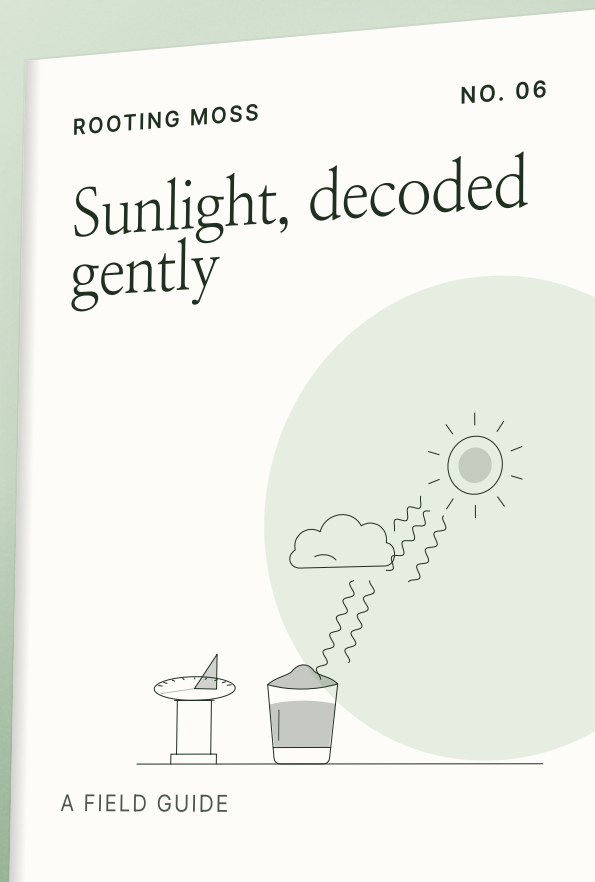




FIELD GUIDE · SKIN

Wear sunscreen daily with enough coverage and reapply

This guide is for anyone who wants steady sun protection without the confusion of labels and filters. After reading, you will be able to read SPF and PA ratings, choose between mineral and chemical formulas, and apply enough sunscreen often enough.



Light types

UVA reaches deep all year while UVB burns strongest at midday.



Label reading

SPF tracks burn protection and PA tracks UVA tanning protection.



Daily habit

A shot glass amount, reapplied often, matters more than the number.

By Erin Dunleavy · Updated Sep 6, 2026 · 10 min read

CONTENTS

01	Meet UVA and UVB	06	Protect dark and pigmentation prone skin
02	Read SPF, broad spectrum and PA labels	07	Build daily sun habits beyond the bottle
03	Compare mineral and chemical filters	08	The checklist
04	Understand the US filter gap and what is new	09	Sources and further reading
05	Apply enough and reapply on time		

Morning light on the windowsill looks harmless, yet skin keeps a longer memory of it than we do. Many people buy a high number and hope it will be enough, then miss the amount, the timing and the UVA side of the story. Once the two kinds of ultraviolet light make sense, labels become tools instead of riddles.

01

Meet UVA and UVB

Sunlight that reaches skin carries two kinds of ultraviolet radiation that behave in different ways. UVA wavelengths are described as 320 to 400 nm in one source and 315 to 400 nm in a review, while UVB is described as 290 to 320 nm and 280 to 315 nm. A review states UVA makes up about 95 percent of terrestrial UV radiation and UVB about 5 percent. That share helps explain why daily exposure adds up even when the skin never turns pink.

UVA reaches into the dermis, the deeper layer where support structures live. It is linked to wrinkles, loss of elasticity, photoaging and DNA damage that can increase skin cancer risk. UVB stays closer to surface layers, carries more energy, and is the primary cause of sunburn and direct DNA damage. UVB also stimulates vitamin D production, which is one reason complete avoidance of sun is not the aim.

Timing matters too. UVA is present during all daylight hours year round and can penetrate clouds and windows, so office light near glass and overcast walks still count. UVB is strongest in summer and between 10 a.m. and 4 p.m., when shade and planning carry extra weight. Plants endure the same rhythm by thickening leaves and making protective compounds, and skin also benefits from a steady routine rather than a single strong dose of care.

02

Read SPF, broad spectrum and PA labels

SPF primarily indicates UVB sunburn protection, measured by comparing UV needed to cause sunburn with and without sunscreen. In practice the scale rises in small steps. Approximately, SPF 15 blocks 93 percent, SPF 30 blocks 97 percent, SPF 50 blocks 98 percent and SPF 100 blocks 99 percent of UVB. The gap between SPF 30 and SPF 50 looks large on the shelf and small on the skin, which is why amount and reapplication often change results more than the number.

Broad spectrum on a US label indicates protection against both UVB and UVA radiation. The phrase tells shoppers that UVA cover is included, but it does not give a number for how much. How much UVA protection any specific broad spectrum SPF product gives without a PA or PPD value on the label remains unknown, and that limit is worth keeping in mind when comparing two bottles.

PA means Protection Grade of UVA, developed in Japan from the Persistent Pigment Darkening method that measures UVA induced tanning. PA grades are grouped by PPD values of 2 to 4 for PA+, 4 to 8 for PA++, 8 to 16 for PA+++ and 16 or higher for PA++++. Shoppers who care about dark spots or uneven tone can use PA as a second lens, beside SPF. A formula with both a solid SPF and a high PA grade offers a clearer picture of all day defense.

FROM THE EDITORS

SPF and PA come from controlled lab tests with generous application. Real world protection is often lower than lab SPF, especially when the layer is thin or patchy. Treat ratings as a guide for choice, then let careful use do the work.

03

Compare mineral and chemical filters

Sunscreen filters fall into two broad families with different ways of handling light. Inorganic or mineral ingredients zinc oxide and titanium dioxide act as physical sunblock that reflects UV. Organic or chemical ingredients such as oxybenzone or avobenzone absorb UV and release it as heat. Many modern formulas blend several filters to cover more of the spectrum while keeping texture pleasant.

Avobenzone was approved in 1988 and remains the main US UVA filter, but it can break down in sunlight unless stabilized. Formulators often pair it with stabilizers or other filters so protection lasts longer on warm skin. Newer filters offer broader and more stable protection in lab and

market experience, but some people can still get allergic reactions or irritant dermatitis. Anyone with stinging, itching or rash that persists should pause use and seek clinician advice, and patch testing can help before a full face trial.

Texture shapes habit as much as chemistry. Mineral formulas may leave a white cast, especially on deeper tones, which can discourage daily use. Chemical and mixed formulas often spread more sheer, though scent, finish and eye sensitivity vary by person. Which formula texture or filter blend will suit an individual skin type without trial, patch testing or clinician advice is not something research can predict. Sampling slowly, one change at a time, respects both skin and budget.

04

Understand the US filter gap and what is new

The reason US shelves looked narrow for years lies in regulation. The US regulates sunscreen filters as over the counter drugs, while the EU and South Korea regulate them as cosmetics with a faster update path. Counting FDA listed UV filters in the US leaves 16 in total, with only zinc oxide and titanium dioxide in Category I as generally recognized as safe and effective and the rest in Category III needing more data. Animal testing rules are a barrier to US innovation, while rigorous testing is needed for safety and effectiveness.

Change arrived in stages. Congress passed the SAFE Sunscreen Standards Act in November 2025 to let applicants use real world evidence and to require FDA to consider nonanimal testing and issue guidance. FDA issued a proposed order for bemotrizinol on December 12, 2025, took comments through January 26, 2026, and finalized it within about seven months. On June 9, 2026, FDA added bemotrizinol at concentrations up to 6 percent to the OTC sunscreen monograph for adults and children 6 months and older.

Bemotrizinol absorbs both UVA and UVB, is highly photostable, stays mostly on the skin surface with low absorption into the body, and may be less irritating. As Carl D’Ruiz, head of beauty and care science, advocacy, and business development at DSM-Firmenich, put it, “modern filters like BEMT are photostable and broad-spectrum, and perform effectively at lower concentrations.” HHS Secretary Robert F. Kennedy, Jr. said, “Bemotrizinol has been used safely in Europe for decades, and FDA’s action will increase competition and consumer confidence in sunscreen products.” When bemotrizinol products from brands beyond the first maker will reach shelves and what they will cost is still unclear, and how much future US approvals will lower skin cancer rates is not yet shown. For now the approval widens choice toward hybrid and photostable filters that may wear more elegantly and suit sensitive skin.

FROM THE EDITORS

Dr. Karen Murry, director of the Office of Nonprescription Drugs at the FDA's Center for Drug Evaluation and Research, said, "The FDA's rigorous standards ensure consumers can be confident in the sunscreens and other nonprescription drugs they use." New options still call for the same careful testing on your own skin.

05

Apply enough and reapply on time

Most people apply too little and wait too long between layers. FDA says an average sized adult or child needs at least one ounce, about a shot glass, to cover the body, applied 15 minutes before exposure and reapplied at least every two hours and after swimming or sweating. Higher SPF blocks a slightly larger share of UVB but does not remove the need for generous application and reapplication. Think of sunscreen like steeping tea: strength comes from full measure and enough time.

No sunscreen is waterproof, and products labeled water resistant must state whether protection lasts 40 or 80 minutes when swimming or sweating. Read that number before a swim or a run, then plan the next layer around it. Keep the bottle in a cool place when possible, since heat and long storage can change texture and spread. Sprays need the same respect as lotions: mist evenly, then rub in to avoid missed strips along shoulders and legs.

Face coverage deserves its own habit. Some guides suggest about a quarter teaspoon idea for the face, but fingers and faces differ, so aim for a full even film across forehead, nose, cheeks, ears and neck. Sunglasses and a broad brimmed hat protect the rims where sunscreen thins first. Reapply over makeup with a lotion or stick patted gently, rather than skipping the midday layer altogether.

06

Protect dark and pigmentation prone skin

Melanin lowers burn risk but does not remove skin cancer risk. That fact surprises many readers with deep skin tones who rarely burn yet still face UVA driven tanning, dark spots, melasma and uneven tone. Daily UVA exposure can deepen pigment slowly, even through windows or on cloudy days. Seeking sheer and elegant formulas that leave no white cast encourages daily use, which is where real benefit grows.

High UVA protection matters here for tone as well as health. Look for broad spectrum claims and, when available, PA++++ or high PPD values, since they speak directly to tanning pathways. Tinted mineral formulas suit some people, while light chemical or hybrid fluids suit others. Cost and finish influence adherence, so choose the texture you will actually wear each morning.

Rooted care also means watching spots with attention. New or changing marks, sores that do not heal, or dark streaks under nails deserve prompt professional review on every skin tone. Sunscreen supports an even tone and may help defend against damage, but evidence suggests it works best as part of shade, clothing and regular skin checks. If irritation or breakouts appear, simplify the routine and ask a dermatologist for guidance suited to pigmentation prone skin.

07

Build daily sun habits beyond the bottle

A bottle works best inside a wider rhythm. FDA sun tips are to limit sun between 10 a.m. and 2 p.m., wear long sleeves, pants, sunglasses and broad brimmed hats, and use broad spectrum SPF 15 or higher regularly as directed. Shade from trees, awnings or a parasol lowers the dose during errands and lunch walks. Checking the UV Index in a weather app helps decide when to add sleeves or shift a run earlier.

Care for the youngest skin is mostly about cover and timing. Sunscreen is not recommended for infants under six months, who should be kept out of midday sun and in protective clothing, with a doctor asked before use. Lightweight long layers, a wide hat and a stroller canopy do the quiet work. Older children still need the ounce measure, the 15 minute head start, and reapplication after water play.

Small field habits carry the season. Keep a spare sunscreen where you will use it, near the door or in a work bag, and replace bottles that smell off or separate. Rinse sweat and sand before reapplying at the beach so the next layer grips. At home, tend the soil of routine: cleanse gently in the evening, moisturize to support the barrier, and let sunscreen be the last thin mulch laid each morning before stepping out.

08

The checklist

-
- ☐ Learn your daylight pattern and plan midday shade
 - ☐ Choose broad spectrum SPF 15 or higher for daily use
 - ☐ Check PA grade when UVA or dark spots concern you
 - ☐ Pick mineral, chemical or hybrid by finish and tolerance
 - ☐ Measure a shot glass ounce for full body coverage
 - ☐ Cover ears, neck, hands and tops of feet
 - ☐ Apply 15 minutes before going outside
 - ☐ Reapply at least every two hours outdoors
 - ☐ Reapply after swimming or heavy sweating
 - ☐ Follow 40 or 80 minute water resistance labels
 - ☐ Wear hat, sunglasses and covering clothing at midday
 - ☐ Keep infants under six months shaded and ask a doctor
-

09

Sources and further reading

- FDA Expands Sunscreen Options for the First Time in 20 Years · [fda.gov](https://www.fda.gov)
- Modernizing U.S. Sunscreen Regulations: How Newer Filters Can Improve Public Health · [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)
- FDA Approves First New Sunscreen Ingredient in Two Decades · ophthalmologyadvisor.com
- Sunscreen: How to Help Protect Your Skin from the Sun · [fda.gov](https://www.fda.gov)
- Better Sunscreen Is Officially Coming to the U.S. · [elle.com](https://www.elle.com)
- New Sunscreen Formulas Are on the Way · [healthcentral.com](https://www.healthcentral.com)

For information only, not medical advice. Check with a qualified professional before using herbal remedies.



WRITTEN BY

Erin Dunleavy

Erin produces the interviews: the research, the question lists, the follow-ups. She reads ingredient lists for fun and admits it.
