

How to use Topical Steroids - Children

What are topical steroids and how do they work?

Topical corticosteroids, usually referred to as ‘topical steroids’, are applied to the skin and used to treat a variety of skin conditions. The type of steroid used in medicines is similar to those produced naturally in the body and they work by reducing inflammation within the skin, making it less red and itchy.

What are the different strengths of topical steroids?

Topical steroids come in a number of different strengths. It is therefore very important that you follow our advice and apply the correct strength of steroid to a given area of the body. The strengths of the most commonly prescribed topical steroids in the UK are listed in the table below:

Strength	Chemical name	Common trade names
Mild	Hydrocortisone 0.5%, 1.0%, 2.5%	Hydrocortisone Dioderm® Efcortelan® Mildison®
Moderate	Betamethasone valerate 0.025% Clobetasone butyrate 0.05% Fluocinolone acetonide 0.001% Fluocortolone 0.25% Fludroxycortide 0.0125%	Betnovate-RD® Eumovate® Clobavate® Synalar 1 in 4 dilution® Haelan® Tape
Strong	Mometasone furoate 0.1% Betamethasone valerate 0.1% Diflucortolone valerate 0.1% Fluocinolone acetonide 0.025% Fluticasone propionate 0.05%	Elocon® Betnovate® Nerisone® Synalar® Cutivate®
Very strong	Clobetasol propionate 0.1% Diflucortolone valerate 0.3%	Dermovate® Nerisone Forte®

In infants and small children, mild or moderate steroids are normally used, although stronger steroids may be needed to treat severe skin conditions. Stronger steroids can sometimes be used on the face and skin folds to treat certain skin conditions for short periods of time.

What are the different preparations of topical corticosteroids?

- **Ointments** have the highest oil content and are therefore usually preferred for dry skin conditions.
- **Creams** are less greasy than ointments but have less moisturising effect. Creams are sometimes preferred for the face and hands or if the skin condition is weeping.
- **Lotions** are less thick than creams and may be used to treat large areas or hairy skin.
- **Solutions and scalp applications** can be water or alcohol-based and are the thinnest topical steroid preparations. Alcohol based preparations may sting when applied to inflamed skin.
- **Tapes** are often used to treat inflamed areas on the hands and feet.

How should I apply topical steroids?

Applying topical steroids correctly will increase their effectiveness and reduce the risk of side effects. Please follow these simple steps when applying them:



Step 1:

Wash your hands to remove invisible bacteria.

Step 2:

Squeeze the topical steroid in a line from the last finger crease to the fingertip. This is called a 'fingertip unit' (FTU) and is enough steroid to cover the same area of skin as two hands laid flat with the fingers together. For more information about fingertip units (FTU) please see the table on the next page.



Step 3:

Apply the treatment in downward motions in the direction of hair growth. Do not rub the treatment in. Wash your hands thoroughly after applying topical corticosteroids.

How much topical steroid should I apply?

- As a general guide, topical steroids should be applied to affected areas of skin to give a thin glistening layer.
- 1 FTU = approximately **0.5g** of cream or ointment (compare this to the size of the tube you have been prescribed).
- If you are using more than a 50g tube of topical steroid in a week then you are using too much.
- Fingertip units for children are measured on an adult finger and are used differently according to the age of the child.
- If you believe your child to be larger than that of a typical 12 year old, please request the leaflet for adults and teenagers.

The table below lists the amount of FTU's required to treat a given body site in children. It assumes that the whole area is treated. If this is not the case then the number of FTU's should be adjusted accordingly.

Age	Number of fingertip units (FTU)				
	Face and neck	Arm and hand	Leg and foot	Front of chest and abdomen	Back including buttocks
3-12 months	1	1	1.5	1	1.5
1-2 years	1.5	1.5	2	2	3
3-5 years	1.5	2	3	3	3.5
6-12 years	2	2.5	4.5	3.5	5

Should I apply topical steroids with moisturisers?

You should avoid applying the topical steroid at the same time as a moisturiser as this will dilute its strength. When both treatments are prescribed, and where practical, the emollient should be applied 30 minutes before application of the topical steroid.

How long should my child use topical steroids for?

The length of treatment will depend on the severity of your skin condition, the strength of topical steroid and the site to which it is applied. Usually, the risk of side effects increases after one to two months of continuous use. If topical steroids are used for longer than this, a treatment-free period or a change in frequency of use can reduce the risk of side effects. However, suddenly stopping treatment can sometimes cause the underlying skin condition to flare. The length of treatment and how it is stopped will vary between people.

What are the side effects of topical steroids?

When used correctly, the risk of side effects from topical steroid use is very low. Local side effects that can occur following topical steroid use are listed here:

1. *Temporary stinging or burning.* This is common, especially if the skin is inflamed. It usually settles within a few days
2. *Thinning of the skin.* This is rare if topical steroids are used correctly. The risk of skin thinning increases if strong steroids are used for long periods, on the face or skin folds, or under bandages or plasters. Most skin thinning will resolve on stopping treatment
3. *Stretch marks.* This is uncommon and generally only occurs after prolonged use of strong topical steroids
4. *Mild lightening of the skin*
5. *Allergic reactions* to the steroid or other ingredients within the preparation
6. *Acne like rash.* This can occur if strong steroids are applied to the face.

A small proportion of the topical steroid is absorbed into the body from the skin. If topical steroids are used in large quantities for long durations of time, this can cause weight gain and the symptoms of steroid excess (Cushing's syndrome), or it can affect the body's production of natural hormonal steroids (adrenal suppression). If topical steroids are used as prescribed, the risk of these complications is very low.

When should I avoid using topical steroids on my child?

Topical corticosteroids can worsen skin infections. If you have a bacterial, viral or fungal skin infection they should therefore be avoided, unless they are applied with an anti-infective agent or you are started on tablet medication to treat the infection.