



## A Message From the President



Winter’s weather encourages us to spend more time indoors, but the risk of overexposure to the sun’s ultraviolet (UV) radiation — the cause of most skin cancers — remains high. Although many people believe that sun exposure isn’t a threat in the winter, this simply isn’t the case. UV radiation reaches us in the form of ultraviolet A (UVA) and ultraviolet B (UVB) rays, and while it’s true that UVB radiation isn’t as intense in the winter as it is in summer, a full 95 percent of the rays that reach the earth’s surface are UVA rays, and their intensity remains much the same throughout the year. Additionally, UVA rays can penetrate glass. So even indoors or driving on a cold winter’s day, it’s still possible to damage your skin.

There’s another reason that the season can be hazardous to skin health: the use of indoor tanning machines is higher during the winter. Indoor tanning is linked with an increased risk of all forms of skin cancer. Indoor

As we can see in the story told in this issue by former tanner Kate Neale, now age 21, indoor tanning can have dire consequences.

tanners are 74 percent more likely to develop melanoma than those who have never tanned indoors, 2.5 times more likely to develop squamous cell carcinoma and 1.5 times more likely to develop basal cell carcinoma. Also, as we report in this issue of *Sun & Skin News*, a new study has for the first time calculated just how much damage a single tanning session can do.

This news is especially significant for people under age 25 (young adults ages 18-29 tend to tan indoors more frequently than do older adults), who seem to be more vulnerable to indoor tanning’s damaging effects: high school and college-age indoor tanners have a greater risk of developing all forms of skin cancer when compared with both non-tanners and tanners ages 25 and over. As we can see in the story told in this issue by former tanner Kate Neale, now age 21, indoor tanning can have dire consequences.

We wish you a happy and healthy holiday season, and encourage you to enjoy all that the winter has to offer — safely! 🌨️



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## Ask the Expert

**Q.** I’m going to the Caribbean this winter. Are there any special precautions I need to take to protect myself from the sun?



Neil Sadick, MD

**A.** When the days get colder and the nights get longer many people enjoy a vacation to a warm place like the Caribbean, to catch some sun and “recharge their batteries.” Typical winter vacation regions are located close to the equator, with little distinction between the seasons and high temperatures year-round. The sunny weather in these regions is accompanied by strong ultraviolet (UV) radiation, as the sun’s rays hit the earth at a more direct angle and aren’t as well-absorbed by the atmosphere. Furthermore, these sunny days tend to be *long*, sometimes with substantial amounts of UV until early evening.

The ability to travel from a winter season to a sunny vacation spot in just a few hours is a great comfort in modern times, but also a heavy burden for the skin. Current studies now show that sun-filled vacations and sunburns play a key role in the development of melanoma, the most dangerous form of skin cancer. Intermittent, intense sun exposure, the kind you are likely to receive on a sun-drenched winter vacation (the sort that often leads to sunburn), is associated with a much higher melanoma risk than regular, everyday sun exposure. Suffering one or more blistering sunburns in childhood or adolescence, or five or more by any age, more than doubles a person’s life-time chances of developing melanoma.

Important precautions that protect you from the sun on your vacation include shade, sun-protective clothing, and sunscreen, as well as sensibly limiting your sun exposure in general. The sunscreen you use should have a sun protection factor of at least 30 and sufficiently block UVA as well as UVB rays. (Look for “broad spectrum” or “multi-spectrum” protection.) If you’ll be vacationing near the water, a water-resistant or very water-resistant sunscreen formula is recommended.

Apply approximately one ounce of sun-screen (two tablespoons) to the whole body, and reapply every two hours or immediately after activities such as swimming, sweating, or rubbing/wiping. Loose-fitting, long-sleeved shirts and long pants made from tightly woven fabrics offer the best protection from the sun’s UV rays. You may want to look for clothes that have a UPF (ultraviolet protection factor) label of 30+; a shirt with a UPF of 30, for example, will let just 1/30<sup>th</sup> of the sun’s UV radiation reach your skin. High-UPF athletic gear may be particularly helpful, since such clothes are meant to keep you cool and comfortable, no matter how hot the weather gets. Finally, a hat with a brim at least 3” all the way around and UV-blocking sunglasses will also help protect the vulnerable skin on your head, face, neck, and tops of the shoulders.

Sensible sun behavior means avoiding tanning and burning as well as seeking the shade between 10 AM and 4 PM (and especially between noon and 2 PM, when the sun’s rays are strongest). ☀️

*Neil Sadick, MD, FAAD, FAACS, FACP, FACPh, is the medical director and owner of Sadick Dermatology, and the director of the Sadick Research Group. Dr. Sadick is also Clinical Professor of Dermatology at Weill Medical College of Cornell University, President-Elect of the American Academy of Cosmetic Surgery, and on the Board of Directors of the Women’s Dermatologic Society, American Board of Cosmetic Surgery, American Board of Hair Restoration Surgery, American Academy of Cosmetic Surgery, and the International Society of Dermatologic Surgery. He sits on the Editorial Board of several medical journals, including the Journal of the American Academy of Dermatology, and has authored or co-authored more than 200 articles in peer-reviewed scientific journals, 60 chapters of medical books and 10 books on cosmetic surgery and vein treatments, lasers and cosmeceuticals.*

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Perry Robins, MD, President

Mary Stine, Executive Director

## Experts Crunch the Numbers on Indoor Tanning

### Just Four Annual Visits Multiplies Skin Cancer Risks



**N**ew research indicates that people who tan indoors four times a year increase their risk of developing the non-melanoma skin cancers basal and squamous cell carcinoma by 15 percent, and their risk of melanoma

**Melanoma, the deadliest form of skin cancer, will kill an estimated 8,790 people in the US this year alone.**

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Make the Most of Your Visit to the Dermatologist

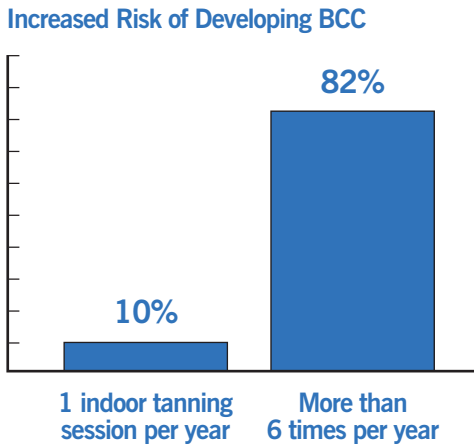
“I Felt Betrayed, Lied to, And Scared”

by 11 percent. Non-melanoma skin cancer can be disfiguring and sometimes life-threatening, and melanoma, the deadliest form of skin cancer, will kill an estimated 8,790 people in the US this year alone. While it has been known for some time that indoor ultraviolet (UV) radiation tanning heightens the risk of developing all forms of skin cancer, with this study, researchers have more precisely quantified the risks.



Investigators led by Mingfeng Zhang, MD, research fellow at Brigham and Women's Hospital and Harvard Medical School in Boston, examined data about tanning bed use collected from more than 73,000 female nurses in the Nurses' Health Study II between 1989 and 2009. The researchers looked at indoor tanning among subjects during both high school and college, and then from ages 25 to 35. In addition to demonstrating a dose-response effect (that is, the more extensive their indoor tanning, the higher their risk of developing skin cancer), the numbers suggest that younger tanners are especially at risk: "Tanning bed use during high school and college conferred a higher risk of basal cell carcinoma (BCC) than

did tanning bed use between ages 25 and 35," Dr. Zhang said. In fact, just *one* indoor tanning session a year while the subjects were in high school or college boosted their risk of developing BCC by 10 percent, and those who tanned indoors more than six times a year had an 82 percent higher risk of developing BCC than non-tanners. The final version of the research paper is not yet available, but the authors presented their findings at a recent meeting of the Association for Cancer Research (AACR). "We provided further evidence of the increased risk caused by tanning beds for all three types of skin cancers," Dr. Zhang said. "This finding should be a warning to the public about the dangers of tanning beds." ■



## Look For Go With Your Own Glow™ Ads in Your Favorite Magazines

Did you see our *Go With Your Own Glow™* ad in the December issue of *Marie Claire*? The Skin Cancer Foundation's anti-tanning public service ad campaign has reached over 450 million readers since 2008, and ads are set to run in *Redbook*; *Town & Country*; *New York*; *O, The Oprah Magazine*; *SHAPE*, and *Country Living* over the next few months. ■



### Become a Fan on Facebook

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# Make the Most of Your Visit to the Dermatologist



To help you make the most of your dermatologist's appointment, The Skin Cancer Foundation asked **Elizabeth Tanzi, MD**, how to prepare for and what to expect during a routine full-body skin examination. Dr. Tanzi is co-director of laser surgery at the Washington Institute of Dermatologic Laser Surgery, Washington, DC, and assistant professor in the Department of Dermatology, Johns Hopkins Hospital Center, Baltimore.

### BEFORE THE EXAM

**"Remove all nail polish** from your fingernails and toenails!" As Dr. Tanzi explained, "We need to look at your nails and nail beds, since skin cancers can form there."

**Perform a full-body skin self-exam** (for instructions, visit [www.skincancer.org/self-exams](http://www.skincancer.org/self-exams)), and **make note of any new, changing, itching, or bleeding moles, growths, or other lesions**. In the early stages of skin cancer development, "You're the person who has the best chance of noticing small changes," Dr. Tanzi observed.

### MOLE MISCONCEPTIONS

"Because patients are often uninformed about what they need to look for, they can be prey to misconceptions about what is a cause for concern," Dr. Tanzi explained. "For example, a lot of patients ask me if their raised moles are dangerous. Mostly they're nothing to worry about," though they should be checked.

### AT THE EXAM

The exam itself will likely be brief, said Dr. Tanzi: "An annual skin exam on a patient who's never had atypical (dysplastic) moles takes about 10 minutes. [Atypical moles are benign, but look suspicious and could be a risk factor for skin cancer.] The more moles you have, the longer the exam." **Ask the dermatologist to examine closely any moles, growths, or lesions** you noted during your skin self-exam. Your dermatologist may biopsy (remove a layer of skin for examination under a microscope) suspicious-looking growths.

If you've never evaluated your skin, **"Have the dermatologist show you how to do a proper skin self-exam**. You should know where to look and what to look for." In particular, Dr. Tanzi counsels patients not to ignore often overlooked areas like the scalp, between the toes, and the soles of the feet.

Finally, **ask questions**. From spellings of unfamiliar terms to recommendations for further research, your doctor should be able to address your concerns. You may want to take notes for reference.

"Additionally, I'm often asked if a mole should be removed because it itches. For instance, a patient will have a mole that gets chafed and irritated by clothing. In general, irritation does not lead to skin cancer. If it's truly a benign nevus (mole) or lesion, then irritation from clothing over long periods of time is not going make it cancerous." ■

## "I Felt Betrayed, Lied to, and Scared"

Former Indoor Tanner Kate Neale's Story



As a teenager I wanted to be tan, but for someone with Fitzpatrick Skin Type 1 [the lightest, most sunburn-prone skin type] and naturally red hair, a tan isn't natural or sustainable, especially not in the winter when you live in Canada! At 16 I was legally permitted to tan indoors. My parents were against it, and even Smart Tan Canada [a tanning association that promotes so-called "safe" tanning] recommended that people with my skin type not tan. But I started tanning anyway, at first weekly, then 2-3 times a week. I ended up tanning up to 16 times a month for approximately 12-15 minutes a session.

After I graduated high school I went straight to the salon to apply for a job. When I was hired I signed a contract saying I would maintain a tanned appearance, and in return I'd get 12 free sessions and one Mystic spray tan a month. I worked at this salon for two-and-a-half years, and was top salesperson for over a year. I really believed in what I was doing. We [salon staff] were sent to seminars with scientists, who told us that tanning beds *prevented* cancer, and so on. I was brainwashed. I was 17.

In April 2011 I moved to Ottawa, Ontario for school. A few weeks later my mother noticed that the freckle

on my stomach had changed, and she wanted me to have it looked at. I went to see a dermatologist, who said he thought it looked fine. But he did a biopsy, which left an inch-long scar. I was scared, but convinced myself that everything would be fine.

Three weeks later the doctor called to tell me that the "freckle" was a melanoma, the deadliest kind of skin cancer. I dropped the phone, and broke down. I had truly believed what I'd been taught by the industry — that tanning prevented certain cancers and that the industry had the documents and scientists to back up these claims. Instead it seems I'd had a death wish. Over the next six weeks I had many doctor's appointments, three more biopsies for lesions on my breast, leg, and arm — and finally excisional surgery to remove the melanoma, which fortunately was at an early-stage, and non-invasive. Today I have a 6-inch scar on my stomach and so much fear.

I'm currently waiting for the results of another biopsy; I always have new spots appearing and changing. I'll never forget going to the surgeon's office with my mom — he thought *she* was the patient. When he realized that I was the patient, he told me I was the youngest person he'd ever treated for melanoma. I'm only 21. ■

YES!

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