

Your quick guide to: Eczema in children

Eczema (also called atopic eczema or atopic dermatitis) is a very common, non-contagious, dry skin condition affecting approximately one in five babies and children in the UK. The common symptoms of eczema are dryness, itch and redness to the skin. Eczema often appears in the first few months of life and, for many children, their eczema often improves as they get older. However, for some children with more severe eczema, there is a possibility that this will persist into adult life. Eczema can be mild, moderate or severe and treatment of the eczema will depend on the severity.

There is currently no cure for eczema however, avoidance of trigger factors (those which make the eczema worse) and a clear eczema treatment plan, will help manage symptoms for most children.

What causes eczema?

Children with atopic eczema typically have dry, itchy and inflamed skin. This is caused by various factors, including:

- An immune system that overreacts to usually harmless substances in the environment
- A defective skin barrier that allows irritants and allergens in and excess loss of water
- A deficiency in lipids (fats)
- For some individuals, a genetic (inherited) mutation in the flaggrin skin barrier gene.

Filaggrin is a protein that plays an important role in the natural moisture level of the skin, and this increases the likelihood of having dry skin and developing eczema. Not everyone with eczema has the flaggrin gene mutation.

It is a common misconception that food allergies cause eczema. Although food allergies do not cause eczema, they can trigger sudden flare-ups or make existing symptoms worse over time. This may occur within minutes of eating the food, or it may be delayed for several hours, sometimes even until the next day.

Babies who develop moderate to severe eczema in the first few months of life are

more likely to develop a food allergy.¹ It is not recommended to remove any foods from your child's diet on your own as this can cause nutritional deficiencies and may not be the cause of your child's eczema. If you think a food is making your child's eczema worse, please seek medical advice, even if they are only having milk and no other foods yet. If a food allergy is strongly suspected, your GP can refer you to an allergist (allergy doctor) or a joint dermatology and allergy service for further investigation and management.³

Signs and symptoms

In babies, eczema often appears between three to six months of age, although it can develop soon after birth. It commonly affects the face, neck, body, arms and legs but the nappy area is usually spared. As a child grows and becomes more mobile the pattern of eczema often changes. The eczema becomes more likely to be seen in the flexural creases around the neck, knees, wrists, elbows and ankles but can also spread more widely across the whole body.

In children of Asian, Black Caribbean or Black African ethnic groups, eczema may present differently. It can affect the front of the knees or wrists, and the skin may feel bumpy with small, raised bumps. The skin may also appear slightly darker rather than red.

The main symptoms of eczema are:

- Intense itch
- Dry skin
- Rash
- Redness
- Inflammation.

What can trigger eczema?

Triggers can be individual and vary from person to person; some may be easy to identify, whilst others may be harder to work out. If you suspect a specific food or something in the environment to be a trigger factor, keeping a symptoms diary can help identify patterns of exposure and signs and symptoms and can be useful to provide to your doctor.

Key facts:

Eczema often appears in the **first few months of life** and can be mild, moderate or severe.

Keeping skin **well moisturised** with a **good quality emollient** is an important part of eczema treatment.

Having an **accurate and timely diagnosis** is important so the most effective eczema treatment can be started.

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Eczema may be made worse by contact with one or more of the following triggers:

- Heat or changes in temperature
- Irritants, including detergents, soaps, bubble bath and perfumed products
- Chemicals e.g. swimming in chlorinated water
- Fabrics like wool (which can feel prickly) or synthetics
- Food allergies or intolerances
- Contact allergens in the environment such as house dust mite, pollen or animal dander
- Viral or bacterial infections
- Changes in the weather or sudden changes in temperature.

Infected eczema

Children with eczema are more likely to get bacterial or viral skin infections as their skin can become broken from scratching. It is important that infection is recognised and treated early. If skin is infected it may feel hot to touch, look very red and appear swollen. Children may have a mild temperature and feel unwell. Other signs and symptoms that eczema may be infected include:

- Oozing or weeping
- Scabbed yellow crust
- Increased itch and irritation
- Painful skin.

If you suspect your child's eczema is infected, it is important to speak to a healthcare professional (GP, health visitor or nurse). They may take a swab of the skin and, depending on the result, prescribe antibiotic medication. These may be given in tablet/liquid form or as a cream-based antibiotic to apply directly to the skin.

How to treat eczema:

Emollients

Keeping skin well moisturised with a good quality emollient is an important part of eczema treatment.

Emollient is the name given to a cream or ointment made specifically for dry skin conditions like eczema. As eczema prone skin becomes dry easily, it is essential to keep eczema skin well moisturised and hydrated by using an emollient as often as required. Emollients should be used every day, even when the eczema appears well managed.

Using an emollient helps maintain the protective role of the skin barrier which reduces dryness and in turn eases the itch.

Tips for emollient treatment

- Emollients for children are available on prescription or can be bought from pharmacies and online providers. You may need to try several different types before finding one that you like and is suitable for your child's skin. If an emollient causes irritation or appears to worsen eczema, it should be stopped immediately and changed for an alternative. Different brands contain different ingredients, so not all emollients suit all skin types.
- Emollients come in a variety of forms including lotions, creams, gels or ointments, and can be used for everyday moisturising, washing and bathing. NICE guidelines on eczema management recommend that children with atopic eczema are prescribed up to 250-500g of emollient weekly.
- Wash your hands to remove any bacteria or traces or other potential irritant before applying any emollients or topical treatments.
- Emollients in pump dispensers or tubes are preferable to those in tubs as dipping hands in and out can cause contamination with bacteria. If using a tub, use a spoon or spatula to remove the emollient and reduce this risk.
- Emollients should be smoothed onto the skin in a downwards motion to avoid blocking the hair follicles. Vigorously rubbing the emollient into the skin should be avoided as this may cause the skin to become itchy or damage already fragile skin. Let any surplus emollient soak into the skin.

- Remember the dryer the skin the more frequently you will need to apply the emollient.
- Use different types of emollients depending on skin dryness and daily activities. For example, use a lighter, easy to apply emollient in the day and a thicker ointment at night.
- Emollients in pump dispensers or tubes are preferable to those in tubs as dipping hands in and out can cause contamination with bacteria. If using a tub, use a spoon or spatula to remove the emollient and reduce this risk.
- Emollients containing paraffin should be used with caution as they can be flammable if exposed to sources of ignition, like gas flames from cooker tops or fires or open fires.
- Continue to use an emollient even if the skin 'looks good' and the eczema appears well controlled. This helps to prevent flare ups of the eczema and can reduce the need for steroid treatment.

Steroid treatment

Steroid creams and ointments, often called topical steroids, are used to control red and inflamed skin caused by eczema flares. They work by calming inflammation and reducing redness in the skin.

Topical steroids are safe when used in short courses, as directed by your healthcare professional. It is important to apply them sparingly to the skin. There are different strengths of topical steroid creams and ointments, including mild, moderate, strong and very strong strengths (potency). Your healthcare professional will advise on the most suitable strength based on the severity of the eczema, where the cream or ointment is to be used on the body and your age.

Areas of the body where the skin is thinner and more fragile such as the face, should only be treated with a mild strength steroid unless advised by your healthcare professional. Topical steroids are safe and effective in controlling eczema flares when used in the correct strength, amount and area. They are most effective when used as

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soon as the signs and symptoms of a flare are recognised.

Tips for steroid treatment

- Steroids are available as a cream or ointment
- Steroids should only be applied to areas of flared eczema that appear inflamed, red and itchy
- Try to establish a daily routine for applying topical treatments, such as before getting dressed or after a nighttime bath or shower
- It is recommended to leave a gap of at least 30 minutes between applying your emollient and topical steroid. This is so that the topical steroid is not diluted or made less effective by the emollient.

Washing bathing/ showering with eczema

Washing helps treat eczema by removing dry skin and any build-up of emollients, reducing bacterial levels on the skin and softening the skin ready for the application of emollients and/or steroids. Soaps and detergents can be an irritant to the skin in eczema and cause it to worsen. It is recommended to use a soap substitute in place of standard cleansing products for hand washing, bathing and showering.

The following tips can help to reduce any discomfort to the skin when bathing or showering.

Tips for bathing/showering

- Water alone is very drying on the skin so using a soap substitute and adding a non-perfumed bath oil or emollient to the water when washing, showering or bathing is important
- **Caution:** emollients and bath oils can make the bath or shower environment slippery be careful when getting in or out
- Bath water should be tepid/lukewarm (around 30 degrees) as heat is a common trigger for eczema and having the bath water too hot may trigger the itch scratch cycle

- Skin should be patted dry rather than rubbed dry to prevent any further damage or stimulating the itch scratch cycle
- Use a separate towel for the individual with eczema that has not been used by other members of the household so there is no soap residue on the towel
- Even with the addition of a bath oil or emollient wash product, emollients need to be applied after bathing to trap moisture in and prevent dryness.

Other types of eczema treatments

Wet wraps

Wet wraps can be an effective way of cooling the skin and providing relief from the intense itch associated with an eczema flare and are very useful for reducing nighttime itch. Wet wraps should only be used after assessment by a specialist and guidance on how and when to apply them.

Antihistamines

Antihistamines are not recommended for use to treat itch in eczema, as the itch in eczema is not caused by the release of histamine. However, sedating antihistamines that may make your child feel sleepy are sometimes used where the eczema is causing a severe lack of sleep for the child. In this case, a short course of seven to 14 days can help sedate the child, so they don't scratch and help establish a sleeping pattern.

Calcineurin inhibitors

Topical calcineurin inhibitors are used for controlling flares of eczema that have not responded adequately to topical steroid treatments, particularly in delicate areas, such as around the eyes, the neck and flexures of the arms and legs. They can also be used to prevent flares. They work by altering the immune system in blocking one of the chemicals that contributes to the flare of eczema. There are two types of calcineurin inhibitors called Tacrolimus (0.03% and 0.01% strength) and Pimecrolimus (1% strength only), and they are usually initially prescribed by a specialist rather than a GP.

Occasionally a mild burning sensation can be experienced on the first few applications of Tacrolimus (also known as Protopic) which usually stops after more frequent use. Calcineurin inhibitors are very useful for use on delicate sites such as the face, neck and flexural areas where the skin folds, such as behind the knees or inside the elbows.

Treatments for more severe eczema in children can include phototherapy (light treatment), oral steroid tablets and immunosuppressant tablet medications. These treatments are usually given under the supervision of a dermatologist in the hospital setting.

Quality of life issues

Eczema often has a significant effect on the quality of life of both the child with eczema, their family and wider networks. Babies and children with eczema may not sleep as well, which can have a knock-on effect on sleep quantity and quality of life for the rest of the family. For older children it may make concentrating on tasks and schoolwork hard. Sometimes children with eczema are embarrassed by how their skin appears and can be subject to bullying. The following tips can help improve some of the issues highlighted.

Creating the best possible sleep environment enables the skin time to repair. Applying emollients and/or steroids before bed, keeping the nursery/bedroom cool, and placing them in light cotton sleep wear.

Use distraction techniques and rewards for treatment times at an age-appropriate level. Examples include singing, watching a favourite cartoon and the use of a star chart or stickers.

When talking about eczema, use positive language - avoid saying 'stop scratching' or using negative terms like 'bad skin'.

Older children, depending on maturity and confidence, can start to become more involved in the daily management of their eczema treatment and may like to have their own emollient supply to put on at school.

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How is eczema diagnosed?

It is important that eczema is diagnosed by a healthcare professional, which will usually be your GP. Having an accurate and timely diagnosis is important so the most effective eczema treatment can be started. Where the diagnosis is or has become uncertain, or the eczema is not well controlled or not responding to treatment, a referral to a dermatologist (doctor specialising in skin conditions) may be required.

If you feel that your child's eczema is not improving with the current treatment, is affecting your child's sleep, or it is having an effect on your family life, then it is important to seek advice from your healthcare professional.

References

1. Du Toit G, et al (2015) Randomised trial of peanut consumption in infants at risk for peanut allergy. *New England Journal of Medicine* 372 803-813.
2. Izadi, N. et al (2015), The Role of Skin Barrier in the Pathogenesis of Food Allergy, *Children (Basel)* 2 (3) p.382-402.
3. NICE. Atopic eczema in children. Nice.org.uk/CG57
4. NICE Guidelines on Atopic eczema in under 12's Quality Standard (QS44). 2013.

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