

Tanning beds might as well be coffins. Oncologists now believe they are to blame for the alarming spike among young women in lethal melanoma cases—the second most common cancer in adults under 30. A big part of the problem: Many women think catching indoor rays is a harmless—or worse, healthy—part of their beauty routine. Women's Health reports on the scary stats and commissions graphic artists to create arresting images that send a clear message:

Skin cancer kills.

SISTER

GIRLFRIEND

DAUGHTER

BEST FRIEND

MOM

GRANDMA

WIFE

NIECE

AUNT

YOU

Since 1970, this skin cancer has increased in women under 40 by 705%. A big reason? TANNING BEDS.

Women's Health



t was Tricia
Thompson's hairstylist
who first spotted a
dark brown mole
behind her ear. "I didn't
think much of it," says
Tricia, who was 32 at
the time. "I went to
the dermatologist and
she froze it off." But
a year later, the same
hairstylist saw that the

mole had grown back, and this time it was a greenish-blue color.

Tricia made an appointment with a different dermatologist, who took a biopsy of the mole. It was melanoma, the most serious of all skin cancers. Best possible scenario: Tricia would end up with a disfiguring scar. Worst case: The melanoma would kill her.

"I worked at an indoor tanning salon in high school and college," she says. "I tanned an average of two or three times a week from the time I was about 14 until I was 21. I remember there was a waiver everyone had to sign, but that was just protocol. Nobody ever sat down to talk about the dangers of indoor tanning, so I didn't really think about them.

"And then I was 34, thinking, Who's going to take care of my dog? Should I sell my house so my family doesn't have to worry about things if I don't make it through this?"

Tricia had surgery to remove the melanoma—and the top quarter of her ear—a couple of weeks after her diagnosis. Her doctor did reconstructive surgery to replace the part of her ear he had to remove, but at her six-month follow-up appointment, the melanoma had returned. She had to have another surgery, this time to remove about a third of her earlobe.

Becky Kocon was just 23 when she was diagnosed with melanoma after she spotted an irregular mole behind her knee. "I started going to tanning salons with my mom when I was 17," says Becky, who's now 27. "When I got to college, I'd go two or three times a week. I knew tanning wasn't good for me, but I didn't think I'd get cancer. At least not in my twenties."

According to a recent Mayo Clinic study, the incidence of melanoma has increased eightfold among women ages 18 to 39 since 1970. "Melanoma is a new epidemic in young women," says Jerry Brewer, M.D., a Mayo Clinic dermatologic surgeon and author of the study, who admits even he was shocked by these findings. "Other studies have shown an increase, but this study found melanoma occurring in women 705 percent more often. It's astounding."

The usual suspects are partly to blame for the scary rise in this deadly disease among twenty- and thirtysomething women, including the disappearing ozone layer and the fact that we're still getting sunburns, even though we should know better. (In fact, recent research found that half of all adults and 66 percent of whites ages 18 to 29 report they had at least one sunburn in the past year.) But because these factors affect women and men alike. and the rise in melanoma diagnoses are in young women, doctors are starting to believe indoor tanningwhich can raise a person's risk for melanoma 75 percent-is a key reason the disease has become an epidemic.

"It's significant that melanoma is on the rise in the same group of people who use indoor tanning beds more than anyone else," says Deborah Sarnoff, M.D., a dermatologist in Manhattan and Greenvale, New York, and senior vice president of The Skin Cancer Foundation. The numbers are striking: Thirty-two percent of white women ages 18 to 21 and 30 percent of white women ages 22 to 25 say they use indoor tanning beds, according to the Centers for Disease Control and Prevention. And a 2012 survey found the same has been true for almost 40 percent of college students.

"If we can change the behavior of young women and get them to stop tanning, the curve of the incidence of melanoma would change," says Brewer.

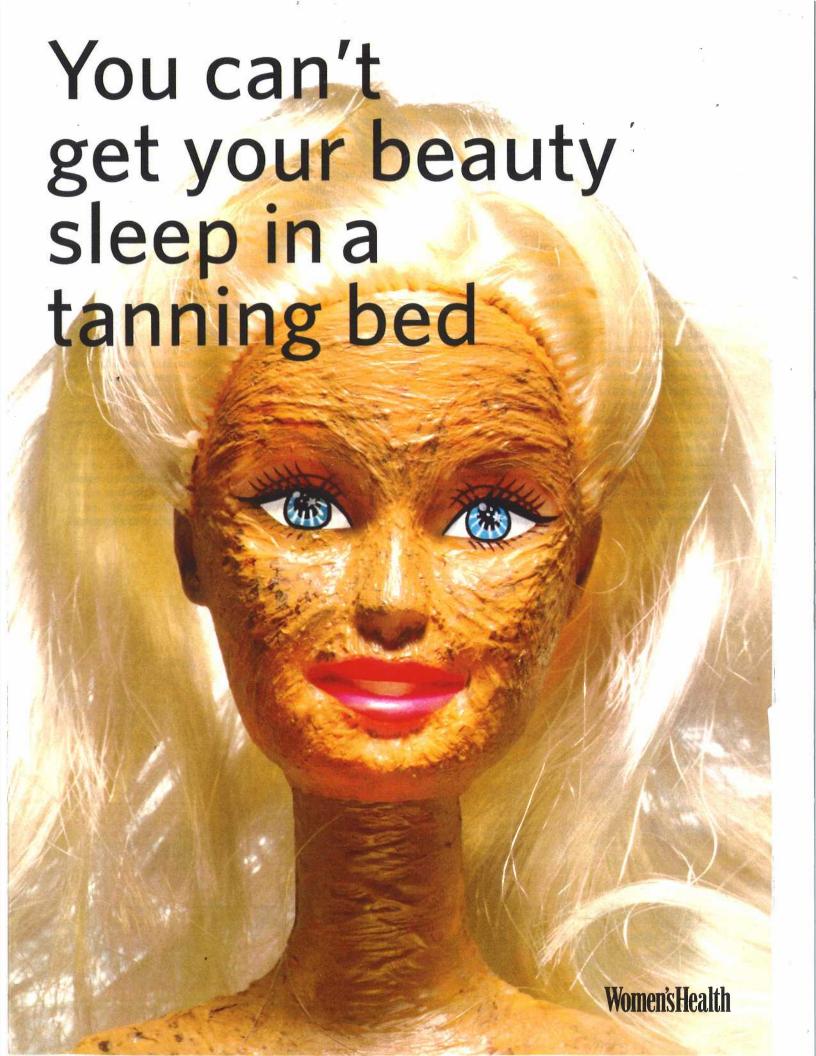
Delusion+ Denial

To try to figure out why young women are still indoor tanning, behavioral scientists at Memorial Sloan-Kettering Cancer Center (MSKCC) in New York City recently surveyed more than 500 college students in the United States. For 59 percent of those who indoor tan, they say it's because "everything causes cancer these days." And 54 percent said tanning beds are "no more risky than lots of other things people do."

What's with the defeatist, something's-gonna-get-me attitude? "Young people are unable to appreciate their own vulnerability," says Smita Banerjee, Ph.D., an assistant attending behavioral scientist at MSKCC and author of the study. In other words: They're weighing the risks and benefits of a potentially health-damaging behavior, and the benefits win.

"When you're young, your main focus is making friends, fitting in, finding a job, and falling in love," says Tim Turnham, Ph.D., executive director of the Melanoma Research Foundation. "The perception is that being tan will help you get those things."

Unfortunately, that perception is pretty accurate. If you're tan, compliments like "You look so healthy!" and "You're glowing!" come flying at you. Americans have been climbing into tanning beds since the devices were first introduced in this country in 1978, and the growing pile of evidence that they can cause cancer hasn't seemed to slow people down. That's because we live in a culture in which being tan is the ideal, says Elizabeth Tanzi, M.D., a dermatologist in Washington,



D.C., and a melanoma survivor herself. Whether you GTL like the cast of *Jersey Shore* (that's gym, tan, laundry for nonfans) or think Snooki looks too Oompa Loompa, it's hard to escape the fact that the skin tone of white women in media images is usually some shade of tan.

And then there's what every dermatologist doesn't want to admit when it comes to golden-brown skin: It makes you look thinner. Those little cellulite bumps on your thighs? They're so much less noticeable when you're tan. The tank-top arm muscles you've been going to Pilates three times a week to see? They're more defined when you have a golden glow. "I went tanning when I was in college because I thought it made me look thinner and healthier, which gave me more confidence," says Hallie Fischer, 27, a data specialist for a nonprofit in Philadelphia who no longer tans. "Indoor

tanning even seemed to clear my skin."

And despite a ton of information on the dangers of indoor tanning-including a startling new study just published in the British Medical Journal estimating that indoor tanning accounts for more than 170,000 cases of nonmelanoma skin cancers in the U.S. each year-a surprising number of college-age women are using indoor tanning beds because they see it as a healthier alternative to lying out in the sun. According to the American Academy of Dermatology, 24 percent of young adults reported that they were either unaware or unsure that tanning beds aren't safer than the sun, and only 35 percent of them knew that a "base tan" is not a healthy way to protect skin from sun damage. A recent U.S. House of Representatives report found that this kind of misinformation is in part due

as your twenties.

74

Percentage of survey respondents who didn't know that skin cancer is the most common form of cancer in the U.S.

Source: American Academy of Dermatology survey

to tanning salons not providing accurate facts about skin cancer and other risks to their clients. In fact, this report found that the vast majority of tanning salons are making claims about the health benefits of indoor tanning. (See "The Tanning-Salon Con Job," page 161.)

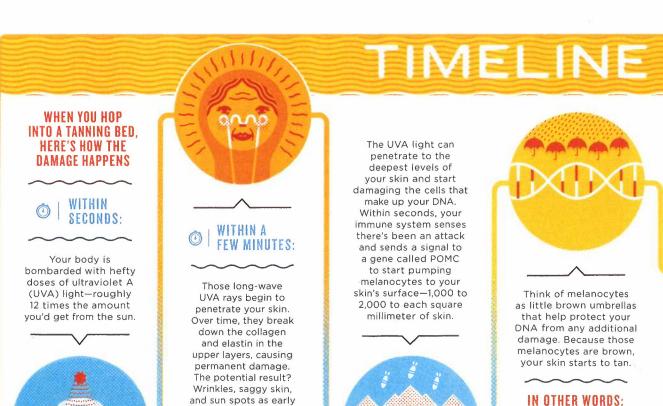
"Most tanning salons don't tell you about cancer," says Becky, who stopped going to them after college. Luckily, her melanoma was removed at an early stage, before it spread, and she hasn't had a

recurrence. But she says when she looks at her four-inch scar, which took a full year to heal, she's grateful it's on the back of her leg and not on her face. "Salons tell you that you can do damage to your retinas, but they don't emphasize the wrinkles and sun spots you're going to get, and they definitely don't mention cancer. When I was 18 years old and going to the tanning salon, I didn't think about the possibility of getting cancer," she adds. "And even toward the end of college, when I started realizing what I was doing was bad, I thought, Oh well, I'll get cancer when I'm 40 and deal with it then."

Lasting Scars

What worries dermatologists almost as much as the skyrocketing rates of melanoma is young women's

A tan is a sign that your DNA is damaged. Your tan is like a full-body scab.



misinformation about how treatable the disease is. While most cases of skin cancer are curable—even melanoma, if it's caught early—too many women seem to think it's no big deal, says Sarnoff. "A lot of people think you can just cut out the skin cancer and you'll be fine. But I'd invite those people to watch a skin-cancer surgery, when you see layer by layer of, say, someone's nose disappearing."

Just look at Tricia, now 35. who was only recently given the green light to have another reconstructive surgery on her ear. Her doctors wanted to wait three months to dothis so the plastic surgery wouldn't hide the melanoma that had a chance of returning again, but she waited a year. "I have to take two weeks of vacation time for this surgery," says Tricia. "The doctor is going to remove cartilage from my ribs and pin it to my ear. Once the skin has grown over the

cartilage, they'll unpin my ear and do a skin graft."

And it's not just melanoma patients who have to deal with the potentially disfiguring side effects of skin cancer. Tanzi says she removes a lot of basal cell and squamous cell carcinomas from women's faces, and those scars can take years to heal. "So many women come to see me before their wedding to ask about a new skin-care regimen, and when I do an exam, I find a skin cancer on their face," says Tanzi. "Then, instead of buying a new night serum, they end up with a two-to three-inch scar on their cheek that looks like a little train track."

That's only if they're lucky and a spot is caught early. While squamous and basal cell carcinomas—the two nonmelanoma skin cancers—don't typically spread to other parts of the body, melanoma is a totally different beast. If a melanoma is just one

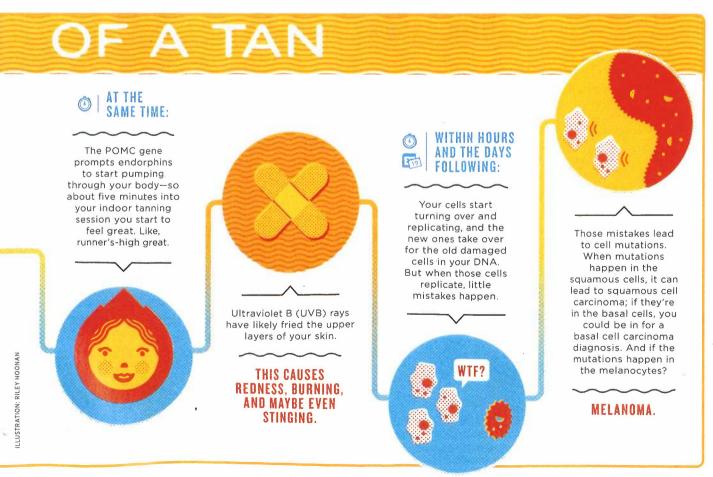
millimeter deep (that's about three grains of salt) or deeper, there's already roughly a 10 percent chance it will spread to the lymph nodes and then to other organs, says Brewer. If that happens, there's about an 85 percent chance it will kill you.

The Addiction Evidence

Even with all of this knowledge of what the UV light in indoor tanning beds actually does to your skin, one out of every three white women between the ages of 18 and 25 continue to fake 'n' bake. One possible reason: A growing body of research shows tanning might actually be as addictive as some drugs.

Bryon Adinoff, M.D., a professor in drug and alcohol abuse research at The University of Texas Southwestern Medical Center, says his tanning-addiction research began when a dermatology medical school resident came to him with a trend she was seeing in skin-cancer patients. "She was treating a lot of young adults who'd tan, get diagnosed with a basal cell carcinoma or even melanoma, and then continue to tan," says Adinoff. She suspected there was some addictive quality to indoor tanning.

So Adinoff recruited indoor tanners who met criteria for addiction (such as trying to cut down and being unable to; needing to go more often to get the same mood boost; and taking time away from friends, family, work, and hobbies in order to tan), and he monitored them during two tanning sessions. One was a regular session, and another was almost exactly like one-except there was a filter that blocked all of the UV light. Blood flow in the participants'



TANNUG BEDS CAN BEDS WALL MUL.

(INDOOR TANNING BEFORE AGE 35 UPS THE RISK FOR MELANOMA BY **75 PERCENT.**)



A Winning Message • Women's Health called upon artists and graphic designers to enter a contest with this goal: to create posters that would powerfully and visually communicate the dangers of tanning beds. The poster above, by Ashley O'Brion, was chosen for its stark depiction of the fatal truth about indoor tanning—the increased risk for cancer.

brains was measured during both sessions.

After the real tanning-bed sessions, Adinoff saw activation in the areas of these participants' brains that are associated with reward-the kind of brain activity that keeps us coming back for more. After the fake sessions, participants reported they hadn't gotten enough light. And those reward centers in their brains didn't have the same kind of blood flow when they were gypped of UV light.

Stephanie Lilly, 42, a certified public accountant in Las Vegas, says she's tried to stop tanning too many times to count. "I'll tell myself I'm only going to go once a week, and then I feel like I don't look tan enough, and I go back," she says. Right now, she goes to the tanning salon three times a week. But in the weeks leading up to a beach vacation she took in the fall, she went seven days a week. "I know a tan is the sign of damage," says Stephanie. "If something drastic happens, or if I notice sun spots and wrinkly skin, maybe I'll stop."

Sending the Wrong Message

Researchers say another reason many young women are still tanning despite the health warnings is because the messaging about the dangers of indoor tanning has been somewhat ineffective. Joel Hillhouse, Ph.D., director of the Skin Cancer Prevention Laboratory at East Tennessee State University, talks to countless college students who tan about why they do it, and he tests various approaches aimed at getting them to stop. "When I first started this line of research, I was a typical public-health person saying, 'Indoor tanning causes cancer,' " he

says. "But I quickly learned that when we give young people a health-based message, we can sound like just another adult who's telling them that something they like to do is bad for them."

For women over 30, it may be different. "The evidence seems to suggest that the health messages resonate much more powerfully as we grow older, and particularly as we get families and other obligations that the health problems would affect," says Hillhouse. "But to reach younger women, you have to hit them where they live. And where they live is how they look. If you present them with a message about how indoor tanning will affect their appearance—how it will cause wrinkles and sun spots even in their twenties-they're more open to the health messages."

But that doesn't mean you can ignore what's also important to them in terms of how they look, which is being tan, says Rob Turrisi, Ph.D., a professor at the Biobehavioral Health and Prevention Research Center at Pennsylvania State University and coauthor with Hillhouse on multiple studies examining the effectiveness of intervention methods to reduce indoor tanning. "The bottom line is that people think having a tan is attractive," says Turrisi. "So educating them on the dangers of being tan isn't enough to get them to change. You have to provide them with alternatives that are at least equally favorable or more favorable."

Adds Hillhouse: "Ultimately, the societal pressure to be tan is going to need to change if young women are going to stop indoor tanning. But that's not going to happen overnight. In the meantime, what we're finding is that educating women on other ways to look good-whether it's selfThe Tanning-Salon Con Job A 2012 survey from the American Academy of Dermatology

shows many people are wildly uninformed when it comes to the facts about indoor tanning, and the results of a recent U.S. House of Representatives report found that tanning salons may be largely to blame for this. The report found that 90 percent of salons told customers that tanning poses no health dangers, 78 percent claimed indoor tanning actually improves health, and 51 percent denied that indoor tanning increases the risk for skin cancer. Here's what you need to know so you don't get duped:

Lie Tanning beds are safer than the sun.

SUCKER COUNT: Twenty-four percent of young adults reported that they were either unaware or unsure that tanning beds are not safer than the sun

THE TRUTH: The cancer-causing UVA rays you get from an indoor tanning bed can be roughly 12 times stronger than the ones you get from the sun. And getting a sunburn in a tanning bed is possible. In fact, a recent study found that nearly one in five indoor tanning sessions results in a sunburn.

Lie Getting a "base" is a healthy way to protect your skin from sun damage.

SUCKER COUNT: Sixty-five percent of young adults thought this statement was true.

THE TRUTH: There is no such thing as a safe "base" tan, says Brewer. "Patients always ask me, 'How much tan is OK for me?' and the answer, no matter your skin tone, is 'No amount of tan is healthy." That's because any level of tan means the DNA in the deep layers of your skin has been damaged, and your body is trying to protect itself from more damage.

Lie Tanning makes you look healthier and younger.

SUCKERCOUNT: Thirty-one percent of young adults were either unsure or didn't know that sun exposure can cause wrinkles. THE TRUTH: The UVA rays you're exposed to in a tanning bed travel to the deepest layers of your skin, damaging collagen fibers and elastin—the stuff that keeps your complexion looking and feeling soft and smooth. Over time, that damage to your collagen and elastin makes your skin thinner and causes sagging and creasing (hello, wrinkles).

tanning lotion, exercise, or fashion that complements their skin tone and body type-is the most effective message."

When Will Pale Equal Pretty?

The societal pressure to be tan seems to be waning a little. Just look at stars like Anne Hathaway, Nicole Kidman, Emma Stone, and Kristen Stewart, who don't even appear to get spray-tanned before red-carpet events. And many people agree that the odd orangey tint of the cast of Jersey Shore isn't exactly the goal. But this still doesn't seem to be overriding young

women's desire to be tan. Says Tanzi, "I think a lot of young women who develop melanoma are going to have to speak out before people realize the damage indoor tanning is doing to their skin."

Becky wishes she didn't feel a pressure to be tan when she first started going to salons. "The message I gotthe one women are still getting-is that if you're tan, you're beautiful," she says. "What more women need to realize is the consequences of being tan. You may not think about those consequences now, but no matter how frequently you tan and no matter what the salon workers tell you, it's not only going to give you wrinklesit's going to change your DNA. And it causes cancer."