

What is atopic eczema?

Atopic eczema (atopic dermatitis) is the most common form of eczema, a condition that causes the skin to become itchy, dry, and inflamed. Although it is more common in children, often developing before their first birthday, it can develop for the first time at any age.

Atopic eczema is usually a long-term (chronic) condition, although it can improve for a period, or even clear completely in some children, as they get older.

The term atopic is used to describe a group of related conditions, which include asthma, eczema, and hay-fever.

What does atopic eczema look and feel like?

Atopic eczema is **itchy**, which can be severe enough to interfere with sleep, causing tiredness and irritability. Typically, atopic eczema goes through phases of being worse (a flare-up), more settled, and then worse again. Sometimes the triggers for a flare-up can be identified, but **often no cause is found**.

Atopic eczema can affect the **face, joint creases and other body folds (collectively known as the flexures) or can be generalised**.

The skin is often dry with fine scale with poorly-defined (cannot draw a border around it) areas of redness (erythema). In skin of colour the redness can be more difficult to see, and sometimes the affected areas become darker in colour. Other common appearances of atopic eczema include coin-sized areas of inflammation on the limbs (a discoid pattern), and numerous small bumps around the hair follicles, mainly in skin of colour.

In atopic eczema the skin may also weep, blister, crust, crack (fissure) or thicken (lichenification).

What causes atopic eczema?

Atopic eczema is a complex condition; several factors appear important for its development including:

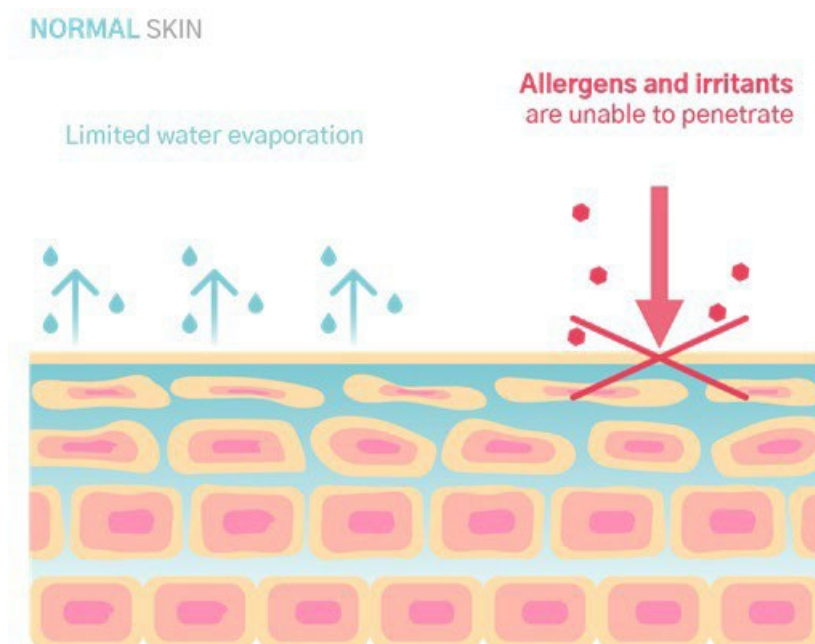
- **Genetic factors** – atopic eczema tends to run in families (see notes below on the skin barrier). If one or both parents have eczema, it is more likely that their children will develop it. Approximately one third of children with atopic eczema will also develop asthma and/or hay fever

- **Environmental factors** – include soaps, detergents, and any other chemicals in contact with the skin. Other factors include exposure to allergens, and infection with certain bacteria and viruses
- Eczema is **not contagious** (ie cannot be caught from somebody else)

The skin barrier – bricks and mortar

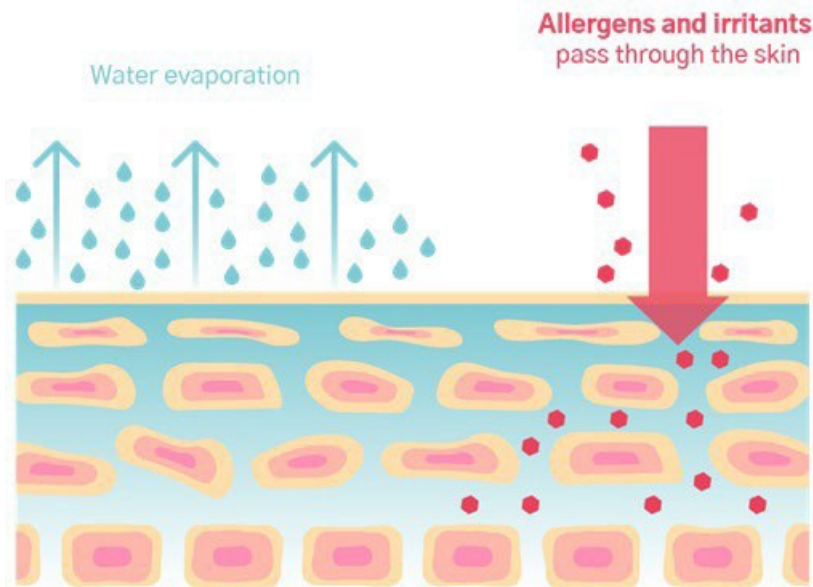
The barrier function refers to the outer skin layer (the Stratum Corneum), which is analogous to a brick wall. In the skin the bricks are dried out, non-living cells called corneocytes. The bricks are held together by mortar/cement, referred to as the intercellular matrix; composed of lipids.

In healthy skin this brick wall is highly impermeable, keeping water loss to a minimum and preventing small particles such as irritants, allergens, and infection from getting into the skin.



In eczema, the **skin barrier becomes less effective** – this can happen naturally as we get older, or in atopic eczema because of a faulty gene, which explains why atopic eczema runs in families. Essentially, the bricks are crumblier and the mortar/cement is less effective at holding everything together, resulting in too much water escaping from the skin (the skin dries out), and allowing more irritants and allergens to penetrate the skin, causing itching and inflammation. **Accordingly, managing the skin barrier effectively is the most important aspect of treating eczema.**

ATOPIC SKIN



Things you can do to help yourself or your child

- **Protect your skin** by avoiding irritants such as soaps, bubble baths, detergents, and contact with other chemicals. Certain materials worn next to the skin such as wool and synthetic fabrics can also aggravate eczema; stick to soft, fine-weave clothing or natural materials such as cotton.
- **Help repair the skin barrier with emollient moisturisers** – these come in the form of creams, gels, and ointments. Creams and gels are better tolerated; ointments are more effective if the skin is very dry. The **most important aspects of treatment** are - use the one that suits you most, use large amounts (500-2000 grams per month), apply to the whole skin, aim to use twice a day as a minimum, and know how to apply. **It is important to know how to apply moisturisers** - if you click on the purple link '**PCDS Videos**' lower down on the homepage of www.pcds.org.uk you will find relevant videos
- **Do not wash (bath or shower) more than once a day, for no more than 10-15 minutes, keeping the water lukewarm** – our skin does not like water. Avoid soaps and anything that makes a lather as this may damage the skin; instead, apply an emollient cream (moisturising cream) onto your skin before you get into the bath/shower, and then wash off in the water. Take care not to slip – using an emollient in this way is best avoided in people with poor balance and/or those who are more at risk of breaking a bone
- **Heat and sunlight** – if heat aggravates the skin, keep the rooms in your house cool, especially the bedroom. Most people's eczema improves with careful

sunlight exposure (always in moderation), although a few people find that sunlight makes their eczema worse

- **Airborne allergens** from cats, dogs, pollen, grass, or the house dust mite, can cause flare-ups in some people. An allergy to animal fur (dander) is more likely if the person also develops other symptoms such as a runny nose, sneezing, and sore eyes when exposed
- **Food allergy is responsible for a minority of cases**; being very uncommon in older children and adults. Food allergy may be suspected in children under the age of 3 years with any of: moderate-severe eczema, wheeze, or bowel symptoms such as vomiting or diarrhoea. Dietary avoidance should only be undertaken with medical advice
- **Keep nails short** and clean to minimise damage to the skin from unintentional scratching
- **School** – if your child has problems sleeping because of their eczema, they may fall behind with their schoolwork. It is helpful to let their teacher know about their condition so it can be taken into consideration
- **See your pharmacist** for advice on the use of emollients and ask about a pre-payment certificate if you pay for prescriptions. Your pharmacist can also recommend mild steroid creams to use if the skin is inflamed that can be purchased without a prescription

Make an appointment at your GP surgery

If your eczema is not responding to the measures described above, then make an appointment to see a health professional.

For information on specific treatments for atopic eczema refer to the **Best Practice Concise Guidelines** on the homepage of www.pcds.org.uk.

General notes on treatment:

- **Emollients** – as discussed above. You must carry on using these even if the eczema is settled, otherwise your eczema is likely to flare-up more often
- **Steroid creams (or ointments, gels, lotions)** – should be applied thinly and only to the affected patches of skin during flare-ups. They must NOT be applied at the same time as a moisturiser, leaving a minimum of 20 minutes between the two applications (a good routine is important. Some people apply moisturisers in a morning and then after washing in the evening, followed by the steroid cream at bedtime). You may be given more than one type/strength. If you click on the purple link '**PCDS Videos**' lower down on the homepage of www.pcds.org.uk you will find relevant **videos on how to apply steroids onto the skin and scalp**

- **Topical calcineurin inhibitors** – these are creams or ointments NOT containing steroids. They are only effective on relatively thin skin, often prescribed on areas such as the face where they can be used instead of steroids and used more regularly if needed. They will not thin the skin
- **Antihistamines** – in most people, non-sedating antihistamines (which do not make you feel tired) do NOT help eczema. Sedating antihistamines (which make you feel tired) may help at night if the eczema is flaring and affecting your sleep. You need to be mindful that sedating antihistamines may affect your driving / ability to work the next morning. Sedating antihistamines must not be used regularly in the long-term as there is some evidence linking them to an increased risk of dementia (memory loss)

One of the most important aspects of treatment is a **management plan** informing you which treatments to use where and when. The PCDS website has a management plan that your health professional can easily complete and print off for you should they choose.

Be aware of eczema herpeticum

This is caused by an infection with the cold sore virus (herpes simplex), usually arising in people with a history of atopic eczema. It causes a sudden painful widespread eruption of weeping small sores, looking different to your eczema. If left, the person will feel hot and shivery and generally unwell. It can occasionally get into the blood stream or eyes, which can be profoundly serious - if you suspect eczema herpeticum you must seek **urgent medical attention**. For more information refer to the A-Z guidelines on the homepage of www.pcds.org.uk and click on the link that reads ***Eczema: eczema herpeticum***

Your mental health

Eczema can have a significant psychological impact and may affect many areas of daily life including school, work, and personal relationships. If the atopic eczema is affecting your mental health the National Eczema Society offers helpful advice at <https://nationaleczema.org/eczema-emotional-wellness/>

If your mental health continues to be affected, then you should discuss this with a health professional.

Referral to a specialist

The following groups of people may need to be referred to a specialist:

- If the **diagnosis is unclear**
- **Moderate-severe eczema not responding** to treatments provided by a health professional
- Possible cases of **contact allergic dermatitis** – this is where the person is allergic to something they are coming into contact with and is more likely in cases of persistent eczema affecting the face, hands, or feet. It is also possible to be allergic to a cream that you have been prescribed
- **Food allergy** – if a young child has been found to have a milk allergy, then a dietician will need to be involved. If the child has more severe reactions to food and/or several possible food allergies, then they will need to be referred to an immunologist or a paediatrician with a special interest in food allergy

What will happen when you are referred?

People suspected of having a contact allergic dermatitis may require patch testing - substances are applied to the back in special, small circular containers and left on for a few days to identify any chemicals that you may be allergic to.

For those not suspected of having contact allergic dermatitis (most people) then the appointment may be face-to-face (the person attends the clinic), or a video call (teledermatology).

Treatment options can include alternative topical treatments (creams, ointments, gels), a course of light treatment (phototherapy), oral medications (tablets) to lessen the immune reaction in your skin (immunosuppressive drugs), or injections.

Please take to your appointment a list of the treatments that you are currently using (and have used) for your eczema, as the specialist may not otherwise know.

Habit reversal therapy

Itchy skin conditions can understandably lead to behaviours such as scratching, rubbing, and/or picking as ways to try and cope. Eventually the behaviours can become habits. Habit reversal therapy is a treatment programme that offers a solution to the behaviour that has developed. Unfortunately therapy is not widely available, however, if you have developed such a habit then ask a health professional to see if there are any local services providing habit reversal therapy; alternatively you can do a Google search. A **patient information leaflet** on this

therapy can be found in the sections on atopic and discoid eczema in the **Best Practice Concise Guidelines** on the homepage of www.pcds.org.uk.

Can atopic eczema be cured?

Unfortunately not, but there are many ways of improving eczema. Most children affected by atopic eczema will improve as they get older, with 60% being clear of it by their teens. However, many of these people continue to have dry skin and will therefore benefit from lifelong avoidance of irritants such as soaps and detergents.

In later life, atopic eczema can recur or present as hand eczema (hand dermatitis), which may be troublesome for people in certain jobs that involve contact with irritant materials, such as catering, hairdressing, cleaning, or healthcare work.

Other helpful resources for eczema

- The National Eczema Society www.eczema.org
- Eczema Outreach Support www.eos.org.uk - a support group helping children and young people with eczema to thrive

CAUTION: this leaflet mentions 'emollients' (moisturisers). When emollient products come into contact with dressings, clothing, bed linen or hair, there is a danger that a naked flame or cigarette smoking could cause these to catch fire. To reduce the fire risk, patients using skincare or haircare products are advised to be incredibly careful near naked flames to reduce the risk of clothing, hair or bedding catching fire. Cigarette smoking (and being close to people who are smoking) should be avoided.

Helping with other skin conditions

If you, a family member, or friend have an undiagnosed skin condition; or you want to learn more about how to treat skin conditions, please visit www.pcds.org.uk – if you click the purple tile near the top of the homepage that reads **Take a Tour** you can learn how best to use this website.