

TOPICAL STEROID WORK AID

GENERAL CONSIDERATIONS

There are a few different classifications of topical steroids, but most commonly they are placed into 7 groups, with group I being the strongest, and group VII being the least potent. The huge assortment of products is often overwhelming to providers. To simplify things it is best to limit the steroids you use to a small handful, with one to two representatives of each class. To that end, a suggested short list will be presented here, along with a more inclusive list from Epocrates.

It is important to recognize that the delivery medium affects the potency of the steroid. In general, the thicker the preparation and the lower the water content, the more potent the effect of the steroid. While there are exceptions, a given concentration of any specific agent will be most potent as an ointment, less potent as a cream, and least potent as a thin lotion. Take great care in choosing the delivery vehicle; choices on the short list will be limited to ointments and creams that are available generically, omitting gels, foams, and other novel but non-generic formulations.

Remember that an occlusive dressing increases the potency of any steroid by approximately one group.

The biggest risk of excessive steroid use is detrimental effect on the skin, primarily atrophy. These risks can be minimized if a couple principles are followed. First, do not use group I-V steroids on sensitive areas—the face, neck, axilla, groin, or occlusive skin folds. Second, do not use group I-V steroids for longer than 10 days at a time. In experienced hands these rules can be bent a bit, but you'll almost never get in trouble if you follow them.

Evidence suggests that once-daily use of any steroid is sufficient, and that little is gained by multiple applications. Despite this, eczema flare treatments often use twice-daily protocols. Since these practices are time-honored and effective, it is still reasonable to follow them.

AMOUNT-NEEDED GUIDELINES

1. Rule of Hand: The area of the side of one adult hand (palm and fingers) is approximately equal to 1% of body surface area. This area requires 0.25 g of medication for one application.
2. Estimation of amount in grams of topical agent needed for a twice-daily, 14-day course. (Note that topical steroids can typically be applied once-daily, so you may wish to cut these amounts in half.)

Location	Amount in Grams, BID Application for 2 Weeks			
	Adult	Older child	Young child	Infant < 1 yr
Arm & hand	60	40	20	15
Back & buttocks	100	70	40	20
Entire body	580	350	190	120
Face & neck	30	30	20	15
Front of chest & abdomen	100	50	30	15
Hand & fingers (front & back)	15	10	7.5	5
Leg & foot	110	60	30	20

Berke R, Singh A, Guralnick M; Atopic Dermatitis: An Overview; Am Fam Physician 2012;86(1):35-42.

3. Give your pharmacist some leeway. Pharmacies do not stock all sizes of all formulations of all topical medications. Including a comment in your prescription like “May dispense any appropriately-sized container you stock” will reduce the likelihood of a callback or delay in filling the prescription. You can save this instruction in your Favorites folder in the Medication Module of the EHR.

Topical Steroids Short List (RL Duffy)		
Potency Group	Agent	Brand Name
I: Highest	Clobetasol 0.05% cream or ointment	Temovate
II: High	Desoximetasone 0.25% cream or ointment Fluocinonide 0.05% cream or ointment	Topicort Lidex
III: High/Medium	Mometasone 0.1% ointment *	Elocon
IV: Medium	Mometasone 0.1% cream Triamcinolone 0.1% ointment	Elocon Aristocort/Kenalog
V: Medium/Low	Desonide 0.05% ointment Triamcinolone 0.1% cream	Tridesilon Aristocort/Kenalog
VI: Low	Desonide 0.05% cream	Tridesilon
VII: Lowest	Hydrocortisone 1% or 2.5% cream or ointment **	
Notes: This is not intended to be a comprehensive list; it is a short list of agents available generically. Brand names are included for reference; some are no longer on the market.		
* Some references place mometasone 0.1% ointment in Group II, but Group III appears more common.		
** While all of these formulations of hydrocortisone are in Group VII, 2.5% will often be more effective than 1%, and ointment will usually be more effective than cream. 1% hydrocortisone cream is the strongest steroid cream available OTC, and the weakest steroid cream likely to have much therapeutic value.		

Topical Steroid List from Epocrates (Fitzpatrick's, 6th Edition; pkg inserts)	
Potency Group	[C=crm, F=foam, G=gel, L=lot, O=oint, S=sol]
I: Highest	betamethasone dipropionate augmented (0.05% G,L,O); clobetasol (0.05% C,F,G,L,O,S,shmp,spray); fluocinonide (0.1% C); flurandrenolide (4 mcg/cm ² tape); halobetasol (0.05% C,O)
II: High	amcinonide (0.1% O); betamethasone dipropionate augmented (0.05% C); betamethasone dipropionate (0.05% O); desoximetasone (0.25% C,O; 0.05% G); diflorasone (0.05% O); diflorasone emollient (0.05% C,O); fluocinonide (0.05% C,G,O,S); halcinonide (0.1% C); mometasone (0.1% O); triamcinolone (0.5% O)
III: High/Medium	amcinonide (0.1% C,L); betamethasone dipropionate (0.05% C); betamethasone valerate (0.1% O); diflorasone (0.05% C,L); fluocinonide emollient (0.05% C); fluticasone (0.005% O); halcinonide (0.1% O,S); triamcinolone (0.5% C)
IV: Medium	betamethasone valerate (0.12% F); clocortolone (0.1% C); desoximetasone (0.05% C); fluocinolone (0.025% O); hydrocortisone valerate (0.2% O); mometasone (0.1% C,L); prednicarbate (0.1% O); triamcinolone (0.0147% spray; 0.1% O)
V: Medium/Low	betamethasone dipropionate (0.05% L); betamethasone valerate (0.1% C,L); desonide (0.05% O); fluocinolone (0.025% C; 0.01% shmp); flurandrenolide (0.05% C,L); fluticasone (0.05% C,L); hydrocortisone butyrate (0.1% C,O,S); hydrocortisone valerate (0.2% C); prednicarbate (0.1% C); triamcinolone (0.025% O; 0.1% C,L)
VI: Low	alclometasone (0.05% C,O); desonide (0.05% C,F,G,L); fluocinolone (0.01% C,S,oil); triamcinolone (0.025% C,L)
VII: Lowest	hydrocortisone (0.5%,1% C,L,O; 2.5% C,L,S); methylprednisolone (0.25% O)