

Topical steroids factsheet

Topical steroids (topical corticosteroids) are recommended by the NHS for treating eczema flare-ups and have been used for over 70 years. To work effectively, they need to be used alongside emollients, which soothe, protect and moisturise the skin. For some people with eczema, daily use of emollients for moisturising and washing is all that is needed to keep their condition under control. However, for most people with eczema, topical steroids will need to be used for short treatment bursts, at the correct strength for the person's age, eczema severity and affected body area, to bring a flare-up under control.

What are topical steroids?

'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 and ointments. Topical steroids act on the skin to reduce inflammation and speed up healing. They also help to make the skin less hot, itchy and sore. They are not, however, a cure for eczema.

Topical steroid preparations are available as creams, ointments, lotions, foams, gels, mousses, shampoos and tape, and come in different strengths or potencies. Which topical steroid/s you are prescribed will depend on your age, the severity of your eczema, the part of your body that is affected and any other treatments you are using.

When your eczema is very dry, it is likely that your healthcare professional will prescribe an ointment-based preparation. Creams, which are light and cooling, may be used to treat moist, weepy or 'wet' eczema. Lotions are easiest to apply on hairy areas of the body.

There are two types of topical steroid that can be bought over the counter from a pharmacy without a prescription: 1% hydrocortisone cream, a mild topical steroid, and Eumovate (clobetasone butyrate 0.05%), a moderate topical steroid (see *Table 1*).

When topical steroids are obtained without a prescription, they should NOT be used around the eyes or on the face, on broken or infected skin, on the anal or

genital areas, in pregnancy, or by anyone under the age of 10 years (hydrocortisone) and 12 years (Eumovate). Usage of this kind requires the guidance of a healthcare professional. Hydrocortisone and Eumovate can only be bought in small tubes – enough to treat small areas of eczema. Most people with eczema will need larger tubes, which are only available on prescription (sizes 30g, 50g-100g).

Topical steroid potencies

In the UK, topical steroid preparations are divided into four categories according to how strong or potent they are. These categories are 'mild', 'moderate', 'potent' and 'very potent'. The potency of topical steroids is determined by the amount of vasoconstriction (narrowing of the blood vessels) they produce. It also relates to the degree to which the topical steroid inhibits inflammation, and its potential for causing side effects. It can be difficult for the person with eczema or the parent of a child with eczema to find out the potency of a product, since potency is not usually stated on the tube or packaging, and the labelled percentage of steroid is different from the potency. The potency of the topical steroid may be stated in the patient information leaflet inside the packaging. One way of understanding the strength of different steroid preparations is to note that 'moderate' is twice as potent as hydrocortisone 1%; 'potent' is 10 times more potent; and 'very potent' at least 50 times more potent. If you are not sure of the potency of a steroid preparation, ask your pharmacist. A list is provided in this factsheet, but new preparations may not be included.

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The potency of the steroid you are given will be based on several factors:

- **Age:** Babies and children with mild to moderate eczema are usually prescribed mild topical steroids. Sometimes, when eczema is more severe or there is no response to a mild steroid, moderate to potent topical steroids may be prescribed for short periods under medical supervision.
- **Severity of the eczema:** A mild or moderate steroid may be replaced by one of a higher potency if symptoms become more severe, and mild or moderate steroids are not able to bring a flare-up under control.
- **Body site:** Areas of thick skin, such as the soles, palms and scalp can be treated with potent preparations. For thinner skin, such as the face and genital areas, mild and moderate preparations are commonly prescribed. A potent steroid will only be used for severe, unresponsive eczema in these areas for a limited period. If a steroid is applied to body folds (for example, the armpits or the skin between the buttocks), the occlusive effect increases its potency, so milder preparations should be used.
- **Size of the affected area:** A weaker steroid might be prescribed when a large area of skin requires treatment.
- **Other treatments:** If bandaging forms part of the treatment, a weaker steroid may be chosen because bandaging will increase the amount of steroid getting into the skin.

You may be given more than one topical steroid to treat eczema in different areas of the body. Make sure you understand which preparation should be used where. If in doubt, talk to your pharmacist or contact your doctor or nurse.

Applying topical steroids

Timeframes for using topical steroids can vary, depending on the age of the person using them, the severity of their eczema and the body site affected. Topical steroids are usually used for between 7 and 14 days, although sometimes a shorter timeframe (for example, 5-7 days) might be advised. After using a

potent or very potent topical steroid for 7 days, you might be advised to step down to a lower potency steroid for a further 7 days. Some doctors recommend continuing to apply a topical steroid for 2 days after a flare has resolved, to prevent rebound flaring. Research shows that topical steroids only need to be applied once a day; using them twice a day does not provide any additional benefit.

After a short treatment burst of the kind described above, it is important to have a steroid break. There is no agreed-upon length of time for this. Doctors generally recommend a steroid break of at least 2 weeks, but 4 weeks might be advised after using potent or very potent topical steroids.

People with more severe eczema who experience very frequent flares are sometimes advised to use topical steroids as 'weekend therapy' rather than for the kind of timeframe described above. Weekend therapy is when topical steroids are applied on 2 consecutive days a week to the areas where the eczema usually flares, for several months at a time. This can help prevent the almost continuous flare cycle, meaning that in the long-run, less topical steroid is needed to control the eczema than if each flare were treated as it occurred.

Using steroids more frequently or for longer periods of time than advised by your healthcare professional will not be of benefit in controlling your eczema and could be harmful to the skin on a long-term basis. Conversely, not using enough topical steroid or using very small amounts continuously often results in it not working so well and perhaps more being used in the long-term.

When eczema is flaring, a topical steroid can be applied at any time of day, but ideally after a bath or shower. Steroid preparations work better when the skin is slightly moist. Pat the skin dry with a soft towel and apply topical steroid to the inflamed (red or darker) areas of skin, then wait 30 minutes and apply emollient all over the body. The reason for the 30-minute gap is to avoid diluting the topical steroid with the emollient and spreading it to areas that do not need it.

Topical steroids should be applied with clean hands in a thin layer so that the skin glistens. It can sometimes be difficult to judge how much steroid to use.

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Table 1 shows topical steroids listed alphabetically by brand name according to their strength.

Table 1: Topical steroids

Brand name	Generic name	Strength
This is the name chosen by the manufacturer – it is in big print on the tube. The following are examples of brand names, but this is not a complete list. You will also find that some topical steroids do not have a brand name – only a generic name.	This is the medical name of the steroid – it is usually written in smaller print on the tube.	Potency – this is not indicated on the tube but may be stated in the information inside the packaging.
Hc45[®]	Hydrocortisone 1%	Mild
Hydrocortisone 0.5%	Hydrocortisone 0.5%	Mild
Hydrocortisone 1%	Hydrocortisone 1%	Mild
Hydrocortisone 2.5%	Hydrocortisone 2.5%	Mild
Mildison Lipocream[®]	Hydrocortisone 1%	Mild
Audavate-RD[®]	Betamethasone valerate 0.025%	Moderate
Betnovate-RD[®]	Betamethasone valerate 0.025%	Moderate
Clobavate[®]	Clobetasone butyrate 0.05%	Moderate
Eumovate[®]	Clobetasone butyrate 0.05%	Moderate
Fludroxycortide[®] (available as cream, ointment and tape)	Fludroxycortide 0.0125%	Moderate
Synalar 1 in 4[®]	Fluocinolone acetonide 0.00625%	Moderate
Audavate[®]	Betamethasone valerate 0.1%	Potent
Betacap[®] (scalp application)	Betamethasone valerate 0.1%	Potent
Betnovate[®]	Betamethasone valerate 0.1%	Potent
Bettamousse[®] (scalp application)	Contains 1.2 mg betamethasone valerate 0.1%, per gram	Potent
Cutivate[®]	Fluticasone propionate 0.005%	Potent
Diprosalic[®] (ointment and scalp preparation)	Betamethasone dipropionate 0.05%	Potent
Diprosone[®]	Betamethasone dipropionate 0.05%	Potent
Elocon[®]	Mometasone furoate 0.1%	Potent
Locoid[®] (scalp application and lotion, 'Locoid Crelo')	Hydrocortisone butyrate 0.1%	Potent
Synalar[®]	Fluocinolone acetonide 0.025%	Potent
Clarelux[®] (scalp application)	Clobetasol propionate 0.05%	Very potent
Dermovate[®]	Clobetasol propionate 0.05%	Very potent
Etrivex[®] (shampoo)	Clobetasol propionate 0.05%	Very potent

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If your healthcare professional thinks your eczema could be infected, you may be prescribed a combination preparation that contains ingredients aimed at fighting the infection (see Table 2 below).

Table 2: Topical steroids with antimicrobial effects

Brand name	Generic name	Main anti-microbial effect	Added antimicrobials	Strength
This is the name chosen by the manufacturer – it is in big print on the tube. The following are examples of brand names, but this is not a complete list. You will also find that some topical steroids do not have a brand name – only a generic name.	This is the medical name of the steroid – it is usually written in smaller print on the tube.	Which type of infection it is used for.		Potency – this is not indicated on the tube but may be stated in the information inside the packaging.
Canesten HC®	Hydrocortisone 1%	Antifungal	Clotrimazole	Mild
Daktacort®	Hydrocortisone 1%	Antifungal	Miconazole nitrate	Mild
Fucidin H®	Hydrocortisone acetate 1%	Antibacterial	Fusidic acid	Mild
Nystaform HC®	Hydrocortisone 0.5%	Antibacterial Antifungal	Chlorhexidine Nystatin	Mild
Terra-Cortril®	Hydrocortisone 1%	Antibacterial	Oxytetracycline	Mild
Timodine®	Hydrocortisone 0.5%	Antibacterial Antifungal	Benzalkonium chloride Nystatin	Mild
Trimovate®	Clobetasone butyrate 0.05%	Antibacterial Antifungal	Oxytetracycline Nystatin	Moderate
Fucibet®	Betamethasone valerate 0.1%	Antibacterial	Fucidic acid	Potent
Lotriderm®	Betamethasone dipropionate 0.064%	Antifungal	Clotrimazole	Potent
Clobetasol with neomycin and nystatin	Clobetasol propionate 0.05%	Antibacterial Antifungal	Neomycin Nystatin	Very potent

These topical steroids are sometimes used for short bursts if infection is suspected. They should not be used for continuous long-term eczema treatment.

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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 *Figure 1*). 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, in an adult, one arm will need 3 FTU while a 4-year-old child will require 2 FTU for an arm and hand (see *Figures 2 and 3*). Adjustments will be required if only a small part of the larger area is affected by eczema. Further information is often provided in the leaflet supplied with your treatment. Any unused steroid cream or ointment should be discarded after the course of treatment is completed. Wash your hands after applying steroids unless you are using them to treat hand eczema.

All steroids will be marked with a use-by date and should not be used after the time stated. You will usually be given a set period of time in which to use the preparation. Any steroid that remains unused at the end of a treatment burst should not be passed on for use by anyone else.

Repeat prescriptions of topical steroids are not generally advised in new cases of eczema since the condition can alter, and it is important for a healthcare professional to examine the skin to reassess the suitability of the treatment. If you have long-standing eczema, you will discuss a management plan with your healthcare professional, and topical steroids are then often prescribed on a repeat prescription, with regular reviews.

Are topical steroids safe?

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.

The likelihood of side effects occurring is related to the potency of the preparation, where it is used, the condition of the skin on which it is used and the age of the person using it. All these factors will be taken into consideration when a prescription is given to treat eczema.

Some people with eczema are concerned about possible side effects when they stop using topical steroids. Topical steroid withdrawal (TSW) reactions are more likely to occur when stopping treatment after prolonged, continuous use of higher potency topical steroids, for usually more than a year. People undergoing TSW reactions experience symptoms worse than their original condition. Symptoms include red or darker burning skin (darker than a person's usual skin colour, depending on skin tone) often in areas where they have never had eczema before. They can feel tired and weak and may even be bed-bound. Please see National Eczema Society's website for more information about TSW.

If used over long periods of time, topical steroids can thin the skin, making it appear transparent, fragile and susceptible to bruising. Blood vessels may become more prominent, and the skin can lose its elasticity, developing 'stretch marks'. Other possible side effects include increased hair growth of very fine hair and perioral dermatitis (a spotty rash around the mouth). However, these effects usually only occur when potent or very potent steroids have been applied for a long period of time, either to the face or to covered parts of the body such as the flexures. Skin thinning can also occur when steroids have been applied under occlusion (for example, under bandages or gloves). For these reasons, topical occlusion should be limited to short periods of time under the supervision of a doctor or nurse.

There is also a small risk from topical steroids being absorbed into the blood through the skin. Again, the likelihood of this occurring is directly linked to the amount and potency of steroid used and the age of the person using it. The main problem relating to the absorption of steroids is suppression of the body's own steroid production by the adrenal glands. This is called 'hypoadrenalism' and causes severe weakness and low blood pressure.

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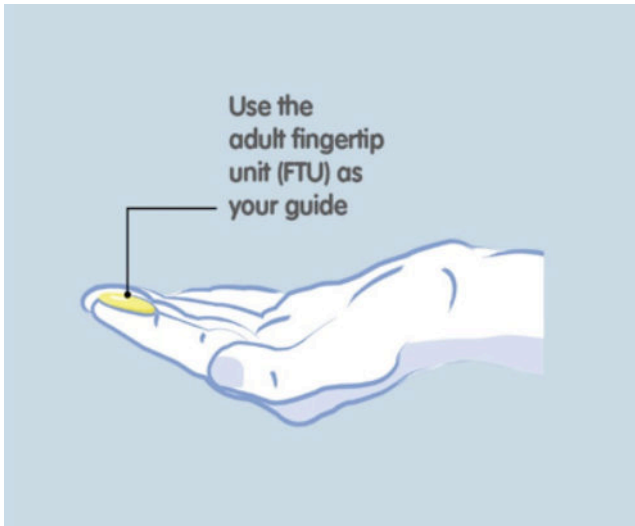


Figure 1 Measuring an FTU

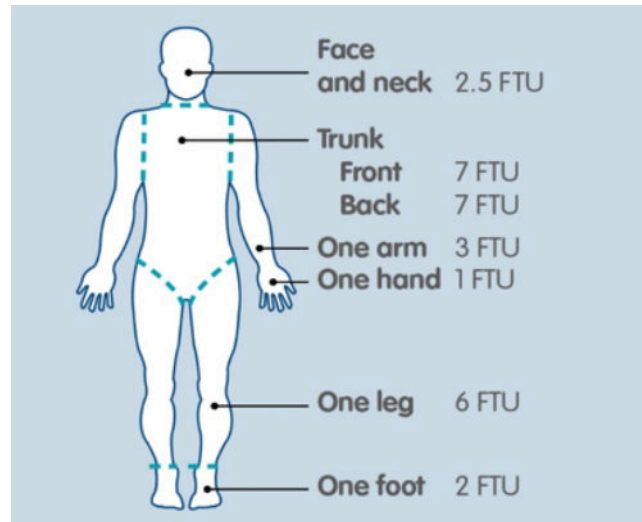


Figure 2 Number of FTU for different parts of an adult's body

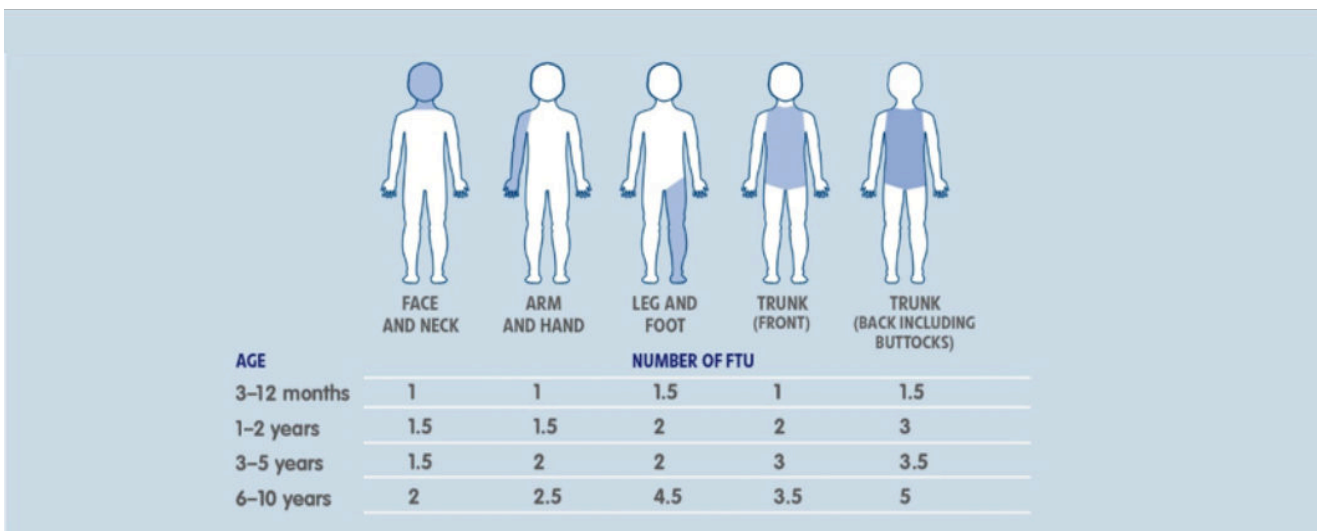


Figure 3 Number of FTU for different parts of a child's body

Adverse effects are less likely to occur if potent and very potent topical steroids are limited in use and are replaced by weaker steroids once they have brought a flare-up under control. Keeping up a daily routine of using emollients for moisturising and washing to repair the skin barrier and prevent dry skin has been shown to reduce the amount of topical steroid required for some people.

Allergy to the steroid itself or to an additive in the base of the preparation can sometimes occur. If the eczema gets worse after using a particular topical steroid, let your doctor or nurse know. Cream preparations contain more additives than ointments, so switching to an ointment preparation might help. Also be aware that topical steroids can suppress the symptoms of skin infection, so

always check with your healthcare professional if you suspect you have a skin infection.

Fear of side effects can make people under-treat their eczema by stopping a treatment too soon or not using enough of it. This can be detrimental to the overall management of the condition and may mean that a stronger topical steroid has to be used to bring the eczema under control again.

Summary

Used on the advice of a healthcare professional, and as part of a good eczema management routine that includes emollients, topical steroids are a valuable treatment for eczema.

Topical steroids have been in widespread use for over

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70 years, and although side effects sometimes occur, they can usually be avoided or treated.

If topical steroids of appropriate potencies, used for the timeframe advised by your healthcare professional, do not bring an eczema flare-up under control, it may be that other problems, such as infection or regular contact with a known allergen are playing a role.

Most topical steroid packaging contains instructions on how to use the topical steroid properly. If you are ever in doubt as to how to use your treatment, do not hesitate to ask either your doctor or nurse or the pharmacist who supplied it.

DISCLAIMER

Our publications contain information and general advice about eczema. They are written and reviewed by dermatology experts, with input from people with eczema. We hope you find the information helpful, although it should not be relied upon as a substitute for personalised advice from a qualified healthcare professional. While we strive to ensure the information is accurate and up-to-date, National Eczema Society does not accept any liability arising from its use. We welcome reader feedback on our publications, please email us at info@eczema.org

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