

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 approx. 1 in 5 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 most 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 for managing eczema will help manage symptoms for most children.

What causes eczema?

All children with atopic eczema have dry skin, which can become itchy and inflamed, this is caused by various factors including an immune system which over reacts to usually harmless substances in the environment, a fault in the make-up of the skins building blocks (cornocytes) that allow irritants and allergens in and moisture to seep out as well as the skin producing less oil to lubricate the skin and for some individuals a genetic (inherited) mutation in the filaggrin skin barrier gene. Filaggrin is a protein that plays an important role in the natural moisture level of the skin and this causes an increased likelihood to have dry skin and of developing eczema. It is important to note that not everyone with eczema has the filaggrin gene mutation.

It is a common misperception that food allergy causes eczema, however this is not true. Having a food allergy or having had a food allergic reaction may cause a sudden eczema flare or worsen the condition over time. Sometimes this happens within minutes after eating the food and on other occasions can be delayed several hours or even a day after exposure. Where eczema develops in the first few months of life and the eczema is moderate to severe and widespread there is an increased likelihood of developing a food allergy (1). It is not

recommended to remove any foods from your child's diet yourself as this can cause nutritional deficiencies and may not be the cause of your child's eczema. If you feel a food is causing your child's eczema to worsen, please seek medical advice, even if your child is only having milk in their diet before any other foods have been introduced. If there is a strong suspicion of food allergy then a referral to an allergist (allergy doctor) or joint dermatology and allergy service should be made by your GP for further investigation and management, as recommended by the National Institute for Clinical Health Care and Excellence (NICE 2007) Guidelines on atopic eczema in children (3).

Signs and symptoms

Eczema in babies often appears at between 3-6 months of age although it can develop just after birth, commonly affecting the face, neck, body, arms and legs, with the nappy area usually spared. As the child grows older and becomes more mobile the pattern of eczema changes, eczema is more likely to be seen in the flexural creases around the neck, knees, wrists, elbows and ankles but can become more widespread and affect the whole body.

In children of Asian, black Caribbean, black African ethnic groups, eczema may present differently with eczema affecting the front surface of the knee or wrist, the skin may feel bumpy with small raised papules on the skin and may look slightly darker rather than red.

The main symptoms of eczema are:

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

What can trigger eczema?

Individual trigger factors vary from person to person, some trigger factors may be easy to identify whilst others may not be so easy to work out. If you suspect a specific food or something in the environment may be a trigger factor keeping a symptoms diary can help work out patterns of exposure and

Key facts:

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

Emollients come in a variety of forms including **lotions, cream, gel** or **ointment** that can be used for everyday moisturising, washing and bathing

The main focus of eczema treatment is a **good skin care** regime including **keeping skin well moisturised**

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signs and symptoms and may be useful to provide to your doctor.

Eczema may be made worse by coming into contact with one or more of the following trigger factors:

- Heat or changes in temperature
- Irritants for example (chemicals, detergents, soaps, bubble bath, perfumed products)
- Chemicals – for example swimming in chlorinated water
- Fabrics like wool (which causes a prickle) or synthetics
- Food allergy or intolerances
- Contact allergens in the environment for example house dust mite, pollen or animal dander can make eczema worse.
- Viral or bacterial infections
- Changes in the weather or sudden changes in temperature

Infected eczema

Children with eczema naturally carry bacteria on the skin and are more likely to get a bacterial or viral skin infection. It is important that this is recognised and treated early. Signs and symptoms that eczema may be infected include:

- Oozing or weeping
- Scabbed yellow crust
- Increased itch and irritation
- Painful skin
- If infection is present in the skin you may find the skin is hot to touch or looks very red and possibly swollen with some weeping or oozing of the skin and crusting. Often the child can have a mild temperature and feel unwell.

If you suspect your child's eczema is infected, it is important to discuss this with a health professional (GP, Health Visitor or Nurse) who may take a swab and depending on the result start treatment with antibiotic medication which may be in a tablet/liquid form or a cream based antibiotic to apply directly to the skin.

How to treat eczema

Emollients

The main focus of eczema treatment is keeping skin well moisturised, and this is done by using a good emollient regime.

Emollient is the name given to a good quality moisturiser made specifically for dry skin conditions like eczema. Emollients are a very important part of the everyday treatment of eczema skin. It is important to keep eczema skin well moisturised and hydrated (as eczema skin is naturally prone to dryness) by using an emollient at least twice a day and as often as is required.

The use of an emollient helps maintain the protective role of the skin barrier and will help reduce dryness which in turn reduces the itch. Emollient should be applied to all areas of the body and not just to those with visible areas of eczema.

Tips for emollient treatment

- Emollients for children are available on prescription or to buy from a pharmacy. It may be necessary to trial several different types before finding one that is suitable and that you like. Emollients that cause irritation after applying or appear to worsen eczema should be stopped immediately and an alternative used.
- Emollients come in a variety of forms including lotions, cream, gel or ointment that can be used for everyday moisturising, washing and bathing. NICE guidelines on eczema management recommend that children with atopic eczema prescribed sufficient quantities of emollients up to 250-500g weekly.
- Wash your hands to remove any bacteria and traces of other potential irritant substances before applying any emollients or topical treatments.
- Emollients should be smoothed onto the skin in a downwards motion to avoid blocking the hair follicles, also avoid vigorously rubbing the emollient into the skin as this may cause the skin to become itchy or damage already fragile skin, just let any surplus

emollient soak into the skin.

- Remember the dryer the skin the more frequently you will need to apply the emollient
- Using a combination of emollients based on skin dryness, daily activities for example using a lighter type of emollient in the day that is easy to apply at school and an ointment at night can be helpful.
- Emollients in pump dispensers or tubes are preferable to those in tubs which may easily become contaminated with bacteria by hands dipping in and out. Using a spoon or spatula to remove emollient from a tub is recommended to help reduce the risk of this.
- Emollients containing paraffin should be used with caution due to the potential risk of flammability if near or exposed to sources of ignition like gas flames from cooker tops or fires or open fires.
- Emollients should be continued even when the skin 'looks good' and the eczema appears well controlled this is to prevent flare ups of the eczema and can also help reduce the need for topical steroid treatment.

Steroid treatment

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

Topical steroids are safe when used in short courses as directed by your health care professional. When applying topical steroids it is important to apply sparingly to the skin so that skin glistens. There are various strengths of topical steroid creams and ointments, including mild, moderate and strong, and your health care professional will advise on the most suitable strength of topical steroid based on the severity of your child's skin, where the cream or ointment is to be used on the body and their age.

Areas of the body where the skin is

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thinner and more fragile for example the face should only be treated with a mild strength topical steroid unless advised by your health care professional. Topical steroids are safe and effective in the use of controlling eczema flares when used in the correct strength (potency), quantity and on the right area, and are very effective to help control a flare eczema flare, when used as soon as possible after recognising the signs and symptoms.

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 nighttime bath or shower.
- It is recommended to leave a gap of around 20 mins 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 skin 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 very irritant to the skin in eczema and cause it to worsen. It is recommended to use a soap substitute in place of standard soap, 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 when washing showering or bathing including adding a bath oil (non-perfumed) or emollient to the water is important.

*Caution Emollients and oils can make the

bath or shower environment slippery for a baby or child so be careful.

- Bath water should be tepid/ luke warm (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 and stimulating the itch scratch cycle.
- Use a separate towel for the individual with eczema that has not been used by the rest 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 night time itch. Wet wraps should only be used after assessment by a specialist and guidance on how and when to apply them given.

Antihistamines

Antihistamines are not recommended to be used to treat itch in eczema, as the itch in eczema is not caused by the release of histamine. However sedating antihistamines (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 7-14 days) can help sedate the child so they don't scratch and to 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 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 these products which usually stops after more frequent use. Calcineurin inhibitors are very useful for use on delicate site such as the face, neck and flexural areas.

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 school work 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

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management of their eczema treatment and may like to have their own emollient supply to put on at school.

How is eczema diagnosed?

It is important that eczema is diagnosed by a health professional which will usually be by 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 your child's eczema is not improving with the current treatment, affecting your child's sleep or it is having an effect on your family life then it is important to seek advice from your health care professional.

Further sources of information and advice are available

[Allergy UK website](#)

[National eczema society](#)

[Eczema outreach support](#)

Visit us at:
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