CONDITION

Atopic dermatitis

Learn how atopic eczema affects the skin, what can trigger flares, and how moisturizers, medicines, and daily skin care can help control symptoms.

WHAT IT IS
Long-term inflammatory skin condition

BODY SYSTEM
Skin

MAIN SYMPTOMS
Itching, dryness, irritation, inflammation

WHAT CAUSES IT
Inherited, immune, skin-barrier and environmental factors

HOW IT IS DIAGNOSED
Skin examination and symptom history

MAIN TREATMENT
Moisturizers and anti-inflammatory medicines

CAN IT BE CURED?
Sometimes - some children improve with age

IS IT AN EMERGENCY?
Sometimes - painful spreading blisters or open sores

LONG-TERM OUTLOOK
Symptoms often come and go long term

Overview

Atopic eczema, also called atopic dermatitis, is a long-term inflammatory skin condition. It causes dry, itchy, irritated skin. Symptoms often come and go, with periods when the skin is calmer and periods of worsening called flares.

The condition can begin at any age, although it often starts in childhood. Some children improve as they get older, while others continue to have symptoms as adults. Adults can also develop atopic eczema for the first time.

Atopic eczema is not contagious. You cannot catch it from another person or spread it by touching affected skin.

The condition involves a weakened skin barrier and an overactive immune response. A healthy

skin barrier helps keep moisture in and irritants, allergens, and germs out. In atopic eczema, the barrier does not work as well. This allows the skin to lose water and become more sensitive.

Eczema matters because persistent itching can affect sleep, concentration, mood, work, school, and family life. Scratching can further damage the skin and raise the risk of infection. Treatment aims to repair the skin barrier, reduce inflammation and itching, prevent flares, and manage complications.

Symptoms

Itching is the main symptom of atopic eczema. It may be mild or intense and can become worse at night. Scratching may briefly relieve the itch but often causes more inflammation, creating an itch-scratch cycle.

Affected skin may be:

Redness may be less obvious on brown or black skin. Inflamed areas may instead look purple, gray, dark brown, or deeper than the surrounding skin. Dryness, swelling, warmth, itching, and changes in texture can help show that the skin is inflamed.

The location can vary with age. Babies often have eczema on the cheeks, scalp, and outer parts of the arms or legs. In older children and adults, it commonly affects the hands, neck, eyelids, and skin folds, such as the elbows and backs of the knees. However, eczema can occur almost anywhere.

Small, firm bumps around hair follicles may be more noticeable in people with darker skin. Some people also develop round or coin-shaped patches, hand eczema, or changes around the eyes.

- Dry, rough, cracked, or scaly
- Inflamed, swollen, or warm
- Sore, sensitive, or painful
- Thickened after repeated rubbing or scratching
- Oozing or crusted during some flares
- Lighter or darker than nearby skin after inflammation improves

Causes and risk factors

There is no single cause of atopic eczema. It usually develops through a combination of

inherited traits, immune-system activity, skin-barrier problems, and environmental exposures.

A family or personal history of eczema, asthma, or allergic conditions such as hay fever increases the likelihood of developing it. Some people have changes in genes involved in the skin barrier, including the gene that helps produce a protein called filaggrin. A genetic change is not required, however, and not everyone with a family history develops eczema.

Everyday exposures may trigger a flare without being the underlying cause. Triggers differ from person to person and may change over time. Common examples include:

Food does not cause most atopic eczema. Some people, especially young children with persistent or more severe eczema, may also have a food allergy. Food allergy testing is usually most useful when there has been a clear reaction after eating a particular food or when a clinician identifies another specific reason to investigate. Broad testing can produce misleading positive results.

Do not remove major foods from a child's diet without medical and nutritional guidance. Unnecessary restriction can affect growth and nutrition and may not improve the skin.

- Dry or cold weather, heat, sweating, or rapid temperature changes
- Fragranced products, harsh soaps, detergents, and solvents
- Rough or irritating fabrics
- Skin infections
- Saliva around a baby's mouth or prolonged contact with wet clothing
- Stress, which can worsen itching and scratching
- Allergens such as pollen, dust mites, or animal dander in some people

Diagnosis

There is no single test for atopic eczema. A healthcare professional usually makes the diagnosis by examining the skin and asking about itching, the pattern and duration of symptoms, previous treatments, triggers, and personal or family history of allergic conditions.

Several conditions can resemble eczema. These include contact dermatitis, psoriasis, scabies, fungal infections, and some uncommon immune or genetic disorders. The pattern of the rash and response to treatment can help distinguish them.

Allergy tests, blood tests, and skin biopsies are not routinely needed. Patch testing may be considered if allergic contact dermatitis is suspected. During patch testing, small amounts of possible contact allergens are placed on the back for several days to look for delayed skin

reactions.

A clinician may take a skin swab if bacterial infection is suspected, although not every weeping or crusted flare needs testing. If the diagnosis is uncertain, symptoms are severe, or standard treatment is not helping, referral to a dermatologist may be appropriate.

Treatment and management

Treatment depends on age, the affected body area, symptom severity, previous response, and how much eczema affects daily life. A written plan can make it easier to understand which products to use during calm periods and which to use during flares.

Moisturizers and washing

Moisturizers, also called emollients, are a basic part of treatment. They reduce water loss and support the skin barrier. Thick creams or ointments often hold in more moisture than lotions, although the best product is one that is comfortable enough to use regularly.

Apply moisturizer generously and often, especially after bathing or handwashing. Fragrance-free products are generally less likely to irritate sensitive skin. "Unscented" products may still contain fragrances that mask other smells.

Short baths or showers in lukewarm water are usually less drying than long, hot ones. Use a gentle, fragrance-free cleanser only where needed. Pat the skin dry rather than rubbing, then apply moisturizer while the skin is still slightly damp.

Treating inflammation

Topical corticosteroids like prednisone or hydrocortisone are anti-inflammatory medicines applied to the skin. They are commonly used for flares. Different strengths are used for different ages and body areas. Delicate areas, such as the face and skin folds, usually need particular care.

When used as directed, topical corticosteroids can control inflammation effectively. Using a product that is too weak, too infrequently, or for too short a time may leave eczema uncontrolled. Excessive or prolonged use of stronger products can cause side effects, including thinning of the skin. A clinician or pharmacist can explain where, how long, and how often to use a prescribed product.

Nonsteroid prescription treatments are also available. These include topical calcineurin inhibitors and other medicines that block specific inflammation pathways. They may be considered for sensitive areas, ongoing control, or eczema that has not responded adequately to other topical treatment. Temporary burning or stinging can occur with some products.

Reducing scratching and flares

Keeping fingernails short may limit skin damage from scratching. Cool compresses can soothe itchy areas. Soft, breathable clothing and avoiding known irritants may also help.

Wet-wrap therapy involves placing damp dressings over moisturizer or prescribed medicine, followed by a dry layer. It can help during significant flares but should be taught by a healthcare professional because it can increase medicine absorption and may not be suitable when infection is present.

Antihistamines like cetirizine or loratadine do not treat the skin inflammation itself. A clinician may sometimes use a sedating antihistamine for a limited period when severe nighttime itching is disrupting sleep, but routine use is not helpful for everyone.

Treatment for harder-to-control eczema

Phototherapy exposes the skin to controlled ultraviolet light in a medical setting. It may be considered when topical treatment is not enough or when large areas are affected.

For moderate or severe eczema, specialists may discuss injectable biologic medicines, oral medicines that target immune pathways, or other systemic treatments that work throughout the body. These treatments require an individual discussion about likely benefits, monitoring, pregnancy considerations, interactions, and possible side effects.

Antibiotics like amoxicillin or doxycycline do not treat eczema inflammation and are not routinely needed. They may be prescribed when there are signs of bacterial infection. Treatment choices should be reviewed if symptoms are not improving as expected.

Complications

Scratching can break the skin and allow bacteria to enter. Possible signs of bacterial infection include rapidly increasing pain, warmth, swelling, pus, spreading redness or discoloration, and new yellow or golden crusts. Fever or feeling generally unwell may also occur.

Eczema herpeticum is a less common but important infection caused by the herpes simplex virus. It can produce clusters of painful, similar-looking blisters or round, open sores that spread quickly. Fever, tiredness, and eye-area involvement may occur. Seek urgent same-day medical assessment for these symptoms.

Call emergency services for difficulty breathing, fainting, confusion, or swelling of the tongue or throat. These are not routine eczema symptoms and may indicate a severe allergic reaction or another emergency.

Other complications can include sleep loss, reduced concentration, anxiety, low mood, and

withdrawal from social activities. Repeated scratching may cause lasting skin thickening. Darker or lighter marks can remain after a flare, but these color changes often improve gradually.

Eczema around the eyes can sometimes contribute to eye irritation or other eye problems. Prompt medical review is appropriate for eye pain, light sensitivity, vision changes, or significant eyelid swelling.

Follow up

Routine follow-up is useful when eczema is not well controlled, treatment instructions are unclear, or prescription medicines are being used regularly. A review may cover the diagnosis, skin-care routine, correct use of topical treatment, possible triggers, side effects, sleep, and the effect on daily life.

Arrange a nonurgent appointment if:

Seek prompt medical advice for signs of infection, rapidly worsening symptoms, severe pain, or eczema near the eyes. Painful spreading blisters, round open sores, fever, or feeling very unwell require urgent same-day assessment.

Long-term management often involves continuing moisturizer even when the skin looks clear. Some people are advised to use prescribed anti-inflammatory treatment on frequently affected areas at planned intervals to reduce flares. This should follow the person's treatment plan rather than a one-size-fits-all schedule.

- Flares are becoming more frequent or difficult to control
- Eczema is affecting sleep, school, work, or emotional well-being
- A treatment causes troublesome irritation or other possible side effects
- The diagnosis or treatment plan is unclear
- You are considering removing foods from your or your child's diet

Sources

- National Institute for Health and Care Excellence. Atopic eczema in under 12s: diagnosis and management . Clinical guideline CG57. Published 2007; updated 2023.



- Sidbury R, Alikhan A, Bercovitch L, et al. "Guidelines of care for the management of atopic dermatitis in adults with topical therapies." Journal of the American Academy of Dermatology . 2023;89(1):e1-e20.
- Davis DMR, Drucker AM, Alikhan A, et al. "Guidelines of care for the management of atopic dermatitis in adults with phototherapy and systemic therapies." Journal of the American Academy of Dermatology . 2024;90(2):e43-e56.
- Chu DK, Schneider L, Asiniwasis RN, et al. "Atopic dermatitis (eczema) guidelines: 2023 American Academy of Allergy, Asthma & Immunology and American College of Allergy, Asthma & Immunology Joint Task Force on Practice Parameters." Annals of Allergy, Asthma & Immunology . 2024;132(3):274-312.
- American Academy of Dermatology Association. Atopic dermatitis: diagnosis, treatment, and skin-care guidance . Patient education resources.
- National Health Service. Atopic eczema . NHS conditions guidance. Reviewed 2023.