

MYTH

Topical corticosteroids cause lightening or darkening of the skin.

Topical corticosteroids rarely cause skin discoloration, which resolves when the treatment is stopped. Skin discoloration is much more likely to result from the eczema itself, because skin inflammation can increase or decrease the amount of tan pigment in the skin. Skin discoloration from eczema will also resolve over time, but may take several months.

MYTH

Topical corticosteroids promote excessive hair growth.

If topical corticosteroids are used for long periods, they can occasionally cause a temporary, mild increase in fine hair growth in the treated areas, although this is rare. Frequent scratching can also cause a temporary, mild increase in fine hair growth.

MYTH

Topical corticosteroids will prolong the eczema and decrease the chances of improvement with age.

There is no evidence that topical corticosteroids change the underlying natural course of the disease.

MYTH

A lot of moisturizer can eliminate the need for topical corticosteroids.

Proper bathing and moisturizing is essential in managing chronic eczema. Although moisturizers are a first-line treatment, when used alone they will only control the very mildest forms of eczema. Moderate or severe eczema cannot be treated effectively with moisturizers alone. Once the skin becomes red (inflamed), additional anti-inflammatory medication is needed to control the disease. Anti-inflammatory treatments include topical corticosteroids, topical calcineurin inhibitors (TCI's such as Elidel or Protopic), ultraviolet light therapy, or systemic medications.

MYTH

Topical corticosteroids should always be applied in smaller amounts than prescribed.

It is true that only a thin layer is needed, but it is important to apply enough to cover all the red areas. A useful way of knowing the correct amount to apply is the fingertip rule: Squeeze a ribbon of the topical

corticosteroid onto the tip of an adult index finger, between the fingertip and the first finger crease. This amount of corticosteroid represents "one fingertip unit", and should be enough to cover an area of skin the size of two flat adult palms of the hand (including fingers).



Tips for Using Topical Corticosteroids

- Use the least potent corticosteroid possible to control the inflammation.
- Only apply the corticosteroid to areas of skin affected by the skin disease.
- It is most effective to apply corticosteroids immediately after bathing.
- Emollients may work better if applied to wet skin. Do not wet the skin without applying an emollient afterwards.
- Only use the corticosteroid as often as prescribed by your doctor — more than twice daily increases the risks but not the benefits of corticosteroids; for many topical corticosteroids, once-a-day application is sufficient.
- Do not use a topical corticosteroid as a moisturizer.
- Wherever possible, avoid using large quantities of corticosteroids for long periods of time.
- Be aware that certain areas of skin – the face, genitals, raw skin, thin skin and areas of skin that rub together, such as beneath the breasts or between the buttocks or thighs - absorb more corticosteroid than other areas.
- Applying dressings over the area of skin treated with the corticosteroid increases the potency and absorption of corticosteroid into the skin. Only use dressings with topical corticosteroids if advised to do so by a physician.

- Once the inflammation is under control, reduce or stop using the corticosteroid. Remember: a proper bathing and moisturizing practice helps prevent flare-ups.

Special Note for Parents of Children with Atopic Dermatitis

Applying medications and supervising your child's skin care is often difficult and time-consuming, especially if the eczema is severe. Many parents are concerned about long-term effects of medications. However, the risk of uncontrolled eczema is far greater. When used appropriately, topical corticosteroids have a very low risk of absorption or thinning of the skin.



NATIONAL
Eczema
ASSOCIATION

For a complimentary copy of the NEA print newsletter, *The Advocate*, and an eczema information package, please contact us. We are always here to help!

National Eczema Association
4460 Redwood Highway, Suite 16D,
San Rafael, CA 94903-1953

nationaleczema.org
info@nationaleczema.org

TELEPHONE 415.499.3474 TOLL FREE 800.818.SKIN
FAX 415.472.5345

JOIN NEA ON FACEBOOK:
[facebook.nationaleczema.org](https://www.facebook.com/nationaleczema.org)

JOIN NEA'S ONLINE SUPPORT COMMUNITY:
community.nationaleczema.org

This information sets forth current opinions from recognized authorities, but it does not dictate an exclusive treatment course. Persons with questions about a medical condition should consult a physician who is knowledgeable about that condition.

The National Eczema Association (NEA) improves the health and quality of life for individuals with eczema through research, support, and education. NEA is entirely supported through individual and corporate contributions and is a 501(c)(3) tax-exempt organization. NEA is the only organization in the United States advocating solely for eczema patients.

Acknowledgments: The National Eczema Association (NEA) acknowledges Drs. Sarah Chamlin, Amy McMichael, Amy Paller, Elaine Siegfried, Eric Simpson, Jonathan D. Ference, Pharm.D, BCPS, and Ms. Irene Crosby for their editorial contributions to this brochure.

Brochure content controlled by the National Eczema Association and funded by an educational grant from PharmaDerm.

pharmaderm.com

 **PharmaDerm**[®]
Skin. Science. Health.[™]

Copyright © 2012 National Eczema Association

ECZEMA

TOPICAL CORICOSTEROIDS *Myths & Facts*



NATIONAL
Eczema
ASSOCIATION



The word “eczema” is derived from a Greek word meaning “to boil over”, which is a good description for the red, inflamed, itchy patches that occur during flare-ups of the disease. Topical steroids are an important part of the treatment plan for most people with eczema. When eczema flares up, applying cream, lotion or ointment containing a steroid will reduce inflammation, ease soreness and irritation, reduce itching, and relieve the need to scratch, allowing the skin to heal and recover.

Steroids are naturally occurring substances that are produced in our bodies to regulate growth and immune function. There are many different kinds of steroids, including “anabolic steroids” like testosterone and “female hormones” like estrogen (both produced in the gonads), and corticosteroids such as cortisol, which is produced by the adrenal glands. Corticosteroids are the type of steroid used for eczema. Corticosteroids have many functions in the body, but among other things they are very effective at controlling inflammation. The way corticosteroids reduce inflammation is very complicated, but it involves temporarily altering the function of a number of cells and chemicals in the skin.

Topical corticosteroids have been used extensively for over 50 years to treat various inflammatory skin conditions. Without a doubt, they remain one of the most valuable currently available treatments, and if used properly, can control symptoms and restore patients’ quality of life.

The vehicle (type of base in which the medication is contained) and type of corticosteroid influences the strength of the topical medication more than the percentage of medication dissolved in the vehicle. Given the same percentage and type of topical corticosteroid, the following list **generally** represents the strengths of the medication, from highest to lowest:

- Ointment (*highest*)
- Creams
- Lotions (*lowest*)

Ointments are greasy, but have the lowest risk of burning and stinging with application. Solutions, gels and sprays are newer, often more complex formulations, some stronger and some weaker than lotions or creams containing the same medication.

Topical corticosteroids come in various strengths, ranging from “super potent” (Class I) to weaker, “least potent” (Class 7). The chart to the right lists some brand-name choices. Many topical steroids have generic versions. While often more expensive, your doctor may prescribe a branded product if they want you to receive the corticosteroid in a particular formulation for a variety of reasons. You should discuss with your doctor if a generic formulation may be available and would be right for you. The list is not comprehensive, and the strength class listing may vary for some products based on the different tests used to define this.

The majority of topical corticosteroid products have been approved by the Federal Drug Administration (FDA) for adults only because studies are always performed in adults first, and performing studies in children is more challenging.

Topical corticosteroids, like many other medications, are often used for indications and ages that have not been specifically studied. This is referred to as “off-label” use.

The following chart lists the topical corticosteroids that have been approved by the FDA for use with children. FDA approval is awarded based on studies with children in a specific range of ages. These medications are commonly used in younger children.

GENERIC NAME	AGE GROUP
Clobetasol propionate 0.05% foam	> 12 years
Fluocinonide 0.1% cream	> 12 years
Fluocinolone acetonide 0.01% oil	> 2 years
Mometasone 0.1% cream/ointment	> 2 years
Fluticasone 0.05% lotion/cream	> 1 year
Aclometasone 0.05% cream/ointment	> 1 year
Prednicarbate 0.1% cream/ointment	> 1 year
Fluticasone 0.05% lotion/cream	> 1 year
Desonide 0.05% foam/gel	> 3 months
Hydrocortisone butyrate 0.1% cream	> 3 months

GENERIC NAME	EXAMPLES OF BRANDED PRODUCTS
--------------	------------------------------

CLASS 1—SUPER POTENT

0.05% clobetasol propionate	Clobex® Lotion/Spray/Shampoo, Olux® E Foam, Temovate E® Emollient/Cream/Ointment Gel/Scalp
0.05% halobetasol propionate	Ultravate® Cream
0.1% fluocinonide	Vanos® Cream

CLASS 2—POTENT

0.05% diflorasone diacetate	ApexiCon® E Cream
0.1% mometasone furoate	Elocon® Ointment
0.1% halcinonide	Halog® Ointment
0.25% desoximetasone	Topicort® Cream/Ointment

CLASS 3—UPPER MID-STRENGTH

0.05% fluocinonide	Lidex-E® Cream
0.05% desoximetasone	Topicort® LP Cream

CLASS 4—MID-STRENGTH

0.1% clocortolone pivalate	Cloderm® Cream
0.1% mometasone furoate	Elocon® Cream
0.1% triamcinolone acetonide	Aristocort® A Cream, Kenalog® Ointment
0.1% betamethasone valerate	Valisone Ointment
0.025% fluocinolone acetonide	Synalar® Ointment

CLASS 5—LOWER MID-STRENGTH

0.05% fluticasone propionate	Cutivate® Cream/Cutivate Lotion
0.1% prednicarbate	Dermatop® Cream
0.1% hydrocortisone probutate	Pandel® Cream
0.1% triamcinolone acetonide	Aristocort® A Cream, Kenalog® Lotion
0.025% fluocinolone acetonide	Synalar® Cream

CLASS 6—MILD

0.05% alclometasone dipropionate	Acloivate® Cream/Ointment
0.05% desonide	Verdeso™ Foam, Desonate Gel™
0.025% triamcinolone acetonide	Aristocort A Cream, Kenalog Lotion
0.1% hydrocortisone butyrate	Locoid Cream/Ointment
0.01% fluocinolone acetonide	Derma-Smoother/FS® Scalp Oil, Synalar® Topical Solution

CLASS 7—LEAST POTENT

2%/2.5% hydrocortisone	Nutracort® Lotion, Synacort® Cream
0.5- 1% hydrocortisone	Cortaid® Cream/Spray/Ointment and many other over-the-counter products

What are the most common risks of using topical corticosteroids?

Most people immediately think of **thinning of the skin** (skin atrophy). This is a well-recognized possible side effect. It is true that potent and super potent topical corticosteroids can cause skin atrophy if applied too frequently and for a prolonged time without a break. Although early skin thinning can disappear if the topical corticosteroid is discontinued, prolonged use can cause permanent stretch marks (striae). Stretch marks usually occur on the upper inner thighs, under the arms, and in the elbow and knee creases. It should be noted that preteens and teenagers who have never used corticosteroids can also get stretch marks. **Permanent skin atrophy from topical corticosteroids is now extremely uncommon when the treatment is used properly.** In the past, recommendations did not specify the amount, frequency and duration to apply topical corticosteroids. We now know that these medications are safest when used intermittently, in an appropriate quantity, and for an appropriate length of time.

Many patients with under-treated eczema have the opposite of skin thinning, and actually develop thickening, and sometimes darkening of the skin (changes known as lichenification). This is the skin’s response to rubbing and scratching.

What are some other risks?

Frequent and prolonged application of a topical corticosteroid to the eyelids can cause glaucoma and even cataracts. Topical corticosteroids can occasionally cause tiny pink bumps and acne, especially when used on the face and around the mouth. On the body, greasy corticosteroid ointments can rarely cause redness around hair follicles, sometimes with a pus bump centered in the follicle (folliculitis). When corticosteroids are applied to large body surface areas, enough may be absorbed to inhibit the body’s own production of cortisol, a condition known as “adrenal suppression”. The risk of adrenal suppression is highest with high potency (Class 1-2) corticosteroids. Infants and young children have a higher ratio of body surface area compared to their weight, so they are more susceptible to corticosteroid absorption. If a child is given corticosteroids by mouth, in large doses or over a long term, prolonged adrenal suppression can be associated with growth suppression and weakened immune responses. Adrenal suppression does not have a significant effect on a child’s brain development.

Myths & Facts

MYTH

Topical corticosteroids should not be used on cracked, broken or weepy skin.

Topical corticosteroids are effective in helping to heal cracked and broken eczematous skin. While these creams and ointments are more easily absorbed through eczematous skin, **they are safe as long as they are used according to the advice of your physician and their use is tapered or discontinued when the skin is healed.** If your skin is tender and swollen it may be infected; this should be evaluated by your doctor.

MYTH

Topical corticosteroids cause stunted growth and development.

Corticosteroid creams and ointments should not be confused with anabolic steroids infamously used by some athletes. **But, babies and very young children are at risk of absorbing topically applied corticosteroids into the bloodstream,** especially when these medications are very potent, applied in large quantities too frequently, or used inappropriately under a diaper or other covered (occluded) area. As such there may be a risk of slowing growth (height). Corticosteroids taken by mouth or used for prolonged periods of time are absorbed into the bloodstream. These can reduce the body’s production of natural corticosteroids, weaken immune responses and affect growth, but do not affect brain development. **Topically applied corticosteroids used in the appropriate quantity and for the appropriate duration are unlikely to affect growth or the body’s ability to fight infections.**

It is important to follow the advice of your doctor when using topical corticosteroids in babies and young infants.

When making a decision about the need for topical corticosteroid therapy, it is critical to weigh the potential risks of the treatment against the risks of the disease. Untreated severe eczema can have an enormously negative impact on overall well-being, restful sleep, ability to concentrate and learn, and family dynamics, which can, in turn, impair a child’s normal growth and development. When topical corticosteroids are applied correctly, the risks of the disease are far greater than the risks of treatment.

