

What Your Patients Need to Hear About Sunscreens

You can't fight every misperception, but you can arm patients with essential facts.

Faced with dire warnings about a skin cancer epidemic, dermatologists have led the charge for prevention, early detection, and more effective treatment. Their efforts are paying off—at least in terms of secondary prevention. Data from the American Cancer Society project a decrease in melanoma deaths this year compared to 2017. Those same data, however, point to a lingering problem: melanoma cases are expected to increase this year compared to last. Despite dermatologists' best efforts to encourage patients to protect themselves from UV exposure, many simply don't take the advice seriously enough.



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“Dermatologists uniformly recommend patients use sunscreen, and yet, less than half the population uses it,” observes Darrell Rigel, MD. Without tangible short-term benefits to sunscreen use, it can be difficult for patients to fully comprehend its importance for short- and long-term skin health. Complicating matters, many patients are influenced by competing voices, some of whom argue that sunscreens are unsafe or ineffective. To see the incidence of skin cancer and associated mortality decline, dermatologists must remain stalwart in their efforts. Thankfully, it can take just a few minutes to deliver the facts, shatter myths, and empower patients to protect themselves.



SUNSCREENS ARE SAFE FOR HUMANS

Some patients point to claims that chemical sunscreen ingredients, especially oxybenzone, are potentially dangerous to human health. With its official sounding title, the Environmental Working Group (EWG) has led the charge against certain chemical sunscreens. “They get a lot of press, and it’s a nice warm and fuzzy name that this group has,” says Dr. Rigel.

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“They take toxicology subjects and studies out of context. Yes, when rats were fed oxybenzone some of the rats had uterotrophic effects, but the amount they fed them was equivalent to what a human would be exposed to if he applied sunscreen on 25 percent of his body (face, neck, hands, arms) at the amount most people typically apply, and used that every day for 277 years.”

Rather than allow patients to fret over extrapolations and questionable conclusions, Dr. Rigel sticks with the facts. “The fact is that the conclusion of these studies are not supported by sound science. We do know as a fact that the regular use of sunscreen lowers your risk of getting skin cancer—both melanoma and non-melanoma skin cancer. A number of prospective studies have shown that. I know that as a fact,”

Dr. Rigel relates.



Elizabeth Tanzi, MD

Director, Capital Laser
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Dr. Tanzi agrees. “I tell my patients that sunscreens have been studied scientifically for decades. We know, in the United States, with the FDA-approval process, that these ingredients have been studied long-term, and they have been proven safe,” she says. “I use them on myself; I use them on my family. I feel very comfortable recommending them, because they are good ingredients and they do protect against the sun.”

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Dr. Rigel also encourages patients to consider the motives of some of those promulgating sunscreen warnings. For example, the EWG provides links to Amazon.com for recommended sunscreens and may receive a commission on purchases made through the Amazon links, which he believes presents a potential conflict of interest.



SUNSCREENS ARE SAFE FOR THE ENVIRONMENT, TOO

A law recently passed in Hawaii bans sunscreens with oxybenzone, citing a potential risk to coral. There’s just one problem: the science is far from clear. “The studies behind the media reports were conducted in the laboratory on one coral under artificial conditions that I suspect would have caused stress to those organisms even before oxybenzone was added to the water. That leads to significant uncertainty in whether or how the results apply in the open ocean,” says Jennifer Saxe, PhD, founder of EcoSafety Sciences. After having been a researcher at the US Environmental Protection Agency National Risk Management Research Laboratory in Cincinnati, Dr. Saxe founded EcoSafety Sciences to study the behavior of chemicals in the environment, chemical exposure, and safety in ecological systems.



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“A new study from a group at the University of Maryland (led by Carys Mitchelmore) aligns with previously published data showing oxybenzone levels were at low concentrations in the waters off Hawaii, well below the value associated with adverse outcomes in the lab conditions tested in other studies,” Dr. Saxe adds.

The Hawaii law passed on the basis of questionable data, so it may be helpful to educate patients that such legislation “proves” nothing about ingredient safety.

“I think there is a strong possibility that anyone reading media reports about the ban on sunscreen ingredients could come to the conclusion that a decision of that magnitude would only be made on the basis of good scientific evidence that the ingredients are causing environmental harm,” Dr. Saxe warns.

“There is no standard of scientific proof required for making a new law of the type Hawaii passed. Typically, however, chemical bans do not come from direct legislation. The federal government and states have, in their executive branches, expertise and procedures in place to make these types of decisions. Direct legislation can be influenced by other factors beyond the science,” she maintains.



SUNSCREENS ARE EFFECTIVE FOR PROTECTING AGAINST SKIN CANCER

Gaining media headlines in recent years are annual sunscreen ratings, some of which proclaim that many sunscreens don’t provide the protective benefits they tout. In addition to the EWG, Consumer’s Union has entered the fray with its annual sunscreen ratings posted in *Consumer Reports*. Certainly some sunscreen products may underperform, but it can be difficult to assess the quality of any sunscreen based on these popular ratings. For Consumer’s Union, Dr. Rigel points out, the testing methodology is not the same as that used by the FDA. “They don’t openly describe what their testing methodology is, so I have no way to evaluate how accurate the testing actually is,” he says.

Faced with questionable reports, Dr. Tanzi takes a big picture view. “I think bringing awareness of sunscreen to the masses is fantastic,” she says. And the goal is to use that awareness to drive behavior change—establishing consistent and long-term healthy habits of applying (and re-applying) sunscreens and avoiding UV exposure. That takes time, requiring that dermatologists be persistent, patient, and opportunistic at each appointment.

Dr. Tanzi recounts her experience with a 30-something patient excited about a pre-wedding cosmetic treatment. At the start of the visit, Dr. Tanzi had to break unsettling news. She had discovered a basal cell carcinoma (BCC) on the patient’s face. “That clearly changed the conversation,” Dr. Tanzi says. “She had to have it removed and was left with a fairly significant scar on her face.” The patient is now cancer-free and adheres to a regimen of daily high-SPF sunscreen and UV avoidance.



SUNSCREENS ARE CONVENIENT AND PATIENT-FRIENDLY

There’s essentially no excuse for not using sunscreen, although Dr. Rigel notes that in the past cosmetic elegance was a sticking point. “Some sun-

screens were tacky, gooeey, sticky, whatever you want to call it,” he says. “They sting if they run in your eyes. I hear all those excuses.”

Dr. Tanzi highlights advancements in formulation technology. “The good news about sunscreen is that the technology is so much better than it used to be, and the formulations are so much better than they used to be. There really isn’t any excuse for someone not to choose to use sunscreen,” she maintains.

Noting that there are formulations for every skin type, Dr. Tanzi points to gels for oily skin or acne-prone skin, moisturizing sunscreens for dry skin, and sports sunscreens that don’t run into the eyes. “Any possible formulation that you want, and you need, you can find,” she says.

The range of available formulations makes it harder for patients to “forget” to reapply sunscreen, Dr. Tanzi notes. “At this point, there are even stick sunscreens and various different types that people can throw in their bags, or their car, and have it when they need it.”



HIGH SPF MATTERS

Dr. Rigel is against any proposal that caps SPF values at 50+. He cites three reasons. “First, if you’re a really fair-skinned person and you’re in a really sunny environment using a 50+, you don’t know if it’s a 51 or it’s a 100. So you don’t really know what you’re getting,” he explains. “The second thing is that, realistically, there will be no incentive to make a better sunscreen; all R&D will cease for sun protection if they put a cap on at 50.”

Finally, Dr. Rigel states, “Higher SPF works better in real-world conditions.” He knows this because he has conducted two studies on it. The first study found greater protection against sunburn for SPF 85 compared to SPF 50 when skiers used the two formulations in a split-face fashion on the slopes in Colorado. A subsequent split-face, randomized study, conducted with additional controls (patients in the second study could reapply the provided SPFs, they tracked reapplication and UV exposure with half-hourly activity diaries, product was weighed at the start and end of the study period, and more patients were recruited), showed that once again, high SPF outperformed lower SPF.

“The SPF 100 was significantly better in terms of protection than the SPF 50,” Dr. Rigel reports. “The SPF 50 side of the face was 11 times more likely to be sunburned than the SPF 100 side of the face.”

Dr. Rigel believes the benefit from higher SPF is directly tied to the issue of real-world use. “If in fact you’re using an SPF 100 and you’re applying 25 percent of the rated amount, you would factor getting the coverage of a 25. But if you’re using an SPF 15 and you’re applying 25 percent of the rated amount, you’re only getting the coverage of a 3 or 4,” he explains.

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—Jennifer Saxe, PhD

There are also claims that higher SPF ratings may give patients a “false sense of security,” but Dr. Rigel discounts that logic. “The way I describe it is like a meter in a taxi cab. It only runs forward, and if you have a high SPF sunscreen on, the meter is going to run more slowly. But it still can get to a point where you need to protect yourself with a reapplication.”



SUNSCREENS ARE JUST ONE PART OF THE PLAN

Stressing that SPF really is just one part of the UV safety equation, Dr. Tanzi emphasizes the need to talk to **every** patient at **every** visit about sunscreen and UV avoidance strategies.

“It’s hard to be dedicated to skin health without even mentioning, very quickly, wearing your sunscreen, and avoiding the sun, wearing hats, and glasses, and sun protective clothing,” she argues.

In addition to successfully treating a previously undiagnosed skin cancer, Dr. Tanzi saw another upside to that case of the bride-to-be with the facial BCC. A good friend of the bride is also Dr. Tanzi’s patient. “When she found out her friend had a basal cell carcinoma, which was clearly related to extensive sun exposure, that was her wake-up call to be using sunscreen on a regular basis,” Dr. Tanzi says. “But not only that. She also began regularly using sun-protective clothing, hats, sunglasses, reapplying sunscreen, really paying attention to UV protection.”



YOU DON’T NEED TO GO OUTSIDE UNPROTECTED

Sometimes it’s not enough to simply refute what patients may believe about SPF; they may need alternatives. For example, when it comes to the argument that patients need UV exposure to counter low vitamin D levels, Dr. Rigel offers a safer strategy. “Vitamin D is not created by the sun. It’s just converted to its useful form by the sun in your skin. But if you’re really concerned about that, you could take vitamin D pills that cost a penny a piece at many retailers. The vitamin D in those pills is already pre-converted. So you don’t even need any sun exposure to make them work.”



IT'S ABOUT A LIFETIME OF HEALTHY SKIN

There are parallels between cigarette smoking and UV exposure. “Everybody agrees that cigarette smoking is bad for you, right? However, people still smoke,” Dr. Rigel observes. He points to an ineffectual public service announcement that the American Academy of Dermatology targeted to teens. It showed five teenagers walking down the street where one teen stood out; the headline read, “One in five Americans will get skin cancer in their lifetime, will you be the one in five?” In focus groups, “They found that everybody knew that they would not be the one in five,” he says.

“Sometimes the traditional skin cancer message doesn’t work for teenagers,” Dr. Rigel acknowledges. “What I found works well with that group is to say, ‘Let’s talk about the aging part of it.’ I say, ‘When you’re 30, you’re going to look 50.’ Being 30 is a curse as a teenager, right? But if you’re going to look 50, that’s a double curse.”

Dr. Tanzi agrees. “I think that we can probably take advantage of the fact that there’s a generation that’s grown up taking selfies and really concerned about their appearance,” she says. Younger celebrities now talk about aesthetic interventions. “Quite frankly, forget about spending hundreds if not thousands of dollars on skin care. What they really should be doing is protecting their skin from the sun, because it’s the number one anti-aging thing that they could potentially be doing to preserve their youthful look,” Dr. Tanzi insists.

QUICK AND SIMPLE

Dermatologists—and their patients—are pressed for time. It’s hard to address every UV misperception a patient may

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have during a visit. Nor would that necessarily prove beneficial. But dermatologists—more so than any other medical professionals—have the expertise and the credibility to quickly and effectively arm each of their patients with the facts.

“The burden is on us as dermatologists to really continue to spread the word. We have to be the standard bearers for this,” Dr. Rigel asserts. “Every patient is individual, you have to overcome their individualized concerns, but at the end of the day, you have to be able to get that message out to them.”

For Dr. Tanzi, the key is that patients leave her office knowing that they “need to find a sunscreen formulation that they like, at least SPF 30 on a daily basis, or 50 and above on a really sunny day. Then stick with it, and then reapply. Again, it’s the sunscreen that you use—that’s the best sunscreen for you!” ■