Childhood Atopic Eczema

Your Questions Answered...

NATIONAL ECZEMA SOCIETY

NATIONAL ECZEMA SOCIETY

Contents Page

Your questions answered 1

Basic questions 1

Treatments 5

Emollients 5

Topical steroids 10

Topical calcineurin inhibitors 13

Antihistamines 13

Paste bandages and wet wraps 14

Treating infection 15

Additional treatments 16

Complementary therapies 17

Diet, breastfeeding and weaning 17

Diet 17

Breastfeeding and weaning 18

Practical advice 19

Home, school and play 19

Further information and support from National Eczema Society 24

Childhood atopic eczema

Your questions answered

When a child is diagnosed with atopic eczema, parents and carers often have a whole range of questions they would like to ask.

For almost 50 years, National Eczema Society's helpline has been providing information and advice to parents and carers of children with eczema. During this time the type of things we are asked about has remained very much the same: carers want more information about the condition itself, treatments, ideas for helping their child feel more comfortable, and advice on diet, sleeplessness, itching and infection.

Childhood Atopic Eczema aims to answer the most common questions.

What is atopic eczema, and what are its most common triggers?

The words 'dermatitis' and 'eczema' mean the same thing. The word 'atopic' means 'out of place'. It is a word used to describe a group of conditions which include eczema, asthma and hay fever.

Eczema Helpline: 0800 448 0818
(Mon-Fri 10.00am to 4.00pm)
Email: helpline@eczema.org
www.eczema.org

Atopy, or any atopic condition, is where the body's immune system overreacts to things that would not normally do any harm – often environmental factors that are all around us. For many children, especially those with more severe atopic eczema, the skin is also affected by genetic changes. One example is filaggrin, a structural protein in the skin that acts differently in atopic eczema, resulting in a defective skin barrier. We know that around 50% of people with atopic eczema have a filaggrin deficit, which is one reason why not all children 'grow out' of eczema. All children with eczema have dry skin, which allows entry to triggers – irritants (e.g. soaps, fragrance, detergents) and allergens (e.g. animal dander, house dust mite droppings and pollens) – which make their skin inflamed and itchy.

What is it like to have childhood atopic eczema?

Atopic eczema is a complex inflammatory skin condition. Children with eczema have dry skin and can experience eczema flare-ups. Areas of inflamed skin can become red or darker, depending on a child's skin tone, and be very itchy and sore. The itch can, at times, became almost unbearable, causing a child to want to scratch constantly, especially at night, thereby interfering with sleep. If a child has moderate to severe atopic eczema, they may scratch until their skin bleeds. However, since the skin is very dry, it can also crack and bleed of its own accord. Any cracked, raw or bleeding areas are especially vulnerable to infection.

Atopic eczema usually appears during the first few months of life, often starting on the face and scalp. It can be present on any area of the body, but in white children it usually affects the skin creases, neck, back of knees and inside of elbows. There may also be roundish, 50p-shaped areas of eczema, known as 'discoid eczema'.

Children of colour often have different patterns of eczema to white children. These include eczema around the front of the knees and the back of the elbows (called the 'reverse flexural pattern') as well as in the creases, as seen on white skin. A papular pattern, which appears as fine bumps over the chest and tummy, is also common.

If a child has infected eczema, it may look red or darker than the child's usual skin colour, depending on skin tone, and weepy, with small blisters.

If the eczema has been persistent, the skin may feel and look thickened in areas where there has been lots of rubbing and scratching. There may be cracks and splits, which can be very painful, especially on the hands, making it difficult to hold a pen or pencil.

Atopic eczema can vary in severity between different children. Some children have dry skin and eczema that can be kept under control with simple treatments, while others may need a variety of more complex treatments. You will get to know what your child's eczema looks like, what treatments will be needed for flares (when the skin becomes hot, inflamed, itchy and sore) and when your child needs to visit a healthcare professional. However, if the eczema gets worse (becomes difficult to control, or wet and weepy with yellow crusts, or spreads rapidly to other parts of the body), you should always ask for medical help. This may indicate severe infection, which would need prompt treatment.

Is there a cure for atopic eczema?

Unfortunately, at present there isn't, but it can usually be well managed, allowing the majority of children to lead a normal life. The nature of eczema is a cycle of controlled eczema (but dry skin is a constant) and inflamed skin 'flares'.

Why does my child have eczema?

Hereditary factors seem to play a role in the development of childhood

atopic eczema. There is often a family history of eczema, asthma or hay fever. If one or both parents have eczema, asthma or hay fever, the risk of their children developing eczema increases. A child can develop one or more of these conditions and does not always develop the same one/s as their parents. There are also many environmental factors that may play a role. These often include climate, temperature, house dust mites and pollen, as well as individual triggers and sometimes individual allergens.

What are the most common triggers and how can I avoid them?

Triggers are environmental factors (they may be irritants or allergens) that cause a child's eczema to worsen or 'flare'. These vary from individual to individual and it can be difficult to identify them as they might not trigger an immediate or noticeable reaction. Some of the most common triggers are:

- Soap and water – Avoid washing in plain water and using soap or bubble bath. These damage the skin barrier, causing more dryness and irritation.
- Fragrance – Avoid fragranced (perfumed) products. Bear in mind that perfume can act as an airborne allergen.
- Temperature – Being too hot or too cold or going from one temperature to another can trigger a bout of itching. Many children with eczema get hot quickly, so dressing in thin layers can help. Set your central heating to 18°C. If this is too cold for the whole house, just keep bedrooms at this temperature.
- Sweat – Aside from avoiding becoming hot and sticky, cotton clothing can be helpful.
- Wet and messy play – e.g. sand, water, paint, clay, some foods and items on the nature table at school. Hands should be moisturised before these kinds of activities, then washed with a soap substitute and moisturised with emollients (see page 5) afterwards. PVC gloves with a cotton glove liner can help.
- Clothing – Wool and synthetic materials can be particularly uncomfortable. 100% cotton, bamboo or silk garments worn under abrasive materials are best. Avoid garments with seams or labels that can chafe, or cut labels out.
- Pollen – If your child's eczema is affected by pollen, it is advisable to keep the windows closed in the early mornings and evenings

when pollen levels are at their highest. Avoid hanging out washing to dry on high pollen days, as pollen will stick to the fabric. Apply a liberal amount of emollient to your child's skin half an hour before they go outside. This will help provide a barrier against pollen, and washing afterwards will remove any pollen particles that have stuck to the skin or hair. Long sleeves and trousers, a hat and sunglasses, and avoiding bare feet and open-toe sandals will offer further protection. You can use a weather forecasting app to predict the likely pollen count. See page 22 for advice on using emollients and sunscreen.

- House dust mites – House dust mites are present in all homes and it is impossible to eradicate them. They thrive in warm, moist environments, particularly mattresses. House dust mite droppings can exacerbate eczema and 80% of children with eczema skin prick test positive to them, so may be allergic to them. Washing clothing and bedding at 60°C kills them. For more tips, see page 19.
- Animals – If you have pets, make sure they are kept away from your child's bedroom. Animal dander, saliva and fur can all be irritants, so make sure you clean rooms regularly and that your child washes their hands after stroking or handling animals.
- Food – A few children with eczema have food allergies, the most common being egg, nuts, sesame and cow's milk. Generally a food allergy is identified before a child is 2 years old. It is important for children to have a good, balanced diet. Children can also have an irritant reaction on their face to food, but this is not an allergy.
- Damp and mould – Spores from rotting vegetation and mould in buildings can make some children's eczema worse.
- Swimming pools – Chlorine and other chemicals added to swimming pool water can have an adverse effect on the skin, so always apply a protective layer of emollient 30 minutes to 1 hour before getting into the water. After your swim, if the pool showers use chlorinated pool water, it may be best to go home and take a shower there. Reapply emollient after your shower.

Is childhood atopic eczema common?

Childhood atopic eczema is very common and has increased significantly in the last 50 years. It now affects 15–20% of UK children.

My child has a problem with light and dark patches of skin due to his eczema. Why is this?

Some children with eczema develop round or oval pale patches that appear when a flare has settled. This is a normal symptom of eczema called *pityriasis alba*. It affects children of all ethnicities, but can be more noticeable in children with darker skin tones. It is also more prominent after being in the sun because of the effect of tanning of non-affected skin. Skin

colour should gradually return to normal, but the patches can persist for 2–3 years.

In children of colour, the areas of skin affected by eczema can become lighter or darker. This is because of changes in skin pigmentation caused by eczema inflammation. The dark patches are usually active areas of eczema, which may also be red. The lighter patches often occur when your child's eczema is clearing (and may also be *pityriasis alba*, as described on page 4). These pigment changes may be seen on the skin for several months as they take a long time to settle down. Eventually normal skin pigment should return.

Can children 'catch' eczema from a child who has it?

No! Eczema is not contagious.

Will my child grow out of eczema?

Eczema improves for most children as they get older – about two-thirds are clear by puberty – but they will always have sensitive skin, and the eczema may return. Some children continue to have problematic eczema throughout life while others may find that their eczema goes away sometime during their childhood, only to come back in adulthood. There is no way we can predict the natural course of your child's eczema – the important thing is to take and keep control of it.

I already have one child with eczema. What is the risk of my next child also having eczema?

If you already have one child with eczema, there is a 25% chance that your next child will also have it. The risk increases if one parent has eczema, and it increases still further if both parents have the condition. However, if the first child has had moderate or severe eczema, it does not necessarily mean that the second child will also have eczema, or to the same degree. Eczema varies in severity from mild to severe and it is quite possible for two children from the same family to have different degrees of eczema or for one child to have eczema and the other never to experience the condition.

Treatments

Emollients

My child has been prescribed emollients, but I am not clear about how often to use them.

Most children with atopic eczema have dry skin. The skin does not produce enough fat and oils (lipids), and due to this and a defective skin barrier that cannot retain water, becomes dry and cracked. A simple way to understand this is to think of

skin with eczema as a dry stone wall and skin without eczema as a recently cemented brick wall. The regular use of emollients (medical moisturisers, which you can get on prescription from your GP, nurse or health visitor) is essential to constantly repair the skin barrier and to help prevent this dryness. You must use emollients every day even when the skin looks good, as this will help prevent further 'flare-ups' of eczema and help to keep the important skin barrier intact.

Emollients are medical moisturisers which come as ointments, creams, lotions, gels and sprays to be left on the skin, and as washes and bath oils/shower gels to be used as soap substitutes.

You should apply leave-on emollient every 3–4 hours if possible, depending on the type being used (e.g. ointment, cream or lotion) and the dryness of your child's skin. Creams, lotions and gels need to be applied more frequently than ointments (sprays are ointment-based), although emollients containing humectant ingredients may need to be applied less frequently, as their moisturising effects last longer.

Soap substitutes (which may be emollient wash products or leave-on emollient used as a soap substitute) should be used every time your child washes their hands or body, even when the skin looks good. During the Covid-19 pandemic, we recommended that people with eczema washed their hands with soap to remove Covid particles (as soap was found to do this more effectively than emollient), and

washed their hands with emollient afterwards to counteract the drying effects of soap.

When a baby or toddler eats messily, or goes out in cold weather, eczema on the face and hands can worsen due to irritation. To protect the skin, apply a generous amount of leave-on emollient to these areas before meals and heading outdoors. Before meals, it's best to apply a thick layer of ointment to establish an effective barrier.

Ask your healthcare professional to prescribe large quantities of emollient at a time – a child with atopic eczema will need to use about 250g of leave-on emollient per week (or up to 500g per week for a bigger child), and more if the eczema is severe. When you find an emollient that your child likes and that suits their skin, ask for it to be on

repeat prescription and in large amounts (e.g. a 500g pump or tub and a 200ml bottle for wash products) so you never run out. Small dispensers or tubs are also useful for taking to school and when you are out and about. Large pharmacies sell smaller empty dispensers and tubs.

Which emollients should I use?

Emollients come in the form of ointments, creams, lotions, gels and sprays. These can be left on the skin and are known as leave-on emollients (most can also be used as soap substitutes). There are also emollient bath/shower washes, which are used for washing and are rinsed off. Local health authorities have a shortlist of emollients selected for healthcare professionals to prescribe from. If your preferred emollient is not listed but can be prescribed (that is, if it is listed on the NHS Drug Tariff), you may be able to have it prescribed on a discretionary individual basis. Emollient bath and shower washes are readily available to buy but are rarely offered on NHS prescription.

Ointments are the greasiest type of emollient. They contain fewer preservatives than other emollients and do not require stabilising additives, which creams, gels and lotions do. (Preservatives and stabilising ingredients can cause an irritant or allergic reaction in some children.) Ointments come in tubs or as sprays. They can give a good seal on the skin and are excellent at restoring barrier function to the skin. They do make clothes oily, but they are a good choice for bedtime and when not wearing special clothes.

Understandably, many parents prefer to be prescribed a cream for their child, which is lighter and is absorbed more quickly into the skin. Gels are similar in consistency to creams.

Lotions are the lightest type of emollient. They are good for areas of infected eczema or for very hairy areas, such as scalps or under the arms.

If your child has moderate to severe eczema, the solution may be to use a cream during the day and an ointment at night.

Some emollients contain added ingredients, such as the humectants urea or glycerol (natural moisturising factors), anti-itch and anti-bacterial additives. Creams and lotions must also contain preservatives and stabilising additives (to keep the oil and water mixed), which in a few children can cause an allergic or irritant reaction, but preservatives are all essential for product safety and preventing contamination.

Most emollients are available on prescription for children and can also be bought from chemists. A healthcare professional should be able to advise you. The key is to find those which suit your child, and this can only be done by trial and error. It is quite possible that you will find that a combination works best – for example, a greasier ointment where the skin is very dry, and a cream or

lotion if the eczema is a bit weepy. Try to use any new emollient for at least a month unless you can see it is making the eczema worse. It is a good idea to patch test a new product on a small area of eczema-free skin every day for 5 days and check for signs of an allergic or irritant reaction. If the skin reacts, stop using the product. If you experience difficulty in getting emollient prescribed for your child, please see the National Eczema Society website for information on getting emollient on prescription.

*See National Eczema Society's Emollients factsheet for more information, which you can download from the National Eczema Society website.

My daughter says that her cream stings when I put it on her – could she be allergic to it?

Some children have sensitive skin and complain of stinging or itching when they have their cream put on. This often happens when their skin is very dry, but the feeling should go away after a few minutes. If it does, this is a sign that it is not an allergy. Even so, you might like to try to find an emollient which doesn't cause this sensation as then your child will be much happier using it.

A few children may have a skin reaction to the preservatives used in creams and lotions, in which case you need to change which ones you use or switch to an ointment instead. Ointments contain fewer preservatives. Examples of ointments that do not contain any preservatives

are 50% liquid paraffin in 50% white soft paraffin, white soft paraffin BP, yellow soft paraffin BP, Diprobase ointment, Zeroderm ointment and Hydromol ointment.

Aqueous cream has been found to cause stinging in some children with eczema. This was the subject of research and it was found that the culprit could be a 'soaping agent' called sodium lauryl sulphate (SLS), which is present in the cream. Further research shows that SLS weakens the skin barrier. Several emollients have been reformulated in recent years to remove SLS, and most emollients available on prescription in the UK don't contain it.

How do I apply the leave-on emollient?

Apply large 'dots' or 'blobs' of the emollient on to the skin generously a few centimetres apart and then smooth it in, using gentle downward strokes in the direction of hair growth. Never rub it in, as thick emollients sometimes block the hair follicles in the skin, which may cause

a mild inflammation or infection of the affected hair follicles. There is good evidence that less topical steroid may be needed if the skin is regularly moisturised.

If you use pots, decant the cream or ointment with a spoon before application to avoid contaminating the product with your fingers. If using creams, a good alternative is to use pump dispensers.

Bandages and clothing containing dried emollient residue will ignite and burn more quickly and intensely if they catch fire. Please prevent your child going anywhere near naked flames or other potentially flammable heat sources.

I have been told to use a soap substitute. Will my child be properly clean?

Ordinary soap and bubble baths degrease the skin and damage the skin barrier, leading to drying out of the skin. Soap substitutes are used with water and will clean the skin just as well as soap in most circumstances. A soap substitute may be an emollient wash product or your child's regular leave-on emollient. To use leave-on emollient as a soap substitute, simply apply it to your child's skin and then rinse it off. Bath oils can also help cleanse the skin.

You should not wash your child with water alone, as water can be very drying.

What about bathing?

Daily bathing is considered optimal for most children with eczema.

Bathing should be for less than 20 minutes, as after this time the skin becomes more fragile and subsequent scratching will cause more damage.

The bath water should be warm but not hot – if the water is too hot this may trigger itching. Never use bubble bath as it can be very drying and irritating to some skins. Also, do not wash your child with water alone – plain water can be very drying to the skin. Instead, apply your child's emollient all over their body before they get into the bath and then simply let them soak and rinse off in the bath. As an alternative to bath oil, add a tablespoon of emollient to the bath as you fill it. The oil and water mix will clean the skin as well as coat it with a film of oil which traps water and prevents the skin drying out.

Emollients can make the bath slippery, so be sure to use a bath mat and clean baths and showers daily to prevent accidents and the build-up of grease. White vinegar is a good cleaning product for the bath.

After bathing, pat the skin dry with a soft towel and reapply the leave-on emollient.

Can my child shower instead of bathing?

Generally, bathing is recommended, as immersing in an emollient bath is a good way to help moisturise and cleanse the skin. If you do not have a bath or prefer other methods of washing, it is acceptable to apply emollients and then rinse them off using a shower or a bucket of water

and a scoop, for example. Younger children may also be 'bucket bathed and rinsed'. Water used for showering and rinsing should be warm but not hot. Ordinary shower gels should be avoided as they can be very drying and irritating to some skins; instead, use emollient shower or wash products or a leave-on emollient as a soap substitute – but take care as they can make the shower floor very slippery.

After washing or showering, pat the skin dry with a soft towel and reapply the leave-on emollient.

Topical steroids

What are topical steroids and are they safe?

Topical steroids are recommended by the NHS for treating eczema flare-ups and have been used for over 70 years. 'Topical' means applied directly to the skin. 'Steroids' are a group of natural hormones, produced in the body by a variety of different glands. They are also produced synthetically as medicines and given as injections and tablets, as well as creams, ointments and tapes. Topical steroids act on the skin to reduce inflammation and itch, and speed up healing.

Topical steroids have a generic (drug) name and a product name, and in the UK come in four different strengths (mild, moderate, potent and very potent) – for example, hydrocortisone is mild, Eumovate is moderate and Betnovate is potent (check the patient information leaflet or ask the pharmacist if you are not sure). The chances of any side effects occurring increase with the strength of the steroid.

Topical steroids should be used for short-term flare treatment only. Doctors may advise using them for 2 weeks: once a day for 7 days and then once every other day for a further 7 days. Sometimes, if the eczema is more severe or still flaring, continued 'weekend therapy' is recommended. Weekend therapy means applying topical steroid on 2 consecutive days each week, usually for no more than a couple of months.

Topical steroids are effective treatments for eczema, but like many medicines, they can have side effects including thinning of the skin. When used for short treatment bursts as directed by a healthcare professional, and applied to areas of affected skin only, the risk of side effects is small. Experience of using topical steroids gained over many years shows the benefits of correct use vastly outweigh the risks.

Some people are concerned about possible side effects when their child stops using topical steroids (namely 'topical steroid withdrawal', TSW). Baby and child eczema often comes back after a topical steroid is stopped, but this is unlikely to be TSW. If it flares up immediately on stopping, this usually means that the eczema is still active and still needs active treatment to control it. If it flares up a week or so after stopping the topical steroid, it is more likely that the eczema is just following its natural relapsing and remitting course

and a further course of topical steroid is appropriate to control the flare-ups.

Eczema is complex and has significant effects on both physical and psychological wellbeing. It must be treated effectively to control itch and inflammation, to minimise scratching with its risk of permanent scarring, and to re-establish the skin barrier.

My doctor has now prescribed a moderately potent steroid for my child, but previously I was given hydrocortisone, which is very weak. Can you explain why?

Eczema flares can be treated with prescribed topical treatments, which will reduce inflammation (red or darker areas of skin, depending on skin tone). The choice of prescribed treatment – e.g. topical steroids and/or topical calcineurin inhibitors (see page 13) – will depend on your child's age, the area of skin affected and the severity of the eczema.

Eczema can vary in its severity. Hydrocortisone is usually all that is needed for babies and children with mild atopic eczema, but for those with moderate to severe eczema a stronger topical steroid may be needed. Doctors may decide to start with a weak topical steroid and, if that does not clear the eczema, move up to a moderately potent topical steroid. Alternatively, the doctor may prefer to 'hit' the eczema with a moderate topical steroid first and then, once the inflammation is under control, move down to the weaker hydrocortisone to clear the skin.

Either way of treating the inflammation is correct. However, using a topical steroid that is too weak should be avoided, as the eczema will not clear and your child's discomfort will be prolonged. It also means that in the long run you will end up using more topical steroid. Prompt short-term treatment with the right topical steroid is key.

How do I apply the topical steroid?

Topical steroids should be applied as instructed. This will usually be once a day, only to the areas of inflammation (i.e. the areas of active eczema). Apply as a thin layer and in smooth, downward strokes. The surface of the skin should 'glisten' once the topical steroid has been applied. Another method of applying topical steroids is the fingertip unit (FTU) application, which is described overleaf.

How much topical steroid do I need to use?

There are guidelines on the amount of topical steroid required to cover different body areas affected by eczema. These are based on the Finger Tip Unit (FTU), which is the amount of cream or ointment that covers the end of an adult finger from the tip to the crease of the first joint when squeezed from an ordinary tube nozzle (see top diagram). One FTU is enough to cover an area of skin the size of one adult hand. Different parts of the body require different amounts of topical steroid. For example, a 4-year-old child will require 2 FTU for an arm and hand (see bottom diagram). Adjustments will be required if only a small part of the larger area is affected by eczema.

Should I put both emollient and topical steroid on the areas of inflammation at the same time? If not, does it matter which I put on first?

A recent study showed that it is more effective to apply a topical steroid before an emollient. It is important that you leave a gap – ideally 20-30 minutes – between applying a topical

steroid and an emollient so that the steroid does not become diluted by the emollient. Many parents and carers find it easiest to apply topical steroid in the evening, after a bath.

*See National Eczema Society's Topical steroids factsheet for more information, which you can download from the National Eczema Society website.

Topical calcineurin inhibitors

I have heard about Elidel and Protopic – what are they?

Elidel and Protopic are the trade names for pimecrolimus cream and tacrolimus ointment. They are topical calcineurin inhibitors (TCIs). They are prescribed for children and adults as an alternative to topical steroids, especially when the eczema is not being adequately controlled by topical steroids or is located on areas of the body where the skin is very delicate, such as the face, neck and groin.

TCIs are usually applied twice a day for short periods to treat flares, or twice a week on non-consecutive days as maintenance treatment.

Elidel can be prescribed for children aged 3 months of age and older, and Protopic for children aged 2 years and older, but younger children may have Protopic prescribed 'off licence' by dermatologists.

There are no concerns about skin thinning with TCIs. However, some people experience a burning or stinging sensation when they are first applied, which usually settles down within the first week of use. TCIs also increase sensitivity to the sun.

When TCIs started being prescribed more than 20 years ago, they had a 'black triangle' warning (meaning they were more closely monitored), as there were reviews suggesting a theoretical cancer risk. However, more recently, a huge systematic review looked at 3.4 million people with eczema worldwide who are treated with TCIs. This research study provided clear evidence that there is no increased risk of cancer, for infants, children or adults.

*See National Eczema Society's Topical calcineurin inhibitors factsheet for more information, which you can download from the National Eczema Society website.

Antihistamines

Could antihistamines help my child?

Antihistamines do not actually treat the itch, as eczema – unlike urticaria (known as skin hives) – is not caused by histamine. If your child suffers from urticaria as well as eczema, antihistamines may be prescribed.

Otherwise, your healthcare professional may prescribe sedating antihistamines to help your child sleep at night. Sedating antihistamines are meant to be used for a short time when the eczema has flared up, and not as a long-term measure. Antihistamines should be given to the child at least half an hour before bedtime, so that they are not sleepy in the morning. Antihistamine creams are not effective for treating eczema (they can cause a contact allergic reaction).

Paste bandages and wet wraps

What bandages can be used for my child's eczema?

Bandages are not in themselves treatments or a cure for eczema. The bandages used in eczema are impregnated with a paste containing zinc oxide or zinc oxide and ichthammol, which are soothing, cooling and relieve irritation. Paste bandages are particularly helpful for rough patches of eczema where the skin is quite thick (called lichenification). They are messy, so a secondary bandage is needed to cover and secure the paste bandage. They can be used for entire limbs or patches of eczema (for example, wrists and ankles).

What are wet wraps?

Wet wraps use viscose tubular bandages or ready-made garments. They provide a protective, comforting layer and prevent damage from scratching. Wet wrap bandaging is where two layers of bandaging are put on over a layer of emollient. The first layer is a wetted bandage and the second (outer) layer is dry.

If your doctor or nurse recommends bandages for your child, make sure they teach you how to apply them.

Wet wraps and bandages should be applied at night only, as scratching damage usually occurs when the child is settling and sleeping. Dry wraps or tubular viscose clothing can be worn as a layer under clothing during the day, if required.

How do wet wrap bandages work alongside eczema treatments?

Wet wraps, bandages and garments hinder scratching, help the skin absorb creams and ointments, cool the skin's surface and reduce itchiness, preventing skin damage. They are prescribed for children who have moderate to severe eczema. Worn at night, they can help the child sleep and prevent them scratching while asleep. Wet wraps are a very good way of controlling the eczema quickly. However, if a topical steroid is used under the bandages, more of the steroid is absorbed, so using steroids under wraps or garments should always be medically supervised. Wet wraps can be used without topical

steroids longterm to maintain the skin. Wet wraps are not necessary for children with only mild eczema. They should never be used on infected eczema.

*See National Eczema Society's Paste Bandages and Wet Wraps booklet for more information, which you can download from the National Eczema Society website.

Treating infection

How can I tell whether my child's eczema is infected?

The skin barrier in eczema is compromised (or not as effective as skin without eczema). This, as well as breaking the skin through scratching, makes it very easy for germs to get into the broken areas. Scratching creates further damage and allows more bacteria to enter the skin.

Infection can cause the skin to change, making it look redder or darker than usual, depending on skin tone. It can also cause the skin to itch and swell, and may even cause it to weep and form a yellow crust. Infected eczema should be suspected in all children who have no response to treatment, rapidly worsening eczema and/or feel unwell with a temperature.

If you think your child's eczema may be infected, you should see your GP as soon as possible.

Infection of atopic eczema is usually with a bacterium called *Staphylococcus aureus*, which makes the eczema worse and slower to heal in some children. *Staph. aureus* has been found in greater numbers on the skin of patients with eczema than skin without eczema.

Bacterial infection of atopic eczema in smaller areas can be treated with antibiotics, in the form of a cream, ointment or lotion. A doctor may prescribe a cream which combines a steroid (to damp down inflammation) with an antibiotic. A combined antibiotic steroid cream should be used for a maximum of 14 days. Alternatively, particularly if the infection is widespread, antibiotics to be taken by mouth may be prescribed.

Children with atopic eczema may also have fungal infections (as a matter of course, rather than due to eczema), such as candida (thrush) and tinea (known as athlete's foot, although it can affect any area of the body), and a yeast infection (*malassezia*). Fungal infections usually affect only one part of the body and make the skin red/pink or darker than usual, depending on skin tone, and slightly scaly. Fungal infections appear in ring-like patches. They are treated with anti-fungal creams and sprays, and very occasionally tablets.

Viral infections seen in atopic eczema include molluscum and eczema herpeticum. Molluscum appears on the skin as white pearly nodules which gradually disappear over several months. This is a harmless viral infection which is common in toddlers and children of primary school age, but is likely to be more widespread in children with eczema. Occasionally, it can take many months to clear.

Eczema herpeticum is a serious condition caused by the cold sore

virus (herpes). It is spread by direct contact. The symptoms of this viral infection include:

- areas of painful eczema that quickly get worse
- groups of fluid-filled blisters that break open and leave small, shallow, open sores on the skin
- a high temperature and generally feeling unwell (in some cases).

Obtaining treatment quickly is important with this infection – it can't be left until morning! You should see a doctor immediately if you think your child has eczema herpeticum. If you cannot be seen by your GP, call NHS 111 or attend the nearest A&E department, as your child will need antiviral treatment (aciclovir) within 48 hours.

Chickenpox is a common childhood illness, but children with eczema have a higher likelihood of developing complications from it. If your child has taken oral steroids within three months of contracting chickenpox, they will have a lowered ability to fight the infection and will require close monitoring by your GP. Oral antivirals or hospital admission may be needed to prevent complications. Topical steroids and topical calcineurin inhibitors are less of an issue. See your GP for advice on continuing these treatments while your child has new chickenpox lesions. Calamine lotion is not advised for children with eczema, as it has a drying effect. It is best to continue using their regular emollient to soothe the skin. Cream-based emollients can be kept in the fridge to provide a cooling effect.

If your child has several infections in a short period of time, a skin swab may be taken to identify the bacterium or virus which may be causing the problem and to ensure that your child receives the correct treatment.

Additional treatments

I am following all the instructions my GP and dermatologist have given me, but my child's eczema shows no sign of improving. Are there any other treatments I can ask about?

There are a number of other treatments available to treat more severe atopic eczema which cannot be managed just with the treatments referred to earlier in this booklet. These include phototherapy, immunosuppressant tablets (methotrexate, ciclosporin and azathioprine), JAK-inhibitors and biologic drugs. All these treatments are prescribed and monitored by dermatologists, so a secondary care referral is needed.

Complementary therapies

Can you please advise me about complementary therapies for treating eczema?

Although complementary therapies are not a cure for eczema, some can be helpful. However, what benefits one person may not necessarily help another. You should let your doctor/nurse know if you are thinking of trying any kind of complementary therapy, and you should not suddenly stop using the treatment prescribed by them.

Safety is also a consideration. People often think that because a cream or product is labelled 'natural', it is safe to use. Herbal remedies can have powerful, and even dangerous, side effects. In addition, some homeopathy creams and Chinese and African herbal creams have been found to contain potent topical steroids and even life-threatening ingredients (e.g. arsenic). If you want to try a complementary therapy, make sure you go to a properly registered practitioner and check that the product you are given has an ingredients list on the pot or tube. Ask in advance how much the treatment course is going to cost.

*See National Eczema Society's Complementary therapies factsheet for more information, which you can download from the National Eczema Society website.

What about Chinese herbs?

Scientific trials have found that Chinese herbal medicine may sometimes be useful in treating severe atopic eczema where conventional treatments have failed. Unfortunately, most of the scientific trials have been with one product, Zemaphyte, which is no longer manufactured. The general benefits and risks of Chinese herbal medicine are difficult to assess, because a herbalist usually makes up a different combination of herbs for each individual. There have been cases of liver or kidney damage resulting from Chinese herbal medicine, so talk to your dermatologist or GP first and have regular blood tests to check for early signs of possible liver damage. Because of the potential risks with liver function, Chinese herbal medicines are not advised for children under 5 years. Again, it is important that you go to a practitioner who is properly registered. The Register of Chinese Herbal Medicine **www.rchm.co.uk** can help you find someone in your area.

Diet, breastfeeding and weaning

Diet

I think my daughter is allergic to something she is eating, which is making her eczema worse. How can I find out?

Many parents and carers believe that their child's eczema is caused by something in their diet; however, research suggests that children with eczema have a slightly higher chance of having a food allergy but, for the

vast majority, food is not an associated factor. Food allergy is also much more likely under the age of 2 years.

Keeping an accurate diary of what your child eats and of the condition of the eczema can be useful. Signs that food may be playing a role in a child's eczema include worsening of the eczema, itching or abdominal pain, or diarrhoea. *If the skin suddenly becomes very red or darker than the child's usual skin tone, itchy and swollen, urgent medical attention is required, especially if the lips and breathing are affected. If lips start to swell and breathing becomes laboured with a hoarse voice, this is angioedema and a medical emergency: call 999 immediately.*

Talk to your doctor if you think food allergies may be a factor. Some foods can cause irritation, rather than an allergic reaction, around children's mouths. Never cut out food groups unless advised to do so by an NHS dietician, as children need adequate nutrients such as calcium and phosphate for their bones, teeth and growth. Do ask to be referred to a dietician by your healthcare professional, if diet is a trigger for your child's eczema.

I am giving my child soya milk instead of cow's milk but the eczema has not improved. What else can I try?

Children who are allergic to cow's milk are often also allergic to soya milk. Sheep and goat's milk, rice or oat milk are not suitable for children under the age of 1 year as they are nutritionally inadequate. It is highly likely that if a child is allergic to cow's milk, they will also be unable to tolerate sheep, goat or buffalo milk.

Should I put my child on a special diet?

A child should not be put on a special diet unless their history is strongly suggestive of a specific food allergy, or where there is widespread active eczema which is not getting better using emollients and topical steroids. In general, restricting a child's diet is of no benefit in older children with atopic eczema. In infants a 4–6-week trial of egg and milk exclusion may be recommended by your dermatologist or GP, if allergy is suspected. Advice and supervision from an NHS dietician is essential.

Breastfeeding and weaning

Should I breastfeed?

Yes, if you can. Although there is no evidence that breastfeeding prevents the development of eczema, breastfeeding does seem to have a protective effect in relation to the severity of eczema during the early months of life. Where possible, you should breastfeed until the baby is at least 6 months old. Do not alter your diet as a breastfeeding mother unless advised to do so by your dermatologist or allergy specialist.

How should I wean my baby?

The World Health Organization recommends that, whenever possible, breastfeeding should continue for the first 6 months of life.

Any infant with atopic eczema is at increased risk of food intolerance, so introduce solid foods one at a time in small quantities so that the effects on the eczema can be noted. Good early foods to introduce are baby rice, pure fruits, vegetable and potato purée.

It is recommended that infants are weaned from 6 months of age. Cow's milk, egg, peanuts, tree nuts, sesame seed, mustard seed, soy, celery, lupin (a legume commonly used in France and Mediterranean countries), sulphites (an agent commonly found in dried fruit), molluscs, wheat, fish and shellfish are foods that have been identified as being the source of the majority of adverse food reactions. They should be introduced in very small amounts (e.g. ½ teaspoon), and no more than one allergenic food at a time. Ideally, allow at least 3 days between these food groups because it can take 3 days for a non-IgE allergy reaction to show. All high-risk foods should have been introduced by the age of 12 months.

Whole nuts should not be introduced to any child, regardless of whether they have eczema, until after the age of 5, as they can be a choking hazard.

Research on preventing peanut allergy suggests that after 6 months, babies can be given nuts and peanuts as long as they are crushed, ground or in the form of smooth peanut butter. If there is a family history of food allergy or other allergies, do consult your healthcare professional before introducing nuts.

If your baby is in a high-risk group for food allergy, discuss with your GP any concerns relating to weaning.

Practical advice

Home, school and play

How can I get rid of house dust mites?

House dust mites live unseen in all our homes. They are tiny creatures found in large quantities in items such as mattresses, carpets and other soft furnishings, and in surface dust. It is not the mites themselves that are the problem but their droppings. When scratched into the skin they will worsen the eczema.

It is impossible to get rid of house dust mites altogether, but there are a few simple measures you can try.

- Wash clothes and bedding at 60°C.
- If your child has soft toys, you can put them in the freezer for 12 hours to kill off the house dust mites.
- Replace old bed mattresses.
- Special mattress and pillow covers are available to protect against the house dust mites. (Make sure they cover the whole mattress/ pillow.)
- Vacuum weekly including mattresses and pillows.
- Damp dust all surfaces.

You can consider the following, but they may not be effective for you:

- Keep soft furnishings to a minimum.
- Replace curtains in the child's bedroom with plain roller blinds.
- Wooden, lino or resin flooring is preferable to carpet, but for many people this may not be a practical

or financial possibility; it is not necessary to make a change when a child has only mild eczema.

Does smoking affect a child's eczema?

Cigarette smoke in an enclosed space can irritate the skin, so avoid smoking around your child. Smoke outside the house and ask relatives and friends to do the same. For advice on stopping smoking, visit **www.nhs.uk/live-well/quit-smoking**

My child's eczema is much worse in the winter – why is this?

It seems that people with eczema have difficulty controlling their body temperature, which means that they can feel heat or cold much more than the rest of us. Becoming hot and sweaty may make the itching worse, while cold weather will make the skin drier and more likely to crack and become sore. Problems with winter skin are further exacerbated by central heating and the lack of humidity in the home. In general, sunshine improves eczema in most children.

Dress your child in layers, so that they can take them off or put them on as necessary. You may also need to use more emollient in the winter to help prevent the skin from drying out.

What sort of clothing should I buy?

100% cotton or bamboo clothing is best for a child with eczema, but some children can also tolerate silk and smooth, modern man-made fibres, as it is the softness of the material that is important. Wool should be avoided as it is 'scratchy' and can irritate the skin. Nylon next to the skin does not allow it to breathe and so it, too, should be avoided. It can also help to cut the labels out and to buy clothes with no seams as these can also irritate.

How should I wash clothes and bedding?

There is no scientific evidence that a non-biological washing powder is better than a biological one, though many people with eczema say that they prefer non-bio. Wash bedding at a temperature of at least 60°C as this will kill off the house dust mite. Always rinse well, if possible with a double rinse cycle, and avoid fabric conditioners, as these can irritate the skin. As emollient clogs up washing machines, about once a month do an empty wash at a very high temperature, using biological detergent to cut through the grease. In the spring and summer months when the pollen count is medium to high, it is better to dry clothes indoors or to tumble dry them, as pollen will attach to clothes drying outside and be an eczema trigger.

My son has eczema and is requesting a pet – should we get him one?

It is advisable to spend time with an animal before investing in one, to see whether your child is allergic to the animal in question. Visit friends with pets to see if your child reacts.

We already have a much-loved dog and my little girl would be very upset if we rehomed it – what can we do?

The answer depends on whether your daughter has an allergy to pet fur/dander. If she has severe eczema driven by this allergy (which would be diagnosed by IgE blood tests), then being in contact with the dog will continue to make her eczema worse. In this case, sadly, rehoming the dog may be your best option. If, however, she has no allergy to the dog but her eczema is irritated by fur/dander, or she has mild to moderate eczema, try these tips:

- Keep the dog out of your daughter's bedroom.
- Put a cotton sheet over the animal's favourite chair and remove the sheet before your daughter sits there.
- Brush the dog regularly to remove any loose fur.
- Wash the dog's bedding regularly.
- Vacuum more often.

(All the above points apply just as much to families who have a cat!)

Can I take my child swimming?

The chlorine and other chemicals in swimming pool water can irritate the skin. Ensure that you put a thick moisturiser, such as Epaderm ointment, Hydromol ointment or 50/50 white soft paraffin/liquid paraffin, on your child 30 minutes to 1 hour before they get into the pool. If your child is learning to swim or is not a strong swimmer, be aware that applying emollient shortly before swimming can make a lifeguard rescue difficult, as their limbs may be slippery, so make sure any emollient is fully absorbed in this case. If your child is swimming in an outdoor pool, leave a half hour gap before applying sunscreen over the protective emollient layer. Shower thoroughly after swimming and apply plenty of your child's usual moisturiser. If the skin is cracked or sore, swimming is best avoided until the skin has healed.

Bathing in the sea often helps eczema, but try it out carefully, especially when the skin is badly broken as the salt water can really sting.

*See National Eczema Society's Swimming and eczema factsheet for more information, which you can download from the National Eczema Society website.

We want to take a holiday in the sun – are there special measures we should take?

Many people find that their child's eczema improves in the sun, but it is important to be aware that the sun can make some children's eczema worse. All children need to be protected from burning with an SPF50, 4-5 UVA star sunscreen, as well as sun protective clothing and

glasses. Many people with eczema find that mineral-based sunscreens (containing titanium dioxide and/or zinc oxide), which block out the sun, are more acceptable to their skin than chemical absorbers. If you can, put on a little moisturiser half an hour before putting on a sunscreen. The time gap will prevent the sunscreen from becoming diluted by the moisturiser, ensuring that it keeps its protective properties. If you are using a moisturiser that is greasy or oily, be careful not to overdo the application of the moisturiser before going out in the sun as this can cause a 'frying' effect. A better solution may be to buy a UV sun suit to minimise the need for sunscreen.

Many children find that heat is a key factor in triggering their eczema. Covering up in light trousers and tops will not only protect against sunburn but will help to keep them cool. Cotton and bamboo clothing are the best materials for keeping a child cool. A wet T-shirt can also be useful to cool the skin, but take care in the sun and apply sunscreen underneath as wet material offers less UV protection than dry.

*See National Eczema Society's Sun and eczema factsheet for more information, which you can download from the National Eczema Society website.

My daughter is always scratching! What can I do to help?

There are a number of things you can do to reduce itching and scratching:

- Encourage your daughter to ask for her leave-on emollient to be applied if she starts to feel itchy. Keep cream-based emollients in the fridge. Applied cold they can help more with itching.
- Have a regular skin care routine.
- After washing, pat the skin dry rather than rubbing it.
- Use cotton or bamboo clothing and bedding. (Wool can make the skin itch and synthetic materials tend to make the child feel hot and sweaty, also triggering the itch.)
- Avoid substances that can affect the skin, such as soap and detergents. Some people find that non-biological products cause fewer problems than biological ones.
- Wash clothes and bedding at 60°C to kill house dust mites, and set your machine for an extra rinse cycle. Do not use fabric conditioner.
- Try to distract her from scratching, e.g. with games that occupy her hands, such as cooking, playing cards, jigsaws, lego, etc.
- Try not to say 'Don't scratch', but reward positive behaviour that helps with the itching, such as getting cold emollient from the fridge and applying it.
- Aim for a room temperature between 16°C and 18°C. A warmer room temperature may cause her to itch more.
- The bedroom should be cool and well ventilated, but not cold.
- If you have pets, keep them out of your child's bedroom.

- Encourage her to rub or pinch the itch gently, rather than scratch.
- Keep her nails short to minimise damage to the skin.
- Consider garments such as 'scratch sleeves' at night.

*See National Eczema Society's Itching and Scratching booklet for more information, which you can download from the National Eczema Society website.

Does stress cause eczema?

Stress alone does not cause eczema; however, it can make eczema worse. Equally, eczema is a cause of stress. Learning practical ways of coping with stress can make it more manageable. Try to identify what causes your child stress and work out ways of avoiding or dealing with these situations in advance.

My daughter is starting school and I am worried her eczema will get worse when I am not there to take care of her. Have you any advice please?

School or nursery should not present problems for the child with eczema if time is taken to ensure that the teachers and nursery staff have eczema explained to them and are given written information about it.

- Well before her first term, approach the school and ask for a meeting to be set up. As a parent, you need to build an understanding between you and the school staff, and provide individual information about your child and their eczema, which may include a health care plan. Explain that your child has eczema and describe what things can be done to manage her skin during the school day. This will help the teacher to understand your child's eczema needs at school. The school nurse may also get involved if a child has severe eczema and other allergies. If you are at all concerned, contact the school nurse.
- If the teacher can ensure that she does not have a desk in direct sunlight or next to a radiator, this will help prevent her getting too hot and itchy.
- Provide the school with a pump dispenser of her emollient.
- If your child has eczema on her hands, cotton gloves may have to be worn during certain activities such as wet and messy play. However, it is important that children with eczema are helped to lead as normal a life as possible.
- Tell the school if your daughter has to take sedating antihistamines to help her sleep at night, as sometimes they can make a child a little drowsy first thing in the morning.
- Getting a teacher to explain to other classmates about eczema, and that it cannot be caught from someone, can be very useful and help them to understand and accept the child.

*See National Eczema Society's School Information booklet for more information, which you can download from the National Eczema Society website. For a hard copy, contact the National Eczema Society Helpline.

Further information from National Eczema Society

More information than can be given in a booklet of this size is available from National Eczema Society. We have other booklets including:

- **Itching and Scratching**
- **A Guide for Teenagers with Eczema**
- **All About Contact Dermatitis**

Booklets and factsheets can be downloaded from our website or ordered from our Helpline.

Website: **www.eczema.org**

Helpline: Telephone* **0800 448 0818** (Monday to Friday 10am to 4pm)
** Calls are free from UK landlines. Charges vary from mobiles.*

Email: **helpline@eczema.org**

We are proud of the wealth of information available on our website and recommend you visit it whenever you need information. You can also check out our Facebook, Instagram and Twitter pages for eczema tips and news.

Our confidential telephone and email Helpline is at the heart of our work, providing information, support and reassurance to thousands of people struggling to cope with eczema. We are not medically qualified and do not diagnose, prescribe, give medical advice or opinions on treatments prescribed by your healthcare professional. We do, however, offer a wealth of practical information about the day-to-day management of eczema and the different treatment options available.

The Helpline is open to all UK residents who are affected by eczema. Please allow five working days for us to reply to emails. We are not able to answer queries from non-UK residents as terminology, healthcare systems and treatments may differ in your country of residence, which may cause confusion.

In addition, National Eczema Society publishes *Exchange*, a magazine packed with:

- articles on eczema management
- features by people with eczema sharing their experiences
- treatment and research news
- experts' replies to your questions.

You can subscribe to Exchange for £25 p.a. at **www.eczema.org** or by calling our administrative office on **020–7281 3553**.

National Eczema Society
11 Murray Street
Camden
London NW1 9RE

Eczema Helpline: 0800 448 0818
Email: helpline@eczema.org
www.eczema.org

National Eczema Society is registered as a charity in England and Wales (No.1009671) and as a company limited by guarantee (No.2685083). Registered Office: 11 Murray Street, Camden, London NW1 9RE.

The information in this booklet is only a general guide. Individual circumstances differ and National Eczema Society does not prescribe, give medical advice or endorse products or treatments. We hope you will find the information useful but it does not replace and should not replace the essential guidance given by your doctor and other healthcare professionals.

Booklet written by Sue Ward, former Information and Education Manager, National Eczema Society.

Revised edition reviewed and updated in November 2023 by Julie Van Onselen, Dermatology Nurse Adviser to National Eczema Society.

Designed and produced by www.dewinter.agency

©National Eczema Society 2023.

All rights reserved. You must have our written permission to electronically or mechanically reproduce or transmit this publication or any part of it.