



National
Eczema
Association

Eczema & the Great Outdoors

Know the difference between
flaring skin and poison oak,
heat rash & bug bites. p9

Mental Health & Eczema

Exploring the scientific
connections underlying the
skin barrier & the mind. p10

Can You Get a Tattoo if You Have Eczema?

Doctors and tattoo artists
share their expert advice. p19

NEA Magazine

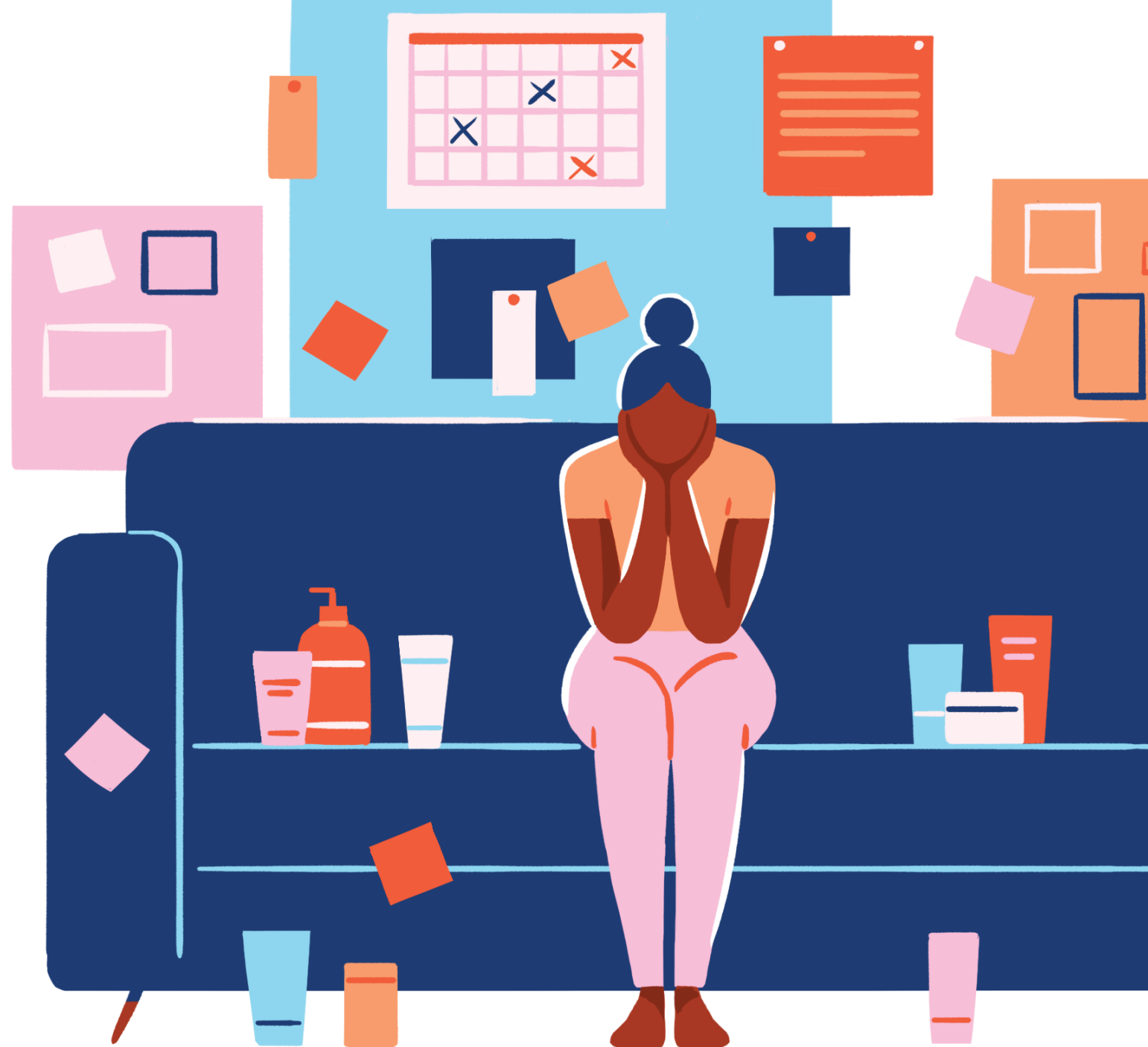
Research, Support and Education for Those Affected by Eczema



My Journey: Jeremy Paredes

On pain, perseverance
and personal
determination

p14



Having **eczema** is complicated.
Managing it shouldn't be.



NEA Magazine

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Photo courtesy Alexis Smith

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Can You Get a Tattoo if You Have Eczema?

Members of our eczema community share the pros and cons (and photos!) of getting tattoos. Plus, hear what doctors and tattoo artists will advise you about body art and flaring skin.

Founded in 1988, the National Eczema Association (NEA) is a 501(c)(3) nonprofit and the largest patient advocacy organization serving the over 31 million Americans who live with eczema and those who care for them. NEA is supported by individual and corporate donations. Advertising is accepted for publication if they are relevant to people with eczema and meet certain standards. NEA Magazine provides health information from a variety of sources, but this information does not dictate an exclusive treatment course and is not intended as medical advice. Persons with questions regarding specific symptoms or

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Letter from Julie

Welcome to the summer issue of NEA Magazine!

As our corner of the world begins to open up, I've loved seeing — and hugging! — my family, my treasured co-workers and dear friends. I hope the same is bringing you renewed joy.

As good as it feels to be together with “our people,” I know for many it comes with a fair amount of anxiety and uncertainty about how to navigate social situations. For those with eczema — many of whom knew social isolation well before the pandemic hit — this can be even more challenging.

The connection between eczema and mental health issues is real and backed by research; take a look at our feature article about mental health on page 8 and Eczema by the Numbers on page 28. Just like eczema, it's different for everybody — with many intersections and common experiences. Honor yourself and your own pace as we create our new normal. And never hesitate to call on NEA for help and support.

Some people in our community find a reprieve from their eczema in the summer, whereas others find that the heat (and sweat) can trigger their flares (see Heard on the Street on page 7). This example once again speaks to the diversity of the lived experience of eczema — the thing that makes one person's eczema better is the very thing that makes another person's worse. This is why it's so vital that we hear from each of you and amplify your story for a broader audience of healthcare providers, policymakers and drug manufacturers.

What better place to share your story than during our upcoming Eczema Expo from August 27-29? This year's Expo theme is “Can You Hear Me?” and we look forward to hearing you, seeing you, learning from you, laughing with you and Zoom-dancing with you. We can't wait!

Be safe, be well and stay tuned.

Yours with gratitude and wishes for good health,

Julie Block - President & CEO

Our Mission: NEA is the driving force for an eczema community fueled by knowledge, strengthened through collective action and propelled by the promise for a better future.

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NEA NEWS

IFAC Success. Welcome to Sam and Allie! Plus, Eczema Out Loud, Expo 2021 and Ambassadors' Corner

Itching For a Cure Hits the Mark

Congrats to everyone who participated in NEA's annual “Itching for a Cure” (IFAC) fundraiser. Our 2021 IFAC campaign took place May 1-15 and raised more than \$17,000 for eczema research. All donations will be invested in the NEA Research Fund and spent on research grants to the most dedicated doctors and scientists in the field. We're pretty amazed by how many people contributed, and we're especially grateful to our top five individual fundraisers: Amy Chnelich, her daughter Ella and their family, who raised more than \$5,000; Christina Crowley, who raised more than \$2,500; and Lisa Choy, Mike Bristol and Justine Scott who each raised more than \$1,000. Thanks to all who contributed — you help shape the field of eczema research today and change the future for millions of people!

Welcome to NEA's Newest Team Members

NEA is thrilled to welcome two new team members to our organization. Allison (Allie) Loiselle has joined as Science & Research Manager to support our growing research program, where she will work on NEA surveys, data management and engaging Research Ambassadors and other members of the community in the research process. Allie comes to us from the University Medical Center Groningen (UMCG) where she was a PhD candidate investigating glaucoma and tinnitus.

We're also excited to welcome Sam DeWys as our new Design Director. Sam has spent the past ten years as a designer and art director in the healthcare space, building awareness campaigns and resources for patients related to ovarian cancer, mental health issues, metastatic breast cancer and allergic asthma. She brings expertise in building brands and creating all forms of print and digital collateral, as well as directing photo and video shoots. Sam is passionate about our mission, as she's seen firsthand the burden of eczema for her sister and niece.

Eczema Out Loud: Love Stories, Science, Self-Image & More

We're seven episodes into our podcast series “Eczema Out Loud,” which features NEA's own Dani Morshead interviewing members of the eczema community about a variety of topics, including: relationships, the atopic march, JAK inhibitors, biologics, living with atopy, clinical trials and, most recently, body-image & skin positivity. Eczema Out Loud is free and available for streaming/download on any of the following platforms: Spotify, Apple Podcasts, Anchor, Breaker, Castbox, Google Podcasts, Overcast, Pocket Casts and RadioPublic. You can also hear all our podcasts on the website at NationalEczema.org/types/podcast. If you have anything you'd like us to cover in an upcoming episode, send a note to Podcast@NationalEczema.org.

NEA QUIZ

How many different types of eczema are there (and can you name them all)?

See the answer on the bottom of the next page!

Eczema Expo 2021 — Mark Your Calendars for August 27-29

We're counting down the days to Eczema Expo, which will be held virtually again, allowing the global community to gather, learn and connect. This year's Expo is dedicated to AMPLIFYING the collective voice of — and individual voices in — the eczema community.

Like past in-person Expos, Virtual Expo will offer opening and closing general sessions, and presentation, discussion and support breakout sessions. The schedule will also include live group fitness classes, in-depth workshops, meet-ups and ecz-tracurricular activities like our annual Ecz-travaganza dance party.

Virtual Expo will feature an exhibitor hall where you can discover new products created for the eczema community, and gathering spaces throughout the event site where you can run into old friends, meet new friends and connect with #skinfluencers.

Don't wait until the last minute to sign up! All your information, plus the link to register, is available at EczemaExpo.org.

Ambassadors' Corner

Over the past few months, NEA Ambassadors have been meeting with eczema industry leaders, including pharmaceutical companies, to share their stories and day-to-day lived experiences with eczema. Ambassadors also participated in NEA's Coalition United for Better Eczema Care (CUBE-C). CUBE-C provides healthcare providers with educational resources focused on patient collaboration and individualized treatment.

"I have learned not only how to advocate for myself, but also how to advocate for other people in the eczema community who are suffering. This is, surprisingly, a really wonderful and gratifying feeling to somehow be able to help other people through the expertise I've gained with my own suffering."

~ Ambassador Carrie C. on her experience with CUBE-C

NEA Quiz Answer:

There are seven different types of eczema. They are: atopic dermatitis, contact dermatitis, neurodermatitis, dyshidrotic eczema, nummular eczema, seborrheic dermatitis and stasis dermatitis.



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My skin hates hates hates humidity.

@jenenec

Bring on the heat! ☀️ The summer heat and humidity does wonders for my eczema! My skin finally gets the relief from the cold, harsh and dry winters. I have less flare ups and my skin tone evens out in the summer. @ccrayne

My eczema is so much better in summer. The sunshine does wonders. No dryness and no flare ups. @priyamulji

Heat makes my eczema so much worse. I hate it. Even more so with wearing a mask. @adventurousaria

The heat and sun are terrible for my eczema, especially in a tropical country like India. The sunrays and hot waves make it so uncomfortable, plus the sweat, itching, rashes. @vidhi.4

Iced bathing is miracle for me. I had more red skin during summer, so ice is one of the best things to calm down inflammation. @indira6758

Firefighting! Sweating literally all summer and being dirty is no bueno for eczema. @kylee_vargas12

Who else itches after taking a shower? How do you treat or address it? 😞 it frustrates 😞😞😞. @strike___through

Omg firstly for me it's deciding what to wear to cover my eczema and also keep cool in the heat. Then having to continuously apply ointment emollients to avoid dry skin but it ends up melting and turning white (you can imagine how that looks on a black skinned person 🙄). @ru10do29

Weirdly it is terrible for like the first week of proper sun, hives, being extremely dry and then after it gets used to it, it's amazing, clear and soft! @emiliareeves3

HEARD ON THE STREET

Hot or not? Tell us how summer affects your eczema

My eczema is on the back of my neck and it tends to be much worse in the summertime. I live in Southern California and it can get up to 100+ degrees in the summer. My main concern is controlling how much I sweat during this time so I never wear my hair down in the summer and wearing the appropriate clothing to keep cool. @awhh_tumm

My skin does better in summertime because I can wear short clothes and I really need sun to heal my wounds. The only problem is pollen! When they mix up with sweat on my skin 🌞🔥🌳🌳. @theatritralisch

NEA PLAYLIST

What song are you playing on repeat? Here are our NEA community-sourced summer 2021 favorite songs. Enjoy!

Butter by BTS! @te.chai

Fallen Angel by Poison @games_jaham

Kiss Me More by SZA and Doja cat :) @sprinkles_coffee

My House by 2PM ❤️❤️❤️ @innahbaylon

Todo de Ti by Rauw Alejandro 🍷 @albany12

Pasadena by Tinashe @quickquiet

August by Taylor Swift @haloenae

Stupid Love by Lady Gaga 🍷🎵 @jcmp914

Serotonin

by Girl in Red

@rosas_sao_azuis

Solar Power by Lorde 🌞 @starryeyesdarkestnights

One Too Many by Keith Urban @samstannerz

Asthmatic

by Spineshank

@ealvarado195

Saturday by Twenty One Pilots @jiddurbug

Only Human by Jonas Brothers @nitewing3439

Cover Me in Sunshine by Pink and her daughter Willow 🌞 @joeyu1978

Lovely Day by Bill Withers ❤️ @shielsyb

GET AHEAD OF ECZEMA AND SHOW MORE SKIN

DUPIXENT is a breakthrough biologic treatment that targets a key source of inflammation that can lead to uncontrolled moderate-to-severe eczema (atopic dermatitis).

Approved for ages 6 and up.

- Fast itch relief*
- Not an immunosuppressant
- Clearer skin that lasts*
- Not a cream or steroid

*In a clinical trial at week 16, 59% of adults taking DUPIXENT + topical corticosteroids (TCS) had significantly less itch vs 20% on TCS only; 39% saw clear or almost clear skin vs 12% on TCS only. 36% saw clear or almost clear skin at week 52 vs 13% on TCS only.

**TALK TO YOUR ECZEMA SPECIALIST
AND GO TO DUPIXENT.COM TO FIND OUT MORE**

INDICATION

DUPIXENT is a prescription medicine used to treat people aged 6 years and older with moderate-to-severe atopic dermatitis (eczema) that is not well controlled with prescription therapies used on the skin (topical), or who cannot use topical therapies. DUPIXENT can be used with or without topical corticosteroids. It is not known if DUPIXENT is safe and effective in children with atopic dermatitis under 6 years of age.

IMPORTANT SAFETY INFORMATION

Do not use if you are allergic to dupilumab or to any of the ingredients in DUPIXENT®.

Before using DUPIXENT, tell your healthcare provider about all your

medical conditions, including

if you: have eye problems; have a parasitic (helminth) infection; are scheduled to receive any vaccinations. You should not receive a “live vaccine” if you are treated with DUPIXENT; are pregnant or plan to become pregnant. It is not known whether DUPIXENT will harm your unborn baby. There is a pregnancy exposure registry for women who take DUPIXENT during pregnancy to collect information about the health of you and your baby. Your healthcare provider can enroll you or you may enroll yourself. To get more information about the registry call 1-877-311-8972 or go to <https://mothertobaby.org/ongoing-study/dupixent/>; are breastfeeding or plan to

breastfeed. It is not known whether DUPIXENT passes into your breast milk. Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins and herbal supplements.

Especially tell your healthcare provider if you are taking oral, topical or inhaled corticosteroid medicines or if you have atopic dermatitis and asthma and use an asthma medicine. **Do not** change or stop your corticosteroid medicine or other asthma medicine without talking to your healthcare provider. This may cause other symptoms that were controlled by the corticosteroid medicine or other asthma medicine to come back.

DUPIXENT can cause serious side effects, including:

Allergic reactions (hypersensitivity), including a severe reaction known as anaphylaxis. Stop using DUPIXENT and tell your healthcare provider or get emergency help right away if you get any of the following symptoms: breathing problems, fever, general ill feeling, swollen lymph nodes, swelling of the face, mouth and tongue, hives, itching, fainting, dizziness, feeling lightheaded (low blood pressure), joint pain, or skin rash.

Eye problems. Tell your healthcare provider if you have any new or worsening eye problems, including eye pain or changes in vision.

The most common side effects in patients with atopic dermatitis include injection site reactions, eye and eyelid inflammation, including redness, swelling, and itching,

and cold sores in your mouth or on your lips.

Tell your healthcare provider if you have any side effect that bothers you or that does not go away. These are not all the possible side effects of DUPIXENT. Call your doctor for medical advice about side effects. You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

Use DUPIXENT exactly as prescribed. Your healthcare provider will tell you how much DUPIXENT to inject and how often to inject it. DUPIXENT is an injection given under the skin (subcutaneous injection). If your healthcare provider decides that you or a caregiver can give DUPIXENT injections, you or your caregiver

should receive training on the right way to prepare and inject DUPIXENT. **Do not** try to inject DUPIXENT until you have been shown the right way by your healthcare provider. In children 12 years of age and older, it is recommended that DUPIXENT be administered by or under supervision of an adult. In children younger than 12 years of age, DUPIXENT should be given by a caregiver.


Please see Brief Summary on next page.

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CALL 1-844-DUPIXENT (1-844-387-4936)

Brief Summary of Important Patient Information about DUPIXENT® (dupilumab) Rx Only (DU-pix’-ent) injection, for subcutaneous use

What is DUPIXENT?

- DUPIXENT is a prescription medicine used:
 - to treat people aged 6 years and older with moderate-to-severe atopic dermatitis (eczema) that is not well controlled with prescription therapies used on the skin (topical), or who cannot use topical therapies. DUPIXENT can be used with or without topical corticosteroids.
- DUPIXENT works by blocking two proteins that contribute to a type of inflammation that plays a major role in atopic dermatitis.
- It is not known if DUPIXENT is safe and effective in children with atopic dermatitis under 6 years of age.

Who should not use DUPIXENT?
Do not use DUPIXENT if you are allergic to dupilumab or to any of the ingredients in DUPIXENT. See the end of this summary of information for a complete list of ingredients in DUPIXENT.

What should I tell my healthcare provider before using DUPIXENT?
Before using DUPIXENT, tell your healthcare provider about all your medical conditions, including if you:

- have eye problems
- have a parasitic (helminth) infection
- are scheduled to receive any vaccinations. You should not receive a “live vaccine” if you are treated with DUPIXENT.
- are pregnant or plan to become pregnant. It is not known whether DUPIXENT will harm your unborn baby.
 - **Pregnancy Exposure Registry.** There is a pregnancy exposure registry for women who take DUPIXENT during pregnancy. The purpose of this registry is to collect information about the health of you and your baby. Your healthcare provider can enroll you in this registry. You may also enroll yourself or get more information about the registry by calling 1 877 311-8972 or going to <https://mothertobaby.org/ongoing-study/dupixent/>.
- are breastfeeding or plan to breastfeed. It is not known whether DUPIXENT passes into your breast milk.

Tell your healthcare provider about all of the medicines you take including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Especially tell your healthcare provider if you:

- are taking oral, topical, or inhaled corticosteroid medicines
- have atopic dermatitis and asthma and use an asthma medicine

Do not change or stop your corticosteroid medicine or other asthma medicine without talking to your healthcare provider. This may cause other symptoms that were controlled by the corticosteroid medicine or other asthma medicine to come back.

How should I use DUPIXENT?

- **See the detailed “Instructions for Use” that comes with DUPIXENT for information on how to prepare and inject DUPIXENT and how to properly store and throw away (dispose of) used DUPIXENT pre-filled syringes and pre-filled pens.**
- Use DUPIXENT exactly as prescribed by your healthcare provider.
- Your healthcare provider will tell you how much DUPIXENT to inject and how often to inject it.
- DUPIXENT comes as a single-dose pre-filled syringe with needle shield or as a pre-filled pen.
- DUPIXENT is given as an injection under the skin (subcutaneous injection).
- If your healthcare provider decides that you or a caregiver can give the injections of DUPIXENT, you or your caregiver should receive training on the right way to prepare and inject DUPIXENT. **Do not** try to inject DUPIXENT until you have been shown the right way by your healthcare provider. In children 12 years of age and older, it is recommended that DUPIXENT be administered by or under supervision of an adult. In children younger than 12 years of age, DUPIXENT should be given by a caregiver.

- **If your dose schedule is every other week and you miss a dose of DUPIXENT:** Give the DUPIXENT injection within 7 days from the missed dose, then continue with your original schedule. If the missed dose is not given within 7 days, wait until the next scheduled dose to give your DUPIXENT injection.
- **If your dose schedule is every 4 weeks and you miss a dose of DUPIXENT:** Give the DUPIXENT injection within 7 days from the missed dose, then continue with your original schedule. If the missed dose is not given within 7 days, start a new every 4 week dose schedule from the time you remember to take your DUPIXENT injection.
- If you inject more DUPIXENT than prescribed, call your healthcare provider right away.
- Your healthcare provider may prescribe other medicines to use with DUPIXENT. Use the other prescribed medicines exactly as your healthcare provider tells you to.

What are the possible side effects of DUPIXENT?
DUPIXENT can cause serious side effects, including:

- **Allergic reactions (hypersensitivity), including a severe reaction known as anaphylaxis.** Stop using DUPIXENT and tell your healthcare provider or get emergency help right away if you get any of the following symptoms: breathing problems, fever, general ill feeling, swollen lymph nodes, swelling of the face, mouth and tongue, hives, itching, fainting, dizziness, feeling lightheaded (low blood pressure), joint pain, or skin rash.
- **Eye problems.** Tell your healthcare provider if you have any new or worsening eye problems, including eye pain or changes in vision.

The most common side effects of DUPIXENT in patients with atopic dermatitis include: injection site reactions, eye and eyelid inflammation, including redness, swelling and itching, and cold sores in your mouth or on your lips. The following additional side effects have been reported with DUPIXENT: facial rash or redness. Tell your healthcare provider if you have any side effect that bothers you or that does not go away. These are not all of the possible side effects of DUPIXENT. Call your doctor for medical advice about side effects. You may report side effects to FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

General information about the safe and effective use of DUPIXENT. Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use DUPIXENT for a condition for which it was not prescribed. Do not give DUPIXENT to other people, even if they have the same symptoms that you have. It may harm them. This is a brief summary of the most important information about DUPIXENT for this use. If you would like more information, talk with your healthcare provider. You can ask your pharmacist or healthcare provider for more information about DUPIXENT that is written for healthcare professionals. For more information about DUPIXENT, go to www.DUPIXENT.com or call 1-844-DUPIXENT (1-844-387-4936)

What are the ingredients in DUPIXENT?
Active ingredient: dupilumab
Inactive ingredients: L-arginine hydrochloride, L-histidine, polysorbate 80, sodium acetate, sucrose, and water for injection

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ASK THE ECZ-PERTS

Eczema and the Great Outdoors

In this summer edition of Ask the Ecz-perts, we talk campfires, poison ivy/oak, bug bites and heat rash with experts Dr. Brian Kim, assistant professor of dermatology at Washington University in St. Louis, and Dr. Stuart Cohen, MPH, a San Diego-based pediatrician.

Can exposure to campfire smoke cause flaring skin and if so, what might this look like?

Dr. Stuart Cohen: This is a good question, especially as we start summer camp and campfire season. Even short bursts of exposure to smoke can damage our skin barrier, and in people with eczema this can increase the susceptibility to dryness and secondary inflammation, leading to flare ups and itchiness. It’s best to cover up and apply daily moisturizers to protect the skin barrier if you’re out near a campfire.

What differentiates eczema from a reaction to poison ivy or poison oak?

Dr. Brian Kim: Three things can often distinguish eczema from allergic contact dermatitis associated with poison ivy or poison oak. First, poison ivy/oak causes a hive-like eruption (urticarial) and then evolves into eczematous lesions. Eczema just flares into eczema, not hives. Second, poison ivy/oak tends to not respect “typical” eczema hot spots. You can see lesions in areas where the allergen



Dr. Stuart Cohen, MPH

Dr. Stuart Cohen, MPH is a pediatrics specialist in San Diego, CA and has over 40 years of experience in the medical field.

Dr. Brian Kim

Dr. Brian Kim is assistant professor of dermatology, anesthesiology, pathology and immunology, and co-director of the Center for the Study of Itch at Washington University School of Medicine in St. Louis.



was accidentally exposed, even the genitals. And therefore it will look more streaky, rather than a typical eczema distribution. Third, the blisters associated with poison ivy/oak are much more dramatic than those generally associated with classical eczema.

How does eczema differ from a heat rash?

Dr. Cohen: A heat rash is caused by excessive sweat blocking the skin pores, trapping the sweat under the skin, leading to red, bumpy or blistery skin. The skin is not dry and may be only slightly itchy. Eczema features very itchy, dry skin with blisters that can be fluid-filled and painful, sometimes even oozing. Eczema is also usually concentrated on flexural areas like elbows, knees and ankles, whereas a heat rash is more likely to appear all over.

How do bug bites or bee stings present in comparison to flaring eczema?

Dr. Kim: Bee stings are painful, and flaring eczema should not be that painful. Bug bites should generally cause small, tiny bumps that are distinct. Eczema tends to flare in a pattern rather than in small, discrete bumps.

Dr. Cohen: Insect bites can mimic eczema by causing multiple itchy red bumps over the torso and face. With a close look, you can see a central punctum or ‘bite hole’ from the insect, which is not apparent in eczema. As an aside, insect bites can cause an immune-mediated response with release of histamines and other inflammatory factors, leading to a worsening of pre-existing eczema.

Are there any other triggers in the outdoors to consider?

Dr. Cohen: Yes. Excessive heat and sweat, coupled with the stress of an adventurous activity, can lead to an exacerbation of pre-existing eczema. Stay cool and hydrated and remember to take frequent rest or ‘chill’ breaks!

Dr. Kim: Keep in mind that there is another condition called contact urticaria which is neither allergic contact dermatitis (like poison ivy/oak), nor classical urticaria (hives), nor eczema. It’s when you get hives directly in response to an allergen via the skin that becomes very itchy and goes away within hours to days.

Send your questions for our Ecz-perts to Editor@NationalEczema.org.

RESEARCH

MENTAL HEALTH AND ECZEMA – SEEING THE UNSEEN

by **Wendy Smith Bogolka, MBS**, National Eczema Association and **Jodi L. Johnson, PhD**, Departments of Dermatology and Pathology, Feinberg School of Medicine, Northwestern University

People affected by eczema live with significant disease and quality of life burden — the physical and often visible burden from signs and symptoms of eczema, but also numerous unseen burdens related to emotional, social and psychological impacts of life with, or caring for, a chronic disease (Figure 1). We take this important opportunity to share the current science underlying connections between mental health issues and atopic dermatitis (AD), advances in screening for and monitoring mental health symptoms in AD patients, therapeutic interventions and inroads for self-care.

CONTRIBUTING FACTORS OF MENTAL HEALTH ISSUES IN AD

AD can affect people's entire lives, yet itching and sleep disturbance — which are frequently linked — are most often cited by patients and caregivers as the greatest causes of disease burden in AD regardless of disease severity. The unpredictability of AD flares coupled with the limited ability of currently available treatments to effectively alleviate itch

and afford long-term disease control, especially for individuals with moderate-to-severe AD, correlates with symptoms of anxiety and/or depression. More frequent and severe sleep disturbance is also associated with increased itch, diminished health-related quality of life and increased anxiety/depression symptoms. Dr. Katrina Abuabara, MSCE at University of California San Francisco said, "The lack of predictability and control in patients and caregivers' lives has the capacity to create secondary stress in multiple life domains and requires high levels of vigilance. AD may also impact healthy coping mechanisms such as social and intimate relationships and/or leisure activities."

The effects of AD on other life areas such as reduced social life and increased isolation are notable as well for their impact on emotional health. Patients with AD, especially affected children and teens, can face self-esteem concerns and mental health impacts due to the stigmatization (i.e. negative judgment, disapproval, lack of acceptance) of their disease by peers, disease-related lifestyle restrictions and in some cases the effects of bullying. Parents and caregivers can also be affected by similar issues, and may experience feelings of guilt, blame, worry and frustration. Christina Schut, a medical psychologist at the Justus-Liebig-University, Giessen, Germany said, "Parents often have to cope with suggestions from relatives and friends saying, 'You should treat your child's skin differently.' This can put a lot of stress on the parents."

There are also potential negative impacts of co-occurring mental health issues and AD on work absenteeism or productivity. A recent study analyzing data from the 2017 US National Health and Wellness Survey reported that adults with moderate-to-severe AD (N=1017) who experienced sleep difficulties (56.6%), depression (70.7%) and anxiety (60.9%) were more likely to have higher levels of work

impairment.² Dr. Shawn Kwatra, assistant professor at Johns Hopkins University and author of the above study said, "As a person who suffers from eczema myself, I can attest to the fact that it is pretty hard to concentrate on your work when you can't stop itching."

MENTAL HEALTH STRUGGLES CAN WORSEN AD (AND VICE VERSA)

There is a sort of "chicken or egg" discussion ongoing about how AD can cause mental health issues, but also how mental health issues can increase symptoms of AD. Dr. Gil Yosipovitch, a professor at the University of Miami and renowned researcher on itch said, "Stress and anxiety are major contributors to aggravation of itch. Itch causes patients to scratch which damages the skin barrier function, amplifying the suffering. Over 50% of AD patients reported that at least one stressful life event occurred in the month prior to an exacerbation of their disease. Flaring of the AD can then increase stress levels and exacerbate anxiety and depression."

Dr. Yosipovitch's work and other research studies confirm this brain-skin connection and have demonstrated key pathways involved in the stress-induced "itch-scratch cycle".³⁻⁶ A hormonal pathway, known as the hypothalamic-pituitary-adrenal axis, is disturbed in AD, which then effects nerves, the immune system and even keratinocytes (cells important for skin structure and barrier), leading to increased inflammation and decreased barrier function. Stress has even been shown to inhibit repair of the skin barrier function itself. While short-term stressors can have these effects, even more of the body's responses can go awry when the stress is more long-term or chronic. Brain 'circuitry' that normally produces a negative-feedback process once the stressor has been removed can become 'turned down' because of chronic stress — weakening a person's ability to adapt.

Stress and anxiety can also lead to the production of cytokines and histamines, involved in the body's immune response, which also results in increased itch. While this interplay between mental health and AD can be complex, mental health outcomes related to anxiety and depression are now being included in several clinical trials for oral and injectable medications for AD — a key acknowledgement of the importance of this issue in the treatment of AD.

MENTAL HEALTH AND THE CARE CONVERSATION

With the connections between AD and mental health impacts gaining greater research attention, have the care conversations between patients and caregivers changed? Yes and no. While many healthcare providers recognize the need to assess and monitor mental health symptoms in their AD patients, Dr. Anna Fishbein, of Northwestern University said, "It's very frustrating when we see someone who is struggling and all of us as clinicians are trying to put this on our radar during our brief visits. Many clinicians are not finding it [mental health issues] because they are not asking about it." Patients and caregivers may also have varying degrees of comfort discussing these issues with their healthcare providers.



Figure 1: Adapted from the multidimensional burden of atopic dermatitis.¹

To try to improve this situation, efforts are underway to develop and validate tools that would allow for quick assessment of mental health during an office visit and efficiently log the results into electronic medical records. Existing tools such as the Hospital Anxiety and Depression Scale (HADS) have been used in clinical trials and were recently evaluated for use in the office care setting. The Patient-Reported Outcome Measures Information System (PROMIS) is being investigated as a possible solution and includes over 300 measures of physical, mental and social health for use with the general population and with individuals living with chronic conditions. PROMIS was recently assessed for adaptation to dermatological care, including AD. Overall, this recent study demonstrated that assessing pain interference, anxiety and depression using PROMIS provided insight into disease severity and treatment response in multiple skin conditions. PROMIS endpoints for assessing sleep and itch have also been studied. Sub-domains of other patient-reported quality of life tools, such as SkinDex, can also provide an assessment of emotional impact of AD for adult patients.

Assessing mental health in young children and in infants is more difficult. Laura Wakschlag, PhD, and her team at Northwestern University recently validated a parent survey tool called The Early Childhood Irritability-Related Impairment Interview (E-CRI) to assess the extent of irritable mood and tantrums in preschool aged children (average age 4.82 years) and infants/toddlers (average age 14 months), allowing understanding of whether these factors were interfering with a young child's developmental adaptation and social

skills.⁷ This might be predictive of future health and stability and may be used to assess the level of emotional discomfort caused by diseases of young childhood, including AD.

Short of using specific tools to document and track mental health symptoms, there is opportunity to start more simplistically. Dr. Schut said, "My advice would first be for the physician to listen and ask questions to get a better understanding of what is going on in the patient's life. Was there anything important in the last couple of weeks — a stressful life event, stress at work, stress in the family? The physician can do active listening, recognizing the patient's emotions and clarifying whether they are understood correctly by the doctor." This opportunity to initiate this conversation extends to patients and caregivers as well — raising it as a key area in describing how life with their AD has been during an office (or telehealth) visit.

Looking to the future generation of healthcare providers, there is also opportunity to improve awareness of mental health issues and training to conduct mental health screening. A recent study found that 64% of the dermatology residents in the United States surveyed had not had education on depression screening as part of their medical training curriculum or clinical practice even though most residents said they thought depression screening was important to provide more whole-person care.⁸ Dr. Kwatra said, "I am hopeful that patients and providers alike recognize the enormous toll of uncontrolled AD on all facets of patients' lives so treatment can be initiated early and quality of life improved."

INTERVENTIONS TO IMPROVE MENTAL HEALTH

There are medical as well as non-medical interventions that may improve mental health for AD patients and caregivers, starting first with the goal to gain better disease control. "There are several effective topical and systemic therapies for AD, with several additional agents in the pipeline. These agents can disrupt the itch-scratch cycle and lead to decreased systemic inflammation, improvement in mental health outcomes and an overall greatly improved quality of life," stated Dr. Kwatra. Dr. Yosipovitch agreed and honed in specifically on ways to alleviate the itch-scratch cycle. "I think we will need to use more holistic approaches to treat the complexities of chronic itch in AD similar to what has been done with chronic pain. No doubt that the new biologics help our patients significantly, but stress reduction and relaxation should be part of our treatment as well. Deep muscle relaxation, cognitive behavioral therapy and acupuncture can reduce nerve sensitization and itch. We sometimes give drugs such as mirtazapine (an antidepressant) in low doses and gamma aminobutyric acid (GABA) drugs can reduce the nerve activity and the itch and eczema improves. Educating dermatologists on these approaches and recommending that patients work with psychologists would help."

Psychological interventions and adjunctive therapies are also being explored to help with the itch/scratch cycle and associated mental distress. Stress reduction techniques like habit reversal training (a combination of awareness training and practicing a competing response to control the habit) and cognitive behavioral therapy (a combination of habit reversal training, relaxation trainings and techniques aimed to restructure thoughts and the senses i.e. identifying harmful thoughts and replacing them with positive ones) are beginning to be studied in clinical trials. Dr. Schut said, "Patients can react to their itch with catastrophizing thoughts such as, 'My itch will never end' or 'I will bleed and look terrible.' These thoughts can actually heighten the itch intensity, so replacing these with conscious positive thoughts and actions can actually ease the itch."

In terms of alternative and self-care treatments, massage therapy can help reduce the sensation of itch. Acupuncture and acupressure can reduce histamine and allergy-induced itch. Mindfulness-based stress reduction, which is moment-to-moment awareness without judging emotions, thoughts or sensations, often accompanied by

ECZEMA BY THE NUMBERS

Learn more about the connection between dermatological diseases such as AD and mental health issues with our infographic on **page 28**.

breathing techniques, can reduce stress not only in AD patients but also in their caregivers. Finding support groups where patients and/or caregivers come together to increase knowledge and offer support can also be reassuring and reduce stress. Dr. Abuabara said specifically to caregivers, "Do not underestimate the importance of making time for yourself. Although it can be beyond challenging to find the time and resources to do so, imagine the announcement made before a plane takes off: 'make sure your mask is secure before you help others'."

COVID-19 AND EFFECTS ON MENTAL HEALTH IN AD

Some evidence suggests that the Covid-19 pandemic worsened mental health symptoms of patients with allergic diseases, including AD. Social isolation increased economic burden, and news overload during quarantine increased psychological stress including emotional exhaustion, irritability and anger, depression, panic, anxiety and post-traumatic stress disorder. Similarly, during the early stages of the Covid-19 pandemic, caregivers fared worse than non-caregivers in terms of mental health and fatigue. Physical exercise, support groups and stress-reduction techniques were recommended to counter these impacts. Publications are beginning to emerge discussing the benefits of turning suffering into growth through positive reframing, maintaining hope and courage, appreciating life, engaging in meaningful activities and socializing even via virtual methods. It has yet to be seen if some aspects of quarantine/virtual existence, including being more able to control our own schedules, reducing commuting time and better regulating our own eating and sleeping schedules, may exert benefits on mental health.

TAKE-HOME POINTS:

- Mental health issues are an important and often unseen part of the burden of AD in patients and caregivers.
- Mental health symptoms and stress have a bi-directional relationship with AD symptoms.
- Healthcare providers are becoming more aware of the need to screen for and monitor mental health issues in patients with AD. Patients should be encouraged to share their mental health concerns in care conversations.
- Treatments that provide better and longer-term control of AD, especially reducing itch and improving sleep, may help ease mental health impacts.
- Psychological, relaxation and stress management interventions can also help alleviate mental health issues associated with AD for both patients and caregivers.

1. Bridgman AC, Block JK, Drucker AM. The multidimensional burden of atopic dermatitis: An update. *Ann Allergy Asthma Immunol.* 2018;120(6):603-606. 2. Kwatra SG, Gruben D, Fung S, DiBonaventura M. Psychosocial Comorbidities and Health Status Among Adults with Moderate-to-Severe Atopic Dermatitis: A 2017 US National Health and Wellness Survey Analysis. *Adv Ther.* 2021;38(3):1627-1637. 3. Golpanian RS, Kim HS, Yosipovitch G. Effects of Stress on Itch. *Clin Ther.* 2020;42(5):745-756. 4. Kim HS, Yosipovitch G. An aberrant parasympathetic response: a new perspective linking chronic stress and itch. *Exp Dermatol.* 2013;22(4):239-244. 5. Mochizuki H, Hernandez L, Yosipovitch G, Sadato N, Kakigi R. The Amygdala Network for Processing Itch in Human Brains. *Acta Derm Venereol.* 2020;100(19):adv00345. 6. Tran BW, Papoiu AD, Russoniello CV, et al. Effect of itch, scratching and mental stress on autonomic nervous system function in atopic dermatitis. *Acta Derm Venereol.* 2010;90(4):354-361. 7. Wakschlag LS, Krogh-Jespersen S, Estabrook R, et al. The Early Childhood Irritability-Related Impairment Interview (E-CRI): A Novel Method for Assessing Young Children's Developmentally Impairing Irritability. *Behav Ther.* 2020;51(2):294-309. 8. Streight KL, Dao H, Jr., Kim SJ. Dermatology Resident Training on Depression Screening: A Cross-Sectional Survey. *Cureus.* 2020;12(6):e8861.

➡ For the complete article and full list of references, please visit NationalEczema.org/mental-health-science.



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Jeremy Paredes

My name is Jeremy Paredes, and I am an eczema warrior.

I was born with severe eczema. For as long as I can remember, my body has been covered with red rashes, scabs and dry skin. Kids would ask if my eczema was skin cancer or if it was contagious. Kids would try to stay away from me and not touch me because I didn't look like the rest of them.

In the middle of my junior year of high school, I hit the lowest of lows. My skin was in an endless cycle of itching, scratching, bleeding and pain. I wasn't able to go to school or focus on studying, and I couldn't play soccer because my skin hurt so much.

Throughout my struggle with eczema, I hadn't let it stop me from what I loved doing. I've played soccer since I was three years old. When my

family moved to Atlanta, Georgia, I started playing club soccer year-round. My favorite position has always been left-back or left-wing, since my older brother always played those two positions.

But last spring, the pain from my skin became too overwhelming; it was complete agony and misery. This is so hard to talk about. My suffering was so severe, I just wanted to end my life.

A little over a year ago, I was stuck at home on the couch. I was barely moving and my skin hurt so bad I could barely even talk. My skin was cracked and so dry. My mom was worried because my skin was becoming green and colorless. She called my doctor, described my condition, and my doctor told her to call an ambulance; that was the day I was rushed to the ER in an ambulance.

I was later informed that if I wasn't brought into the ER that night, I would have died.

At the time, I didn't know how dire my situation really was. My eczema was so severe, it had put my body into septic shock.

I was in the hospital's intensive care unit for six days. In the midst of immense pain and suffering, it's easy to lose hope of getting better.

However, what I learned through my worst experience with eczema is that for every low moment, there's a high moment waiting in the future.

While I was in the hospital, my close friends, soccer teammates and film classmates came to visit me, bringing food, games and positive vibes that completely changed my mindset.

I wasn't only pushing through my toughest time for myself; I was determined to get through the worst of my eczema in order to be there for my family, my friends and my teammates. The support of my soccer coach and teammates especially encouraged me to stay positive and remain hopeful. For an athlete, getting good at your respective sport takes patience, practice and determination. I felt very disappointed, sad and angry that I wasn't able to play soccer due to my eczema. Not being able to play due to my eczema was a huge weight I hated having.

But without my eczema, I wouldn't be the same person I am today.

I wouldn't have the same battle scars, compassion for others and positive outlook on my everyday life if it wasn't for my up and down battle with eczema. The staff and teachers at my high school have been amazing in their support. From my counselor Dr. Higgins, to my teachers and coaches, Coach Bowler and Coach Tim, they have all checked up on me throughout the previous year to make sure I was feeling okay.

Just as eczema never defined me when it was at its worst, it doesn't define me now.

I'm still the person I've always been: one who would not quit, who's ready to take on the next challenge. I recently began taking a newly-approved drug which has been a game changer. I'm now playing soccer again with my club team. I'm back to creating and producing videos every week, filming football games, and I'm back hanging out with my friends.

I graduated from high school, and in the fall I'll be attending Georgia Tech and joining the Georgia Tech Football Creative Media Team. I'm very grateful to say I am the first high school content creator to be recruited by Georgia Tech Football. I'm super excited to continue my passion for filmmaking, as I will be helping film, edit and produce a range of sports media content for the football team. I'm ready to put the spotlight on our Georgia Tech athletes!

I want to share my story because there's always going to be a way to overcome any obstacle that you face. I want to thank my parents, Rob and Maisie, and my older brother Josh, for always sticking with me through the highs and lows.

My journey with eczema still continues. But the worst is behind me.



All photos courtesy Jeremy Paredes

Addressing the toughest challenges in atopic dermatitis takes all of us.



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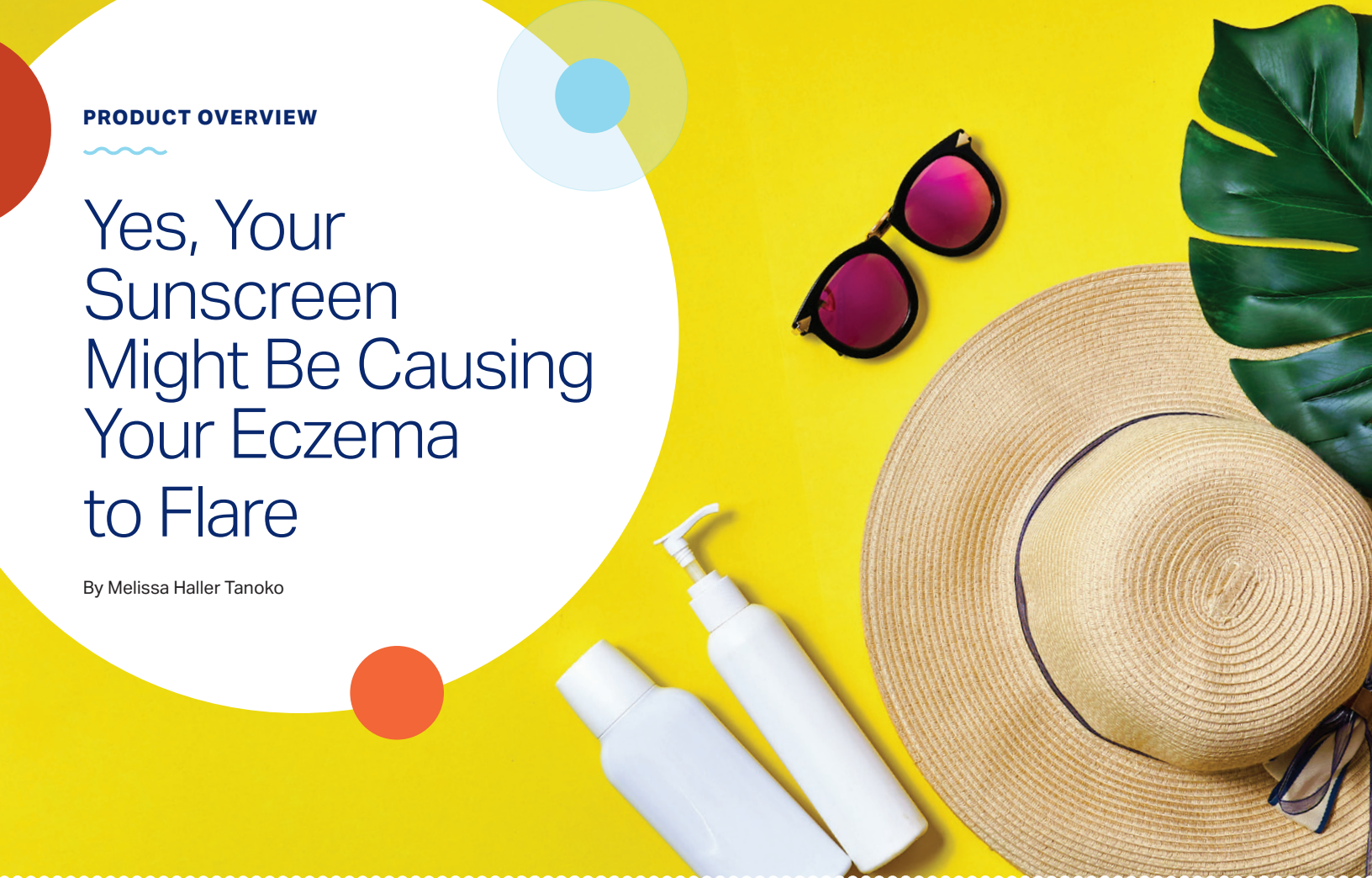
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PRODUCT OVERVIEW

Yes, Your Sunscreen Might Be Causing Your Eczema to Flare

By Melissa Haller Tanoko



If you live with eczema, choosing the right sunscreen is complicated: It's important to protect your skin while avoiding any ingredients that might cause a flare. We spoke with Dr. JiaDe "Jeff" Yu, board-certified dermatologist at Massachusetts General Hospital, to better understand what people with eczema should consider when choosing their sunscreen.

Why does sunscreen cause my skin to flare?

To choose the right type of sunscreen, it may help to understand why a sunscreen might trigger a flare in the first place. According to Dr. Yu, there are two common types of adverse reactions to sunscreen: the first is topical irritation; the second is an allergic reaction; and both responses have their unique underlying cause.

Dr. Yu explained that irritant reactions to sunscreen are the most common. "Irritant reactions occur immediately," he said. "They're often characterized by stinging and burning." This is usually caused by a high alcohol content in the sunscreen. Looking for a sunscreen without alcohol, or a minimal amount of alcohol in it, can be challenging. "The amount of alcohol in a sunscreen is difficult to suss out just by reading the ingredients alone," Dr. Yu said. "There is little to no regulation for this labeling." Dr. Yu recommended using

"thicker sunscreen balms such as sticks," and looking for sunscreens labeled "sensitive skin." The best course of action would be to find a sunscreen without any alcohol at all. The NEA Seal of Acceptance™ Product Directory does not allow any sunscreens with alcohol and can help inform your individual search.

In the case of an allergic reaction to sunscreen, the symptoms appear more slowly. The flaring is typically caused by an ingredient that takes longer for the skin to absorb. "Allergic reactions to sunscreen are rare and typically occur within a few hours or days," said Dr. Yu. "The most common allergens are usually the inactive ingredients such as fragrances and preservatives. The reaction is usually characterized by itching."

In the event of an allergic reaction, you may need to consult with an allergist. With a skin test or blood test, an allergist can help identify the specific ingredients to avoid in the future. Dr. Yu also noted that some people do have allergic reactions to the active ingredients in sunscreen, too, though this is less common. He said that chemical filters such as oxybenzone (benzophenone-3), avobenzone and benzophenone-4 can sometimes lead to a delayed allergic reaction. Certain sunscreens include these chemicals to absorb the sun's rays,¹ as opposed to mineral sunscreens that use ingredients like zinc oxide or titanium dioxide to deflect the sun.¹

PRODUCT OVERVIEW

Dr. Yu also advised people with eczema to be aware of a rare allergic reaction called photoallergic contact dermatitis.² This occurs when ingredients in the sunscreen remain inert and harmless on your skin until the UV rays activate them and cause flaring in your skin. One ingredient that has been found to cause photoallergic contact dermatitis is octocrylene,³ especially in adults who use lotions with the drug ketoprofen; octocrylene has also been found to trigger a contact allergy in children.³ Consider avoiding all products that contain octocrylene, as this ingredient is not allowed in any Seal of Acceptance products.

For those who would like to determine whether their reaction to sunscreen is due to an irritant or allergic reaction, Dr. Yu recommends speaking with a board-certified dermatologist who specializes in this area. “Testing products used on the skin such as sunscreen is almost exclusively done by dermatologists with an interest in patch testing and allergic contact dermatitis. These doctors are members of the American Contact Dermatitis Society.” To find a member of the American Contact Dermatitis Society in your area, go to [ContactDerm.org/find](https://www.contactderm.org/find).

How do you choose?

For someone living with eczema, finding the right sunscreen may involve some trial and error. Your first step is reading the label. If you have experienced topical irritation due to the alcohol content,






consider trying an alcohol-free mineral sunscreen in the NEA Product Directory. The active blocking ingredients should feature zinc oxide and/or titanium dioxide, as opposed to alternative non-organic chemical compounds excluded by the NEA Product Directory.

Once you’ve selected a possible sunscreen, the next step is to apply a patch test before using the sunscreen more extensively on the rest of your body. A patch test is simple: just dab a pea-sized amount to the inside of your wrist or elbow, then leave the area unwashed for 24–48 hours, and watch for any reactions such as itching, redness, flaking, pain or rash. If your skin doesn’t flare, the next step is to try using the sunscreen in the sun. In the absence of any photoallergic reaction, you may be ready to apply the sunscreen liberally and frequently, while remembering to stay hydrated, too.

If the patch test results in an allergic reaction, or if the allergic reaction happens once you’re out in the sun, it’s time to schedule an appointment with a dermatologist with expertise in contact dermatitis.

Other considerations before heading outside:

Once you’ve selected a sunscreen that works for your skin, apply at least 30 minutes before going outside. Apply to all exposed surfaces, and don’t be afraid to use a lot, about one ounce or more. In addition to your sunscreen, don’t forget these additional steps to ensure a holistic approach to skin protection while you’re outside

-  Wear a large hat that shades your face
-  Wear sunglasses to protect the skin around your eyes
-  Wear sun-protective clothing with a UPF rating of 30 or higher (ratings of 50 are considered to be excellent)
-  Avoid the middle of the day when the sun is hottest
-  Reapply your sunscreen frequently

Ready for some time in the sun? Get your search for the perfect sunscreen started with our Product Directory for sunscreens that have earned the NEA Seal of Acceptance. Visit [NationalEczema.org/eczema-products](https://www.nationaleczema.org/eczema-products).

1. All about sunscreen: Why you need it. How it works for you. Skin Cancer Foundation. Updated January, 2021. Accessed April 14, 2021. <https://www.skincancer.org/skin-cancer-prevention/sun-protection/sunscreen/>. 2. Ngan, V. What is photocontact dermatitis? DermNet NZ: All About Skin: Updated January 2006. Accessed 4/21/ 2021. <https://dermnetnz.org/topics/photocontact-dermatitis/>. 3. de Groot AC, Roberts DW. Contact and photocontact allergy to octocrylene: A review. *Contact Dermatitis*. 2014;70(4):193-204.doi: 10.1111/cod.12205. 4. Sun-protective clothing: A safe, simple way to keep the rays at bay. Skin Cancer Foundation. Updated June, 2019. Accessed April 14, 2021. <https://www.skincancer.org/skin-cancer-prevention/sun-protection/sun-protective-clothing/>.



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FEATURE

Can You Get a Tattoo If You Have Eczema?

By Steve Nelson

Getting a tattoo is a big decision for anyone — after all, it stays with you for life. If you live with eczema, there are additional factors to consider. We connected with several tattoo artists, a dermatologist and an allergist to get the best recommendations on the pros and cons of body art for people with eczema. We also spoke with members of our eczema community; their stories highlight both the pros and cons of getting tattoos.

When to Hold Off on Getting a Tattoo

There are some clear situations, according to experts, when people with eczema should not get tattooed. If your skin is flaring, you should wait. “If there’s any sign of anything wrong with a customer’s skin, that’s an instant ‘no’ for us,” said Lori Rowe, who’s worked for 18 years as a tattoo artist in Portland, Oregon. “Most people are pretty cautious, but sometimes we still have to turn people away.” Flaring skin may indicate a system-wide elevated immune response, even if the location of the prospective tattoo isn’t actively flaring. Dr. Peter Lio, dermatologist at Northwestern University’s Feinberg School of Medicine, echoed Lori’s caution. “I’d probably try to talk someone out of getting a tattoo if they were flaring,” he said. “Even if a person is flaring in a small, distant area, we still consider inflammation as abnormal in the skin as a whole.”

Your skin may appear flare-free where you want to get a tattoo, but, if you’re flaring elsewhere, the ink from the tattoo can still affect your

Photo courtesy Alexis Smith

entire body. Dr. Ari Zelig, an allergist based in Miami, Florida, explained that “flaring skin can be worsened by allergens and irritants, especially the dye used in some color tattoo inks.” While black ink is potentially less likely to exacerbate flaring skin, Dr. Zelig and Dr. Lio advised patients to wait until their flaring skin had calmed down. If any of the following statements are true for you, according to Dr. Zelig, it means you should not get a tattoo (at least until your status changes):

- If you are taking isotretinoin (Accutane), which may impair healing time;
- If you have a history of keloid formation, which could develop within the tattoo;
- If you have a history of skin lesions related to severe eczema, psoriasis, lichen planus, vitiligo and discoid lupus;
- If you have a bleeding disorder or if you’re receiving anticoagulation therapy;
- If you have not completed your hepatitis B immunization.

There are other medical considerations, too. Dr. Lio said he has treated patients for contact dermatitis caused by their tattoo; he also described treating “a granulomatous reaction” caused by a tattoo “where the body creates a form of chronic inflammation designed to wall off foreign material. It is usually the pigment itself,” he said, “although it can also be bacteria or other contaminants from the tattoo procedure.” Dr. Lio made it clear that both reactions are “extremely difficult to treat, and sometimes the only way out is to surgically excise the tattoo.”

Plenty of People with Eczema Still Get Tattoos

In spite of the risks, people with eczema can and do still get tattoos. Some people with eczema consider getting a tattoo in order to become more self-confident; others describe their desire to make their bodies more beautiful or to create an artistic “mask” that overshadows the eczematous parts of their skin. Others get tattoos for the same reasons people all over the world get tattoos: they want to capture a story or memory and/or they just like the way they look.

Alexis Smith lives with moderate-to-severe eczema and has had nine different tattoo sessions over the past seven years. “I love having art on my body,” she said. “In my experience, the good has always outweighed the negative.” Jayne Jezebel is a Baltimore, Maryland-based tattoo artist who has worked with Smith and other customers with eczema. “I think getting tattoos is a way for people to create a physical identity not determined by their environment or their genetics,” Jayne said. “A lot of my clients have said they felt more at home in their skin, more confident about themselves as they got more tattoos.”

Skyler Winfield lives with moderate-to-severe eczema and got her first tattoo a month after her 18th birthday. “Growing up, my eczema was always severe. Kids and adults stared at me and asked what was wrong with me,” she said. “When I finally turned 18, I knew a tattoo was the first thing I wanted to get. It made me more confident knowing that people were staring at the beautiful and thoughtful artwork on my



Photo courtesy Kaitlyn Snyder

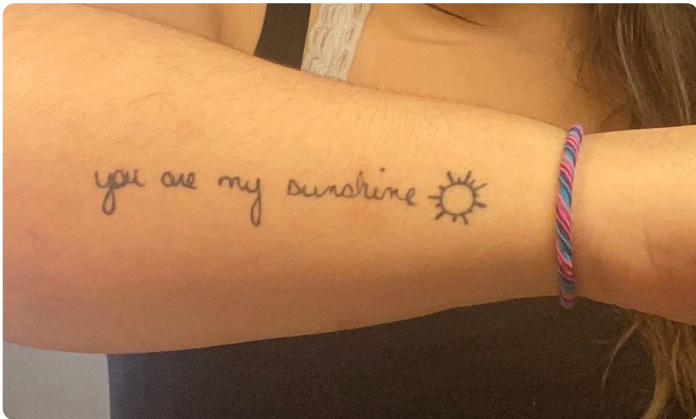


Photo courtesy Skyler Winfield

body, admiring it, instead of the eczema on my skin.” Zoe McReynolds expressed the same sentiment. “I have several tattoos in places where my eczema isn’t too bad,” she said. “It’s made a real difference to my self-esteem. If I see a stranger looking closely at me, now I assume they’re checking out my tattoos, rather than staring at my eczema!”

Things to Consider When Choosing a Tattoo Artist

If you’re going to get a tattoo, the next step is choosing the right artist. Ideally, you’ll find a tattoo artist who has experience with eczema or lives with eczema personally. Sarah Walls works as the office manager of Wonderland Tattoos in Portland, Oregon and lives with moderate eczema. She advises her potential clients to “take plenty of time and read all the artist’s reviews. If you look long enough,” she said, “you’ll find an artist who knows about eczema and has worked with customers who have it.”

Before choosing an artist, it’s also important to schedule a consultation. Alexis Smith emphasized the importance of having at least one, or possibly two, in-person conversations with a tattoo artist before getting started. “I explained to my tattoo artist, Jayne, that I have eczema,” Alexis said, “but that it doesn’t typically flare in the areas that I was getting tattooed.” She added that “most reputable shops will make you fill out a medical form and one of the questions is about skin conditions, so they’re very much aware of it.”

Daniel Boey lives with moderate-to-severe eczema and mentioned the importance of researching a tattoo artist’s specific area of expertise; some are experts in illustrations or lettering, or some work only in black and white versus color, and some specialize in working with scarred skin. All the different styles of body art have potential implications for what tattoo might be right for an individual living with eczema; the more research you can do, the more you’ll know about choosing the right type of tattoo for your own body.

For people of color with eczema, U.K.-based tattoo artist Samuel Parul-Enahoro emphasized the importance of working with someone who understands the complexities of different skin tones. “When artists aren’t experts in dark skin they can press too hard,” Samuel said. “Always go with somebody more established who understands how to work with different skin tones.” New York City-based tattoo artist Amanda Rodriguez had similar guidance for people of color when considering a tattoo artist. “Send them a clear picture of yourself,” Amanda said. “Once they see your skin tone, they can give you the right advice and send you pictures of their work on skin of color.”

Based on what she’s seen as an office manager in a tattoo shop, Sarah Walls provided the following advice to consider before choosing an artist:

- Ask a friend or relative: a personal referral is a good starting point;
- Read all the reviews of an artist online;
- Review the artist’s portfolio; most reputable artists now showcase their work on Instagram or on their personal websites;
- Confirm that the artist is licensed;
- Have at least two conversations in person and talk about your individual experience with eczema; if the artist does not have experience with eczema, discuss your condition and be sure you feel comfortable that the artist understands the risks and benefits for you individually before making a commitment;
- Confirm that the artist has hypoallergenic inks, allergy-friendly gloves (latex-free) and allergy-friendly soap and moisturizers;
- Be sure that you feel comfortable and confident in your choice.

Proceed with Caution and Test Your Skin







Once you’re ready, be sure to get a small patch test on your skin. “We do patch tests all the time,” said Sarah Walls. “It’s better to know how your skin will respond before we get started.” Dr. Zelig advises his patients to “consider having a small dot tattooed with the desired ink and monitor for a reaction.” Sarah said that a patch test “only takes a few minutes to test out the exact type of needle and ink on a customer’s skin. It’s a good precaution for someone with eczema,” she said. “We could wait a full day, or a full week, whatever’s best for the customer to feel comfortable and confident.” If your skin has a negative reaction, it’s worth discussing your decision, again, with your dermatologist or allergist. The patch test reaction should give a preliminary indication of how your skin will react to the larger artwork and whether it’s medically safe to continue with a full-size tattoo.



Photo courtesy Daniel Boey

Recommendations for the Day of Your Tattoo Appointment

Based on our experts’ guidance, the ideal time to get a tattoo is when a person is completely flare-free. Dr. Lio said that “ideally the skin location for a tattoo should be eczema-free for at least a few months: in other words, the eczema should be under excellent control before getting a tattoo.” Artists Lori Rowe and Jayne Jezebel agreed, and Sarah Walls added several key reminders to consider the night before the appointment:

-  Go to bed early and get a good night’s sleep
-  Drink plenty of water until you’re fully hydrated
-  Don’t drink alcohol the night before the appointment
-  Don’t get sunburned the day before your appointment
-  Don’t take Aspirin or ibuprofen the day before the appointment because they can thin the blood
-  Eat a full breakfast so you don’t come into the appointment on an empty stomach

Sarah said that people with eczema are often better prepared for their own skincare. “I’ve seen people with eczema who take much, much better care of their skin than some of our customers. I know I do,” she said. “In some ways, our customers with eczema already know so much more about how to care for their tattoos than people coming in who don’t know much about their own skin.” This may include bringing in specific soap or lotion or towels that work best

for your individual skin. Customizing the experience to meet each person's individual needs, Sarah said, is an important part of the first appointment: "Comfort is everything."

Healing and Maintenance of the New Tattoo

Members of the eczema community reported a variety of responses to the new tattoo; some had no issues at all, whereas others experienced immediate reactions. Alyssa Elizabeth lives with moderate-to-severe eczema and explained that her "skin got angry all around the tattoo and flared." She described the healing process as "the worst part of getting a tattoo." Zoe McReynolds lives with moderate eczema and admitted that her experience getting a tattoo on her back "was a disaster" because the "the ink didn't settle" and she needed touch up work after it had healed.

Alexis Smith, however, experienced a different challenge. "For some reason my body is able to tolerate a million jabs of a needle," she said. "But the adhesive from the tape was enough to give me a new flare." Alexis said that her tattoo artist, Jayne, had alternative "wrap up options" that were more eczema-friendly than the regular tape and Saran wrap that had initially triggered Alexis's eczema. Planning ahead made the healing process go more smoothly for Alexis's follow-up tattoo work because she knew what to avoid while healing.

Dr. Lio advised people to apply petroleum jelly and a bandage to the tattoo after the procedure. He suggested waiting a full day or so before removing the bandage, whereas Jayne recommended "leaving it on for three days minimum, seven days ideally." Jayne said that it would be easiest to peel off the bandage "like a sticker by one of the edges" and that it's "easier to remove under warm running water." Dr. Lio and Jayne had the same recommendation for a gentle, mild soap for cleaning and either patting the area dry with a paper towel, or ideally, allowing the skin to air-dry. Dr. Zelig gave additional advice for maintenance, including:

- Wash your hands before touching your tattoo;
- Moisturize 1-2 times a day (or as needed);
- Do not pick or scratch at the tattoo; if it's uncomfortably itchy, pat the tattoo with the open palm of your hand;
- Do not try to remove peeling or scabbing skin;
- Avoid swimming for at least two weeks;
- Do not let your pets lick or touch the tattoo;
- Avoid direct sunlight and do not apply sunscreen to the tattoo while healing.

Conclusion

After conducting all of your research and talking with the tattoo artist and your doctor, at the end of the day remember that you know your body best. And if you've decided to pursue a tattoo (or not), we'd love to hear about your process, advice and recommendations at: Editor@NationalEczema.org.



Photo courtesy Jennifer Waters



Photo courtesy Tiffany Shum



Photo courtesy Danae Lelina



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SANOFI GENZYME



Justin-Oneil Ramos

➔ How long have you lived with eczema?

I've lived with eczema for as long as I can remember. I distinctly remember coping with flare-ups at different points throughout my childhood. My struggle with eczema has led me to the NEA Ambassador community, which I'm grateful to have found. Very recently, I started taking Dupixent® and I'm excited to experience the improvement of my eczema that so many others have found.

➔ What is the quality you like most in yourself?

The quality I admire most in myself is my constant drive to learn and improve. Whether it's one of my hobbies, such as playing guitar or powerlifting, or in my professional career, I love to see progression and growth in myself. I find it satisfying and motivating to look back and see how far I've come, and to look forward to see how much I have left to accomplish.

➔ Who is your favorite musician?

If I had to pick one favorite artist, it would have to be Drake. For better or worse, I've been a loyal Drake fan since I first discovered his music in 2009. Otherwise my musical preferences are scattered. As a guitarist, I hold Jimi Hendrix and Santana in the highest regards. For when I'm working out, I like Travis Scott and Young Thug. For when I feel especially sad, I find solace in Frank Ocean and Beach House, and for when I feel like dancing it's Disclosure and Kaytranada.

➔ Which living person do you most admire?

I admire my parents the most. My mother and father immigrated to the U.S. from the Philippines in their 20s, not knowing anyone, with little to no money and speaking very little English. With hard work and faith, they raised me and my sister and put us in a position to succeed. To this day, I'm grateful for their guidance and support, and I aspire to do the same for my children in the future.

➔ What was the last great TV show you watched?

The last great TV show I watched was "Avatar: The Last Airbender." Having never watched it when I was younger, I wanted to see what the hype was about over a children's show. I was worried I wouldn't enjoy it as an adult, but I was stunned: the show is a masterpiece.

➔ What is your favorite indulgence that makes you flare (but you do it anyway)?

Hot showers. Although hot water dries my skin out and tends to aggravate my eczema spots, I cannot say no to a piping hot shower after a long day (especially in the winter!).

➔ Choose one: A) ability to fly or B) powers of invisibility.

I would definitely choose the ability to fly. No more traffic!

➔ What do you consider the most common misconception about eczema?

I think it's difficult for people to understand how living with eczema can vary greatly from person to person. Everyone's experience with eczema is unique and fluctuating. Eczema can simply be a mild annoyance to some; to others, it can be a debilitating condition that significantly reduces quality of life. The severity of one's eczema can wax and wane over time. Additionally, not only are there many different types of eczema, but there are also many different ways to manage and treat this condition. What works for one person's eczema might not work for someone else's.

➔ What or who is the greatest love of your life?

The greatest love of my life is my guitar. I've been in love since my mother bought me my first guitar in elementary school. It's therapeutic to play for myself and for others. Although I've been playing for over 10 years, I still consider myself a beginner. It truly takes a lifetime to master the instrument, and I am drawn to the never-ending room for improvement.

➔ When and where are you happiest?

I'm at my happiest whenever I can spend time with friends and family. They truly are the most important part of my support system. With our busy lives and hectic schedules, it can be difficult to make the time to see each other, but when we do I'm at my happiest.

➔ Which talent would you most like to have?

I wish I could dunk a basketball. As an NBA fan since childhood, I grew up idolizing Kobe Bryant and Vince Carter. I've dreamt about posterizing defenders just like them. But I think those dreams are (quite literally) out of reach.

➔ What do you consider your greatest achievement?

My greatest achievement (so far) is having graduated in 2019 from Rutgers University with a bachelor's degree in Biology. My classes were difficult and there were times when I felt like giving up, but

thankfully I was able to push through and earn that sweet, sweet degree. My goal now is to gain admission to medical school in hopes of becoming a physician.

➔ If you could learn to speak another language, which language would you pick to learn?

If I could learn to speak another language, it would be Ilokano, a language native to the Ilocos Norte region of the Philippines, where my parents are from. Growing up in the U.S., I never learned the language from my parents. It's not too late!

➔ What's the worst thing about having eczema?

The worst thing about having eczema is how painful it can be, mentally and physically, to endure the signs and symptoms of a bad flare-up. The itching and flaking can, at times, feel unbearable and inescapable. There are countless instances where I've wanted to hide myself from the world during a flare-up. Overcoming these feelings and regaining my self-confidence has been a crucial part of my battle against eczema.

➔ What's the best thing about having eczema?

The best thing about having eczema is the personal growth I've experienced, and the opportunity to be able to share my growth with others. After hating my skin for so long, I've learned to practice self-care and self-love. From this, I feel as if I have a deeper connection with others who have also had to struggle with eczema. Being a part of the broader eczema community and knowing I'm not alone in my struggle is truly empowering.

➔ You're hosting a dinner party and you can invite any three people you want, living or dead: who do you invite and why?

If I could invite anyone to my dinner party, I would invite Pop Smoke, Aaliyah and Mac Miller. Their careers were cut way too short by their deaths. They had so much music left.

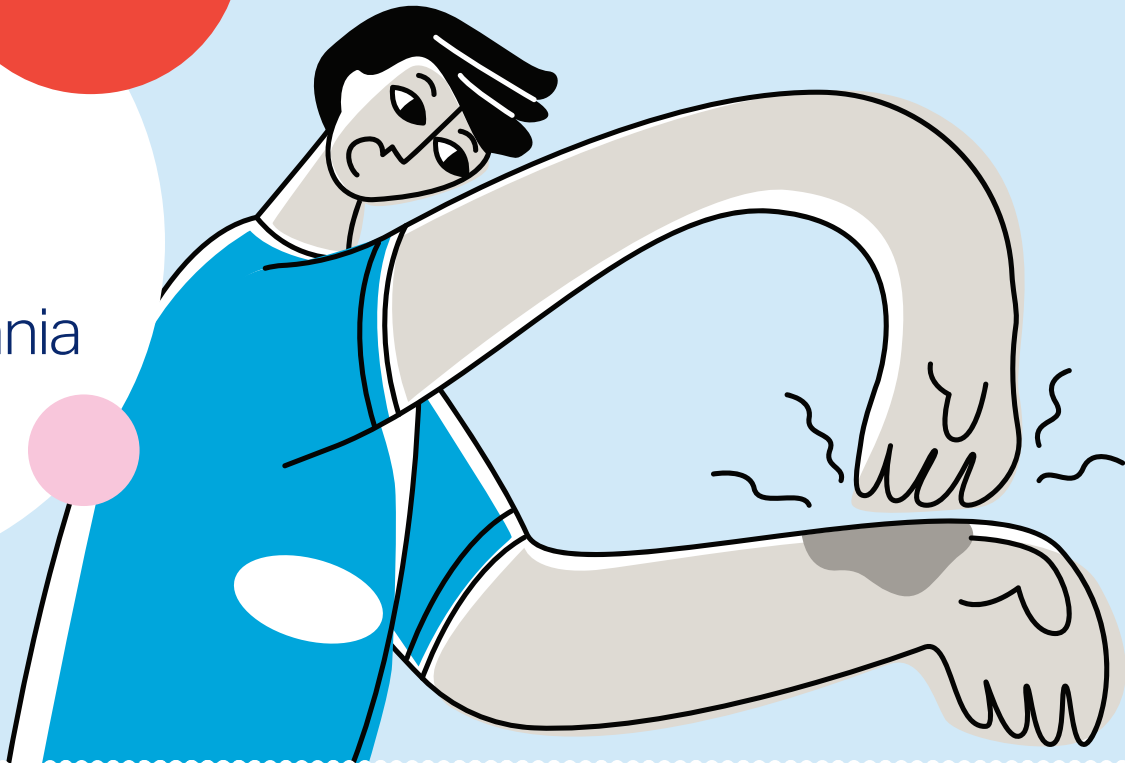
Who are your eczema heroes?

My eczema heroes are my older sister, my girlfriend and all my friends who live with eczema. Despite their personal struggles with the condition, they continue to live with purpose and fulfillment. They inspire me to be confident and to embrace my skin, even when I don't want to or feel like I can't.



Eczema and Dermatillomania

By Angela Ballard, RN



Life with eczema means touching your skin and, inevitably, scratching. But too much scratching (or, worse, picking) can be damaging, can lead to infections and scarring, and it can become a problem unto itself; it can lead to a skin picking disorder known as dermatillomania.

Dermatillomania is marked by repetitive scratching, picking, pulling, squeezing, scraping, lancing, rubbing, digging or even biting of the skin. It's considered part of the obsessive compulsive spectrum. "Dermatillomania (skin picking) is probably much more common than people realize," said Dr. Peter A. Lio, a clinical assistant professor of dermatology and pediatrics at Northwestern University's Feinberg School of Medicine. "In fact, many of my eczema patients announce that they are 'pickers' and I'm always grateful to know this because it can affect my treatment approach."

Commonly leading to pain, wounds and scars, dermatillomania can also cause embarrassment. Often, it's skin on the face, hands, arms, legs or back that people pick at, and, while fingers and fingernails are the most common implements, tweezers, pins and other "tools" are sometimes involved. Skin picking urges can be linked to times of stress, anxiety, sadness or even boredom.

According to the *Journal of Psychiatric Research*, skin picking disorder affects approximately 2.1% of people at some point in their lives, but it's likely under-reported and under-recognized.¹ "I do think that eczema patients are more likely to experience dermatillomania," Dr. Lio said. "And it's probably a 'chicken or egg' situation: Those who are more likely to pick at their skin can probably trigger inflammation and thus eczema at times."

But this is not to say that people with eczema make up the majority of dermatillomania cases, quite the opposite, said Lio. "While I do see many of my eczema patients with dermatillomania, the majority [of people with dermatillomania] actually seem to have acne or perhaps

even no clear underlying skin condition at all." Lio added: "I see all ages with this condition, from children to very mature adults."

When does normal scratching turn the corner towards skin picking disorder, with its obsessive compulsive tendencies? Lio emphasized that there is a range, not an absolute threshold.

Diagnosis & Treatment

To help recognize dermatillomania, healthcare providers look for the following characteristics:

- 1 Chronic skin picking that results in tissue damage, lesions, wounds and sometimes infections;
- 2 Repeated attempts to decrease or stop skin picking;
- 3 Picking that is causing significant distress or dysfunction by interfering with a person's social or work life, or his or her ability to function day-to-day;
- 4 Skin picking that causes feelings of loss of self-control, shame or embarrassment;
- 5 Skin-damaging actions that are not related to substance abuse, a medical condition such as scabies, or a mental health condition that is producing delusions or hallucinations.

Cognitive behavioral therapy (CBT), habit reversal exercises, support groups, treating itch, and caring for picking-related infections and wounds are part of the multi-pronged approach to caring for dermatillomania. Sometimes antidepressants like selective serotonin reuptake inhibitors (SSRIs) may be prescribed. According to the TLC Foundation for Body-Focused Repetitive Behaviors and a report in *JAMA Psychiatry*, supplementation with n-acetyl cysteine may also be used to impact levels of glutamate (a chemical that triggers excitement in the brain).²

Techniques that can help minimize the urge to pick or alleviate the picking compulsion, without causing damage, include:

-  Wearing gloves during times when picking often occurs, such as before sleep, while watching television or when feeling stressed or depressed;
-  Keeping fingernails trimmed short;
-  Maintaining skin routines and receiving appropriate therapy for skin conditions to minimize itch, bumps, acne, or other skin irregularities as much as possible, as these can be triggers for picking;
-  Recognizing triggers and engaging in alternate behaviors when triggered. Keeping hands busy by squeezing "stress" balls, making fists, knitting, or using "fidgets";
-  Applying moisturizer to skin instead of picking at it;
-  Keeping tweezers, pins, et cetera, out of sight;
-  Trying to limit stress while sticking to a healthful routine of sleep, exercise and nutritious, balanced eating;
-  Learning coping skills to understand and work with difficult emotions and setting boundaries.

Everyone scratches and occasionally picks at their skin — and with eczema, scratching and picking is even more likely. But by recognizing when skin picking is becoming a damaging, repetitive behavior, a person with eczema can get the help they need.

If you think you or a loved one needs support for a skin picking disorder, you can find information about treatment and support groups from the TLC Foundation for Body-Focused Repetitive Behaviors at BRFB.org and other online sources like SkinPick.com

1. Grant J, Chamberlain S. Prevalence of skin picking (excoriation) disorder. *J Psychiatr Res*. 2020;130: 57–60. 2. NGrant JE, Chamberlain SR, Redden SA, Leppink EW, Odlaug BL, Kim SW. N-Acetylcysteine in the Treatment of Excoriation Disorder: A Randomized Clinical Trial. *JAMA Psychiatry*. 2016;73(5):490–496.

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ECZEMA BY THE NUMBERS

Mental Health And Eczema

Research publications raising awareness of the connection between dermatological diseases such as AD and mental health issues are increasing in number, and the data provides sobering confirmation of the lived experiences of many patients and caregivers with eczema.

Adults with AD



Adults with AD have a **2.5-3x higher risk** for anxiety or depression that increases with disease severity.^{1, 2-4}



Up to **50%** of adults with AD may go undiagnosed.^{1, 2-4}

Children with AD



Children with AD are **more likely** to be diagnosed with attention deficit hyperactivity disorder (ADHD).^{5, 6-8}



Children and adolescents with AD are **2-6x more likely** to have depression, anxiety or conduct disorder than children without AD.⁸⁻⁹



Childhood AD has a **significant impact** on the emotional and social well-being of parents and caregivers.¹⁰

AD's negative impact on mental health ranks **greater than** that for patients with:



heart disease



high blood pressure



diabetes¹¹

Recent studies have suggested people with AD are

UP TO
44%

more likely to exhibit suicidal ideation¹²⁻¹⁶

AND
36%

more likely to attempt suicide¹²⁻¹⁶

1. Chiesa Fuxench ZC, Block JK, Boguniewicz M, et al. Atopic Dermatitis in America Study: A Cross-Sectional Study Examining the Prevalence and Disease Burden of Atopic Dermatitis in the US Adult Population. *J Invest Dermatol*. 2019;139(3):583-590. 2. Silverberg JI, Gelfand JM, Margolis DJ, et al. Symptoms and diagnosis of anxiety and depression in atopic dermatitis in U.S. adults. *Br J Dermatol*. 2019. 3. Yu SH, Silverberg JI. Association between Atopic Dermatitis and Depression in US Adults. *J Invest Dermatol*. 2015;135(12):3183-3186. 4. Cheng BT, Silverberg JI. Depression and psychological distress in US adults with atopic dermatitis. *Ann Allergy Asthma Immunol*. 2019;123(2):179-185. 5. Paller A, Jaworski JC, Simpson EL, et al. Major Comorbidities of Atopic Dermatitis: Beyond Allergic Disorders. *Am J Clin Dermatol*. 2018;19(6):821-838. 6. Strom MA, Fishbein AB, Paller AS, Silverberg JI. Association between atopic dermatitis and attention deficit hyperactivity disorder in U.S. children and adults. *Br J Dermatol*. 2016;175(5):920-929. 7. Tsai JD, Chang SN, Mou CH, Sung FC, Lue KH. Association between atopic diseases and attention-deficit/hyperactivity disorder in childhood: a population-based case-control study. *Ann Epidemiol*. 2013;23(4):185-188. 8. Yaghmaie P, Koudelka CW, Simpson EL. Mental health comorbidity in patients with atopic dermatitis. *J Allergy Clin Immunol*. 2013;131(2):428-433. 9. Garg N, Silverberg JI. Association between childhood allergic disease, psychological comorbidity, and injury requiring medical attention. *Ann Allergy Asthma Immunol*. 2014;112(6):525-532. 10. Yang EJ, Beck KM, Sekhon S, Bhutani T, Koo J. The impact of pediatric atopic dermatitis on families: A review. *Pediatr Dermatol*. 2019;36(1):66-71. 11. Silverberg JI, Gelfand JM, Margolis DJ, et al. Patient burden and quality of life in atopic dermatitis in US adults: A population-based cross-sectional study. *Ann Allergy Asthma Immunol*. 2018;121(3):340-347. 12. Sandhu JK, Wu KK, Bui TL, Armstrong AW. Association Between Atopic Dermatitis and Suicidality: A Systematic Review and Meta-analysis. *JAMA Dermatol*. 2019;155(2):178-187. 13. Patel KR, Immaneni S, Singam V, Rastogi S, Silverberg JI. Association between atopic dermatitis, depression, and suicidal ideation: A systematic review and meta-analysis. *J Am Acad Dermatol*. 2019;80(2):402-410. 14. Ronnstad ATM, Halling-Overgaard AS, Hamann CR, Skov L, Egeberg A, Thyssen JP. Association of atopic dermatitis with depression, anxiety, and suicidal ideation in children and adults: A systematic review and meta-analysis. *J Am Acad Dermatol*. 2018;79(3):448-456 e430. 15. Drucker AM, Thiruchelvam D, Redelmeier DA. Eczema and subsequent suicide: a matched case-control study. *BMJ Open*. 2018;8(11):e023776. 16. Halvorsen JA, Lien L, Dalgard F, Bjertness E, Stern RS. Suicidal ideation, mental health problems, and social function in adolescents with eczema: a population-based study. *J Invest Dermatol*. 2014;134(7):1847-1854.

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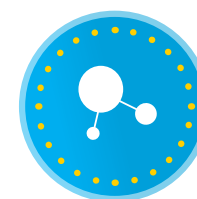


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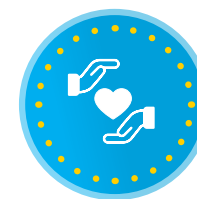
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October 2019

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Breakthroughs that
change patients' lives

eczema expo21

VIRTUAL

My skin glows
INVISIBLE
BEAUTIFUL
WARRIOR
ROLLER COASTER!
FLARE
Isolating & MODE
stand my skin
stand to my skin
stand the itch that
able rashes
I Chose me
Unexpected... why is this happening
community growth
eczema is torture
NOT ONE SIZE FITS ALL.
patience
and tolerance. I'm a pretty tough cookie
SENSITIVITY
MAKE EVERY DAY A CELEBRATION
health is wealth
face and body
My skincare is my self care
it's a brand moment
Steady
resilient
understanding
stress
constant discomfort
PERSPECTIVE
I'm not alone
itch fest
practicing humility
control my stress
compassion makes you
the itchiest thing ever.
Eczema chose me
Eczema is a life-long struggle
Emotionally
strength