Decision Aid for children with eczema and their caregivers

What is eczema?
Eczema, also known as atopic dermatitis, is a skin condition that causes an itchy rash. Eczema can flare (worsen) when exposed to certain triggers, such as changes in the weather, a viral infection, rough materials like some wool, fragrances (such as in lotions) and harsh soaps, detergents, and cleaning products. Allergens like dust mites, pet dander, and pollen can also be triggers. Food can be a trigger, although this happens rarely. Treatment for eczema may include medication. Your doctor may also talk to you about how to avoid triggers.¹²³

ECZEMA TRIGGERS
- Harsh soaps
- Changes in seasons
- Viral and Other Infections
- Allergens (such as pet dander, dust, pollen, or from certain products)
- Sweating
- Psychological Stress

Overview of this Decision Aid
In the following pages, you will see different eczema treatment options based on the severity of your eczema: mild eczema, moderate eczema, and severe eczema. (NOTE: Throughout this tool, we refer to “your eczema,” but this phrase can also mean “your child’s eczema.” We also provide treatment options for dry skin, which is a common problem among individuals with eczema).

ECZEMA SKIN CARE
- Moisturization
- Baths
- Wet wraps
- Topical or systemic treatments

Do I have to treat my eczema?
Leaving eczema untreated is an option. However, untreated eczema can cause more inflammation and itchiness and may impact mental and physical health, such as by causing sleep disruption or increasing the risk of depression and anxiety. Untreated eczema can also lead to complications like skin infections, and untreated eczema on the face might increase the risk of food allergies and other allergic conditions.
There is no cure for eczema. Treatment for eczema depends on the severity of the condition, and its location on the body. The photos below are examples of mild, moderate and severe eczema.

There is no limit to the amount and frequency of moisturizer applied.

If your hands are dry or have eczema, moisturize every time they become wet, such as after washing.

If you use a prescription topical medication, apply it as directed, before you moisturize.

Apply a thick layer of moisturizer all over your skin quickly after bathing or showering to “lock in” moisture and protect the skin barrier.

Moisturizers contain a mixture of oil and water. The more the oil, the better the moisturizer for dry skin. Ointments (Vaseline, Aquaphor) have the most oil, then creams, Vanicream, Eucerin, Cetaphil), then lotions (which are mostly water).

Moisturizers that are fragrance- and dye-free are the least likely to cause skin allergies.

Eczema Treatment Options
What is important to you when it comes to treating your eczema? Fill out the Patient Values Worksheet at the end of this document and discuss your values with your health care provider.

Moisturization
Skin affected by eczema has a weak barrier and cannot properly hold moisture, keep out irritating substances, or support growth of normal, protective skin germs. Keeping your skin moisturized can help protect it and promote normal function.

Bathing
A daily bath (or shower) can be useful as a way to get moisture into the skin. Baths (or showers) without moisturizer right afterwards can dry the skin. Baths should not be too hot and should be limited to under 10 minutes if possible.

Dilute Bleach Baths
Twice weekly to daily dilute bleach baths can be an easy and inexpensive maintenance treatment to control skin inflammation and reduce crusting if the eczema is moderate or severe.

Colloidal Oatmeal Bath Additive
Colloidal oatmeal* is soothing, anti-inflammatory, and can help to retain skin moisture. To use in the bath, add finely ground oatmeal or ready-made 100% natural colloidal oatmeal to your bath.

*Do not use oatmeal or food proteins on skin when your child has a food allergy.

“It's basically just for everybody, a trial and error, what works for you, what doesn't. Everyone's skin is different. So, not everyone's going to know what exactly your skin routine is.”
- WHAT PATIENTS SAY ABOUT TREATING ECZEMA
Topical Treatments
For Mild to Severe Eczema

When treating mild eczema, you should continue trigger avoidance and the basic treatments listed under Moisturization and Bathing, and your physician may recommend adding one or more of the topical treatments described below to treat active rash. Discuss these treatments with your health care provider to decide which topical treatment is best for you.7,8 Use the Eczema Action Plan at the end of this document to make a treatment plan.

Topical treatments are creams, ointments, lotions, hydrogels, oils, or sprays that are applied to the skin. Ointments are used frequently because they are the most moisturizing and are well tolerated. Topical (cortico)steroids are also frequently used. Steroids range in strength from over-the-counter hydrocortisone to prescription super potent steroids for severe flares. Most individuals with mild eczema can use the topical medication until their eczema clears, with moisturizers between flares. Regardless of severity, the body location of the eczema can affect the choice of medication. The face, and especially the thin-skinned eyelids, are sensitive to medication effects. As a result, only mild topical steroids or nonsteroidal medications are used on the face.

<table>
<thead>
<tr>
<th>Topical Treatments</th>
<th>Notable Side Effects</th>
<th>Cost</th>
<th>Speed of Results</th>
<th>Duration of Results</th>
<th>Convenience</th>
</tr>
</thead>
<tbody>
<tr>
<td>No treatment</td>
<td>Itchy, red skin; increased infection risk</td>
<td>-</td>
<td>Days to weeks</td>
<td>Eczema often recurs when treatment is stopped</td>
<td>Apply as prescribed, typically up to 2 times per day</td>
</tr>
<tr>
<td>Corticosteroid</td>
<td>Common side effects: None Occasional burning and stinging</td>
<td>$-$</td>
<td>Immediate</td>
<td>FDA approved only for up to 20% of body surface and for short term use</td>
<td>Inconvenient to apply</td>
</tr>
<tr>
<td>Calcineurin inhibitor (tacrolimus/Protopic, pimecrolimus/Elidel)</td>
<td>Early FDA warning, but now shown to be very safe, even in children; discuss with your physician.</td>
<td>$-$</td>
<td>-</td>
<td>Limit use to 20% or less of body surface area</td>
<td>Can be used on multiple body parts with different levels of severity</td>
</tr>
<tr>
<td>Phosphodiesterase(PDE) 4 inhibitor (crisaborole/Eucrisa)</td>
<td>Burning, stinging</td>
<td>$-$</td>
<td>-</td>
<td>Recommended on top of other treatment options</td>
<td></td>
</tr>
<tr>
<td>Janus Kinase (JAK) inhibitor (ruxolitinib/Opzelura)</td>
<td>Infections, FDA warning for all JAK inhibitors; discuss with your physician</td>
<td>$-$</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Wet wrap therapy$</td>
<td>Wet feeling, Can increase absorption of topical steroid Risk of infection if not used properly</td>
<td>$$$</td>
<td>Temporary effects</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Notable Side Effects

- Itchy, red skin; increased infection risk
- Occasional burning and stinging
- Side effects associated with long-term, frequent application: stretch marks; reversible skin thinning, local hair growth; spider veins, eczema recurrence

Cost

- No treatment
- $-$
- $-$
- $$$
- $$$$$
- $

Speed of Results

- Days to weeks
- Immediate

Duration of Results

- Eczema often recurs when treatment is stopped
- FDA approved only for up to 20% of body surface and for short term use
- Temporary effects

Convenience

- Apply as prescribed, typically up to 2 times per day
- Inconvenient to apply
- Can be used on multiple body parts with different levels of severity
- Limit use to 20% or less of body surface area
- Recommended on top of other treatment options
- Limit use to 20% or less of body surface area

Age Group+$

- Any age
- Any age$+
- 3 months and up
- 12 years and up
- Any age

*Corticosteroid Use — Risk of Side Effects

Less than 10% of patients experience side effect

90% of patients experience no side effect

How much medicine to use?

One adult fingertip unit is enough to spread on an entire palm (including fingers) of an adult.

1 Fingertip Unit (FTU) From fingertip to first crease
1 Palm From fingertip to wrist crease

*The topical calcineurin inhibitors were given a boxed warning for a possible increased risk of lymphoma. Clinical studies in the past 15 years suggest that there is no association with lymphoma and it can be used safely without the risks seen with topical steroids. Discuss with your health care provider for more information.

+Medications are often used in younger children “off-label,” meaning beyond what was approved by the FDA. FDA approval for corticosteroids varies by product and calcineurin inhibitors are approved for patients > or = 2 years old.

#JAK inhibitors have been associated with serious infections, heart and vascular system effects, blood clots, and increased risk of death in adults with rheumatoid arthritis. The boxed warning is for the entire class and primarily refers to these medications when taken by mouth. Topical use to up to 20% of body surface area has not been associated with safety risk.

Moisten the clothing or gauze in warm water until they are slightly damp. Next, wrap the moist dressing around the affected area. Then gently wrap a dry layer (of pajamas or gauze) over the wet one.

The most commonly recommended treatment.
Stronger topical steroids are needed to bring the skin redness and itch under control; lower strength topical steroids or non-corticosteroids are used to maintain control. Stopping or reducing corticosteroids is often followed by worsening. For topical treatments, see previous page. If you are not responding well to topical treatment, your health care provider may: 1) recommend stronger topical medication, 2) consider another diagnosis, or 3) refer you to a specialist.

If you are using adequate amounts of topical medication as recommended and still have itch and skin redness, a systemic treatment option may be needed to manage your eczema. There are certain bacteria, such as Staphylococcus aureus (staph) that are known to be a trigger for eczema, and treatment may include antibiotics if clinical infection is recognized.

Systemic Treatments

For Moderate to Severe Eczema

The most commonly recommended treatment.

<table>
<thead>
<tr>
<th>Systemic immunosuppressants are contraindicated for almost all children; cyclosporine was used in the past because it is fastest acting, followed by use of phototherapy or an alternative systemic immunosuppressant, most often methylprednisolone. However, dupilumab is now the most effective treatment.</th>
</tr>
</thead>
</table>

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**REFERENCES**

APPENDIX A: Eczema Action Plan for mild or moderate disease

ECZEMA UNDER CONTROL:

*(Skin soft, supple, maybe some dryness or temporary skin darkening or lightening)*

Step 1: Bathe (5-10 minutes) in lukewarm water every day or every other day
Step 2: Pat skin dry and apply moisturizer within 3 minutes of finishing bath to seal in moisture
Step 3: Apply moisturizer 2 more times during the day to skin that feels dry or often flares

If you have moderate to severe eczema, clear skin with topical steroids and then try preventive (proactive) treatment 2-3 times weekly of mid-strength topical steroid or calcineurin inhibitor to skin areas that would flare without continued medications.

[ ] Use on __________________________ Apply _________ times ___________
  (BODY PART)

[ ] Use on __________________________ Apply _________ times ___________
  (BODY PART)

[ ] Use on __________________________ Apply _________ times ___________
  (BODY PART)

FLARE TREATMENT *(redness, some itch)*

[ ] Use on __________________________ Apply _________ times ___________
  (BODY PART)

(Maximum _________ days)

[ ] Use on __________________________ Apply _________ times ___________
  (BODY PART)

When to call your doctor:
• Signs of infection *(such as oozing, crusting, pus bumps, increased skin pain, fever)*.
• Eczema does not improve or worsens despite following the treatment plan.
• Sudden worsening

Contact information:
## Eczema Action Plan for moderate or severe disease

### ECZEMA UNDER CONTROL:
*(Skin soft, supple, may be some dryness or temporary skin darkening or lightening)*

- **Step 1:** Bathe (5-10 minutes) in lukewarm water (+ bleach) every day or every other day
- **Step 2:** Pat skin dry and apply moisturizer within 2-3 minutes after bath to seal in moisture
- **Step 3:** Apply moisturizer 2 more times during the day to skin that feels dry or often flares

If you have moderate to severe eczema, clear skin with topical steroids and then try preventive (proactive) treatment 2-3 times weekly of mid-strength topical steroid or calcineurin inhibitor to skin areas that would flare without continued medications.

### PROACTIVE TREATMENT

<table>
<thead>
<tr>
<th>Drug</th>
<th>Use on</th>
<th>Apply</th>
<th>Times</th>
<th>(BODY PART)</th>
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</table>

### MILD FLARE TREATMENT *(redness, some itch)*

- **Use on**
- **Apply**
- **Times**
- **(BODY PART)**

(Maximum _______ days)

- **Use on**
- **Apply**
- **Times**
- **(BODY PART)**

### SEVERE FLARE TREATMENT *(very itchy rash)*

- **Use on**
- **Apply**
- **Times**
- **(BODY PART)**

(Maximum _______ days)

- **Use on**
- **Apply**
- **Times**
- **(BODY PART)**

When to call your doctor:
- Signs of infection *(such as oozing, crusting, pus bumps, increased skin pain, fever).*
- Eczema does not improve or worsens despite following the treatment plan.
- Sudden worsening

Contact information:
Take a moment to respond to the questions below. Your responses may help you and your health care provider to select the best treatment for your eczema.

Below are some common symptoms of eczema. Which of these symptoms of eczema are most bothersome to you? (check all that apply)

- Redness
- Itch
- Rough/bumpy skin
- Dry skin
- Other - please specify: ____________________________

Below are some ways eczema symptoms affect people’s lives. Which of these do you experience? (check all that apply)

- Disturbing sleep
- Avoiding swimming or other sports
- Feeling embarrassed, self-conscious, upset, or sad
- Having to wear different or special clothes
- Interfering with your school time
- Having other people call you names, tease you, bully you, ask you questions, or avoid you because of your skin

How important are the following factors to you when picking an eczema treatment?
Rate each on a scale of 1 to 5 (1 meaning not that important; 5 meaning extremely important)

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Cost</td>
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<tr>
<td>Speed of results</td>
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<td>Duration of results</td>
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<td>Side effects</td>
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<tr>
<td>Convenience</td>
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<td>Proven efficacy in clinical studies</td>
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<tr>
<td>Scent/odor</td>
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<tr>
<td>Sticky/tacky feeling</td>
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For severe disease only:

- How you get the medication
  (topical, oral, a shot)

1  2  3  4  5

Trigger Avoidance

Trigger avoidance is an important part of controlling your eczema. Common eczema triggers are changes in the weather, a viral infection, rough materials like wool, or heavily fragranced lotions, soaps, detergents, and cleaning products. Allergens like dust mites, pet dander, and pollen can also be triggers.

What triggers bother your eczema? Circle the images above and discuss with your health care provider.