknown, however, there are genetic, immunological and environmental factors that play a role. Eczema can come and go, and can migrate around the body; just as one patch clears up, another may develop. This is the chronic nature of the disease.



When the skin cycles back to inflammation, the patient is experiencing a flare-up.

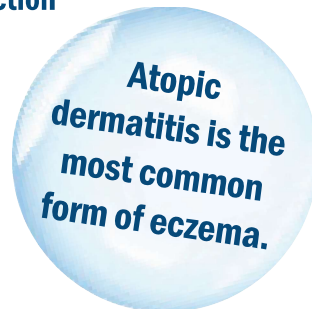
Understanding the Disease

Eczema is a recurring inflammation of the skin that:

- typically begins in early childhood
- can occur in infants as early as a few weeks old
- can continue through adolescence and into adulthood
- may occur for the first time well into adulthood
- may be outgrown; however, skin may continue to be dry, irritable, and sensitive

Impaired Skin Barrier Function

Our skin is the barrier to the outside world, is somewhat waterproof, and keeps our internal organs and systems safe from the elements and from bacteria invading our bodies.



Atopic dermatitis patients have impaired barrier function, often due to a deficiency in ceramides (a lipid) and filaggrin (a protein). This means that the skin barrier is broken down, loses moisture, and can allow bacteria to enter the body (causing bacterial infections on the skin). These deficiencies leave the skin dry and cracked. The goal of eczema management is to replenish moisture, and improve the skin barrier. This is why frequent moisturizing is so important.

Flare-Ups

Flare-ups can be prompted by environmental elements or “triggers” such as certain soaps, clothing fabrics, deodorants, carpet fibres, dust, and others. Sometimes a flare-up will occur with no discernible trigger. Overheating, excessive sweating, low humidity, certain foods, and stress can also contribute to flare-ups.

When the skin becomes irritated by any one of these irritants, it itches, causing the sufferer to scratch the affected area. Scratching makes the condition worse and the skin becomes inflamed and reddened, aggravating the itch. This is called the “itch-scratch cycle” and can become severe and cause pain.



Some health care professionals describe this as the mystery of eczema - is it the rash that itches, or the itch that rashes?

Trigger Chart

Look around you and write down all of the possible things in your surroundings that could be contributing to your flare-ups. For example, do you experience a flare-up or worsening of your eczema when you wear a certain sweater? Is your eczema worse in the winter? Do you itch on the days when you clean your house? Does perfume irritate your skin?

Use this Trigger Chart to help to identify your triggers.



Environmental Factor/Trigger	Name of Product	Date and Time	Symptoms Experienced	Pain Level (Low, Med, High)	Approach/Treatment Used
Dust mites					
Soaps/detergents/fabric softener sheets					
Lotions/creams					
Pet dander					
Change in seasons					
Deodorants					
Perfumes					
Cosmetics					
Shampoo/hair products					
Bubble bath/bath oils/scented bath salts					
Wool/other fabrics					
Latex/rubber/plastic					
Water (hot baths, chlorinated)					
Tobacco smoke					
Plants					
Cleaning products					
Foods (eggs, milk, wheat, citrus foods, soy, seafood, etc.)					
Sweating					
Change in weather					

Prevention is the Best Medicine

Controlling factors in your environment can help minimize flare-ups from occurring. By minimizing or eliminating your triggers, you can help to reduce the number of flare-ups experienced. One of the frustrating parts of eczema is that flare-ups can still occur even when you are diligently avoiding triggers and taking care of your skin.

The Role of Food Allergies

Certain foods can trigger a flare-up, just like other environmental triggers. This can occur by eating the trigger food, or by skin contact with the food during preparation (on the hands and around the mouth).

It is important to note that food allergies do not cause eczema, however foods can trigger a flare-up. It is not recommended to withhold foods or entire food groups for long periods of time without consulting your doctor or your allergist to confirm that there is in fact an allergy to that food.

Allergy skin testing can help provide clues about environmental and food allergies, however, patients with atopic dermatitis have high false positive rates, as the simple act of scratching the skin during testing can cause inflammation which may then be misinterpreted as an allergic reaction. Antihistamine use can also impact the accuracy of allergy testing. Speak with your allergist about your eczema and your medical treatments prior to testing.

Psychological Impact of Eczema

Eczema can be a significant burden and have a psychological impact on sufferers and their families, and can contribute to feelings of embarrassment, social withdrawal, depression, and anxiety. The condition can have a negative impact on mood and daily living, as it can be a chronically painful and uncomfortable condition. Sleep disruption is very common, which also impacts psychological well-being. Speak with your child's health care professional about any concerns related to psychological well-being.



Hydrating the Skin

The Importance of Bathing and Moisturizing

While there is no standard recommendation on bathing/showering frequency or duration, Canadian experts generally recommend bathing once daily, for 5 to 10 minutes, in warm clear water. If bathing/showering is uncomfortable, bathing every second day is fine. Coating the skin after every bath or shower with an emollient (moisturizer) helps to seal that moisture in the skin. This is necessary in patients with eczema as their natural skin barrier, which would normally trap moisture in the skin, doesn't work well. This leaves the skin dry, rough, and sensitive to irritants.

After bathing/showering, gently pat the skin dry and then immediately apply your moisturizer to skin that is still damp. Apply prescription products as recommended by your health care professional.

Apply a moisturizer several times throughout the day. Moist skin will reduce itchiness, which in turn helps to control the disease, as flares occur or increase in response to itching.

Does drinking lots of water help to hydrate the skin?

It is a common myth that drinking an adequate amount of water during the day will hydrate the skin. It is in fact the bathing and moisturizing technique that hydrates the skin. Decades ago, doctors often recommended that eczema sufferers limit baths and showers; however, experts now recommend bathing as an important part of controlling eczema.

Guide to Moisturizers, Cleansers and Bath Products

The best products for bathing and moisturizing are:

1. Products that have few ingredients and that are formulated for sensitive skin and eczema. You want thick moisturizers that will both moisturize the skin and provide a barrier.
2. Products that fit your budget. More expensive is not necessarily better.
3. Products that the eczema sufferer will tolerate and will actually use! If you or your child dislikes the greasy feeling of petrolatum, then find a moisturizer that works for you!

Guide to Ingredients

What Are Ceramides?

An increasingly popular ingredient in moisturizers and emollients is ceramides. Ceramides are lipid (fat) molecules that are important components of skin. They improve the skin barrier, help to increase skin hydration, and prevent the entry of irritants. People with atopic dermatitis have fewer ceramides in the skin, so it is thought that these missing fats can be replaced with moisturizers that contain ceramides.

Anti-Itch Ingredients & Strategies

Moisturizer ingredients, such as Colloidal Oatmeal, Allantoin, and Niacinamide, can have anti-itch properties, and help to soothe the skin. Other anti-itch strategies include frequent application of moisturizers, keeping nails trimmed short and smooth, and using cool compresses during periods of intense itch.

If your eczema has cleared up, and you are no longer using your prescription treatments, continue with a diligent moisturizing routine which may help to prolong the period between flares.



Always look for ESC's Seal of Acceptance

Products that are identified as 'Accepted' have undergone a formal scientific review, are formulated with ingredients and/or concentrations that have been found to be generally suitable for use with sensitive skin and have officially earned our Seal of Acceptance.

Speak with your health care professional if you have any concerns related to your eczema management.

ESC's Seal of Acceptance products include:

Personal Care Products, such as moisturizers, sprays, cleansers, shampoos, and over-the-counter drugs.

Laundry Care Products, such as fabric softeners and laundry detergents.

Look for ESC's Seal of Acceptance products at eczemahelp.ca

Seal of Acceptance Disclaimers

Seal of Acceptance products, including personal care products and laundry care products, may contain potential irritants at concentration levels thought to be insignificant for most individuals. Some people with eczema may still find they do not tolerate certain products or certain ingredients. Rarely, some individuals will have an allergy to specific ingredients that are well tolerated by others. ESC recommends individuals seek advice on product selection from their health care professional.

The Eczema Society of Canada's (ESC) Seal of Acceptance does not constitute medical advice and relies upon available scientific evidence at the time of issuance of the Seal of Acceptance.

Skin Care Products – ESC recommends that individuals patch test any new product on a small area of skin, before applying it to a large area of skin. Should irritation occur, do not use the product and see your health care professional. Note that cleansers should never be left on the skin.

Over the Counter (OTC) Drugs – ESC reminds consumers that all drugs, including OTC drugs, have risks and potential side effects. Consumers are reminded to read and follow the instructions and consult with their health care professional before using any medication and if their skin is worsening.

Laundry Care Products – Laundry products that have earned our Seal of Acceptance are formulated for sensitive skin; however some people may have an allergy or sensitivities to specific ingredients that are well tolerated by others. Individuals are advised to speak with their health care professional about any concerns related to clothing, fabrics, and laundry care. Should irritation occur, do not use the product and seek medical advice.



Medical Management

Medical management is an important part of controlling eczema, and medications (including topical creams and ointments) should be used as

prescribed by your health care professional. Do not discontinue or alter the treatment plan without consulting your health care professional. Speak to your health care professional or your child's health care professional about the best treatment option for the individual.

Anti-Inflammatory Topical Treatments:

- **Topical Corticosteroids** are prescribed to reduce inflammation and itching. Strengths range from mild to potent. When used under the direction of a health care professional, topical corticosteroids are very effective and safe. In fearing side effects, eczema sufferers or their caregivers often use the treatment too sparingly, or too infrequently. Possible side effects include thinning of the skin if preparations are used excessively or for extended periods. Follow your health care professional's recommendations exactly, and address any questions or concerns you have with your health care professional.
- **Topical Calcineurin Inhibitors (e.g. Elidel[®], Protopic[®])** are prescribed for inflammation and itching, and work by calming the over-active immune response in the skin that causes eczema flares. Side effects may include a burning feeling or a sensation of warmth at the site of application.
- **Topical PDE4 Inhibitors (e.g. Eucrisa[™])** are a new type of topical medication prescribed to manage inflammation. They work to block an enzyme called phosphodiesterase 4 (called PDE4 for short) from allowing too much inflammation to occur in the skin. Cells in our immune system produce PDE4 which helps the body control cytokines (proteins that contribute to inflammation). Sometimes, such as with people with eczema, cytokines are mistakenly triggered in the body and this inflammation results in eczema flares. A possible side effect is a burning sensation after application.

Antibiotics:

- **Topical Antibiotics** are prescribed for secondary infection, which can worsen the eczema and may make it more difficult for the eczema to respond to treatment. Localized patches of infected or resistant eczema may be treated by topical antibiotic creams and ointments. Mupirocin (e.g. Bactroban[®]) or fusidic acid (e.g. Fucidin[®] ointment) have shown to be beneficial.
- **Combination Topical Treatments** combine antibiotics with a topical corticosteroid, which helps to both reduce inflammation and clear the secondary infection with one application. Clearing infections is an important part of eczema management.
- **Oral (taken by mouth) Antibiotics** are prescribed for more significant skin infections. There is often secondary infection on eczema patches, even when there may be no other obvious signs of infection. Oral antibiotics are preferred over topical antibiotics when the infection is extensive.

Oral Steroids:

- **Oral Corticosteroids (e.g. prednisone)** are rarely used, and reserved for the most severe cases. There are long-term side effects with prolonged use, and because eczema is a chronic condition, this is not a permanent solution for severe chronic eczema.

Antihistamines:

- **Antihistamines** are sometimes used to relieve itching and aid in sleep, however regular antihistamine use in eczema management is not recommended and should be discussed with your health care professional. Use of antihistamines for children 6 years of age and under is not recommended.

Biologic Drugs:

- **Biologic Drugs (e.g. Dupixent[™])** are a new class of medication for patients with atopic dermatitis (the most common form of eczema) that is moderate or severe and does not improve enough with topical medications. The medication is taken with a needle injection under the skin and the medication works to stop the process of inflammation that occurs with atopic dermatitis. The first biologic drug approved in Canada for treating atopic dermatitis is called dupilumab (brand name Dupixent[™]). Speak with your health care professional to learn more about treatments that are right for you.

TOPICAL TREATMENTS

Type of Treatment

Uses

Drawbacks/Concerns

Topical Corticosteroids (e.g. Hydrocortisone)

Topical prescription treatment for inflammation and itching. Potencies range from mild to potent. Mild and mid-potency corticosteroids are generally recommended.

Possible side effects include thinning of the skin and stretch marks if strong preparations are used. Discuss duration of use and side effects with the prescribing health care professional.

Topical Calcineurin Inhibitors (e.g. Elidel® and Protopic®)

Topical prescription treatment for reducing inflammation and itching, and work by calming the over-active immune response in the skin that causes eczema flares.

Possible side effects include a burning or warm sensation, stinging, or itching at the application site.

Topical PDE4 Inhibitors (e.g. Eucrisa™)

Topical PDE4 inhibitors, such as Eucrisa™ (crisaborole) are shown to reduce symptoms of atopic dermatitis and are indicated for the treatment of mild-to-moderate atopic dermatitis in patients two years of age and older.

Mild stinging and/or burning may occur upon application.

Topical Antibiotics with Topical Corticosteroids (e.g. Fucidin® H, Fucibet®)

The topical antibiotic Fucidin® combined with topical corticosteroids is used to treat inflammation and bacterial infection. Recommended when bacteria is suspected to be contributing to the eczema flare. Preferred when the infection is on small areas of the skin. Fucidin® H is Fucidin® combined with a mild topical corticosteroid, and Fucibet® is Fucidin® combined with a mid-potency topical corticosteroid.

Long-term use may cause bacteria to become resistant to the antibiotic.

ADDITIONAL TREATMENTS

Type of Treatment

Uses

Drawbacks/Concerns

Biologic Drugs (e.g. Dupixent™)

Biologic drugs, such as Dupixent™ (dupilumab), are injectable treatments indicated for moderate or severe atopic dermatitis not responding to topical medication. Biologic drugs work to stop the process of inflammation that occurs with atopic dermatitis. Speak to your health care professional about whether this treatment is suitable for you.

The most common side effects of dupilumab are conjunctivitis (commonly called pink eye) and redness and other symptoms at the site of the injection. Speak to your health care professional about the safety of this and all medications to manage atopic dermatitis (eczema).

Type of Treatment **Uses**

Oral Antibiotics To treat secondary skin infections caused by scratching, that is widespread on the skin.

Phototherapy Reduces symptoms of eczema.

Oral corticosteroids (e.g. prednisone) Only used in the most severe cases, to control wide spread inflammation on the skin.

Antihistamines Sometimes used to relieve itching and aid in sleep.

Drawbacks/Concerns

Nausea, diarrhea, and potential allergic reactions can occur.

Prolonged exposure to UVB light can cause sunburn, skin damage, eye damage, skin cancer, dry skin, freckling, and premature aging of the skin. This is recommended as a second-line treatment and is only used under the guidance of a health care professional.

There are long-term side effects with prolonged use, and because eczema is a chronic condition, this is not a permanent solution for severe chronic eczema.

Antihistamines are not recommended as part of regular treatment. They can cause drowsiness, although this is often what helps with reducing itch. Skin that is well hydrated through bathing and moisturizing should become less itchy, and therefore reduce the need for antihistamines. Use of antihistamines for children 6 years of age and under is not recommended. Antihistamine use should be discussed with a health care professional.

ADJUNCTIVE THERAPIES

Type of Treatment **Uses**

Bathing & Moisturizing To increase hydration of the skin, reduce itching, reduce inflammation, and prolong time between flare-ups.

Cold Compresses To relieve itching and burning associated with inflammation. When skin is inflamed cold compresses or a cold pack may be helpful to soothe and cool the skin, and help to relieve itching. Soft cotton fabric can be soaked in cool water and applied to the skin for 5-10 minutes (wring out excess water before applying to the skin). Follow the compress with a moisturizer. Note that cold packs or ice packs should not be applied directly to bare skin.

Wet Wraps Relieve itching and help hydrate the skin.

Homopathic Remedies, Naturopathic Remedies, Alternative Therapies May be thought to help manage symptoms of eczema.

Drawbacks/Concerns

Risk of injury from slipping if oils or additives are used in the bath.

While this only offers temporary relief, it can be very helpful during a flare, or an intense period of itchy skin.

Maceration, or damage to the skin, may occur. Do this treatment only under the advice of your health care professional.

Little and/or no data or research supports the effects or the safety of these treatments. Be advised that there may be side effects and drug interactions from these treatments. Patients and parents of patients should have a clear understanding of the expectations of what these treatments are meant to do.



Eczema Tips and Facts

- Some children outgrow their eczema, but for others it may be a lifelong condition to manage.
- Eczema is not contagious. You cannot “catch” it from a school playmate.
- Keeping your skin moist and well hydrated (e.g. applying moisturizer throughout the day) is the best defence against recurrent flares.
- Use a cool-mist humidifier in the house or in the bedroom of the eczema sufferer, especially during the dry winter months. Clean as directed to prevent potential mold growth.
- Avoid overheating and sweating when possible, as it increases itchiness, and can worsen eczema.
- Cotton clothing is often best tolerated by people with eczema.
- Avoid harsh soaps, and try to select products that are formulated for eczema and/or sensitive skin.
- Many sunscreen products contain irritating ingredients. Look for sunscreens that are formulated for sensitive skin, or look for formulations with physical sunblocks (e.g., titanium dioxide or zinc oxide).
- Other sun protection strategies should always be used, when possible. These strategies include avoidance of peak sun exposure time (typically mid morning to late afternoon); use of a wide brimmed hat; use of loose and light protective clothing.
- Keep nails trimmed short and filed smooth. This will help to reduce damage done to the skin from scratching.

About the Eczema Society

The Eczema Society of Canada is a registered Canadian charity dedicated to eczema education, support, awareness, and research.



For additional information or to order
treatment guides contact:

Eczema Society of Canada
Telephone: 1-855-ECZEMA-1
E-mail: info@eczemahelp.ca

www.eczemahelp.ca

The medical content within this guide is based on current recommendations in eczema treatment, in consultation with expert Canadian dermatologists, paediatricians, and pharmacists. This information should never be used as an exclusive treatment course. Always review your treatment with your own health care provider.