Because we're working hard on our new SouthFlorida.com/LIVE morning show, we reached into our archives to pick the Best of News Illustrated — classic pages on a variety of timeless subjects.

# KILLER TAN

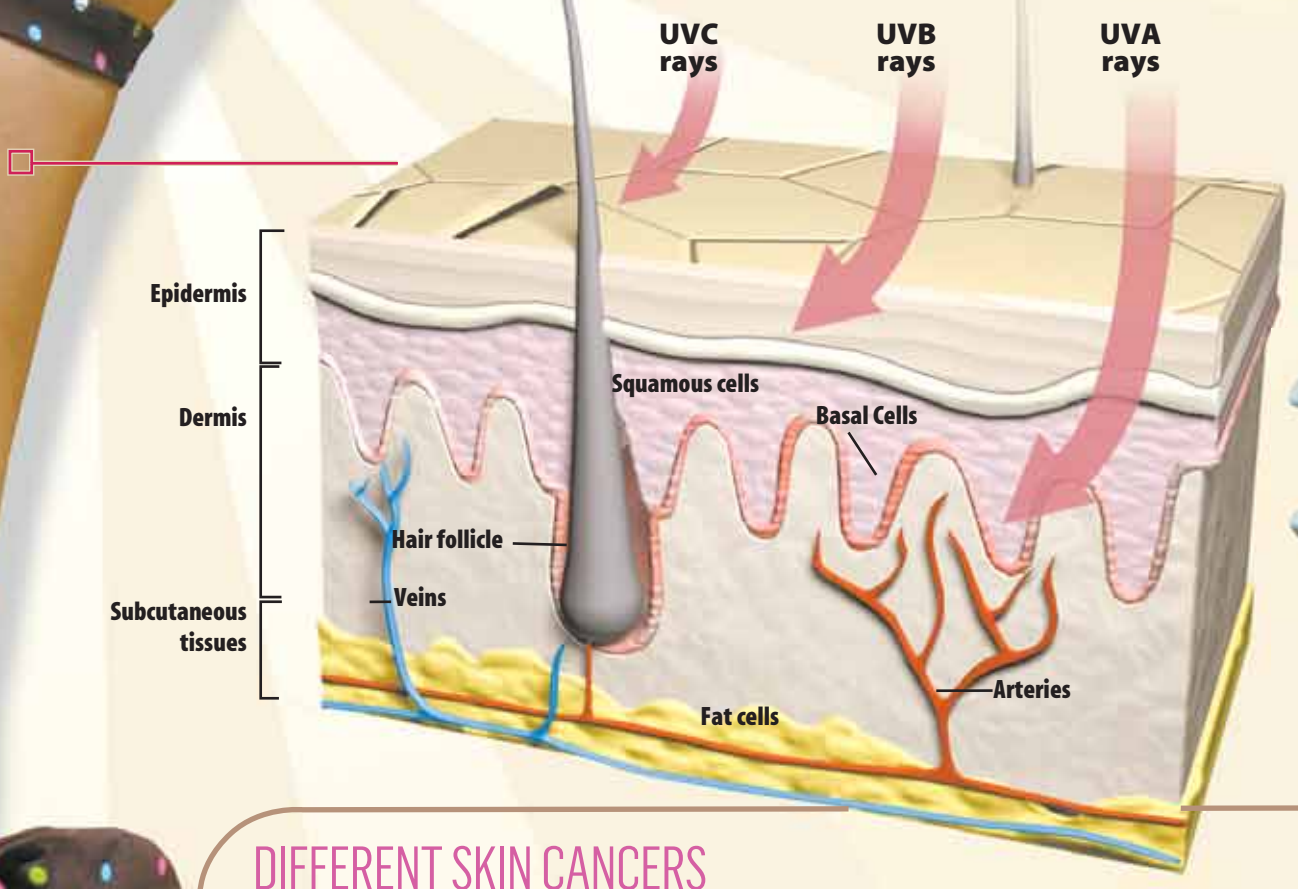
Damage to your skin caused by the sun or tanning beds is cumulative, so cancers often do not develop until 20 years or so after exposure.

## TYPES OF ULTRAVIOLET RAYS

**UVC (100-280 nm)** Shortest wave, but most powerful, mostly screened out by the ozone layer and causes minimal damage. But this may be changing because of the diminishing ozone.

**UVB (280-315 nm)** Mostly used in tanning beds. These short waves affect mostly the epidermis layer of skin, causing sunburn. Stimulates to form new melanin, which produces a tanning effect, the skin's natural protection against sun's rays. Long-term exposure can cause skin cancer and aging.

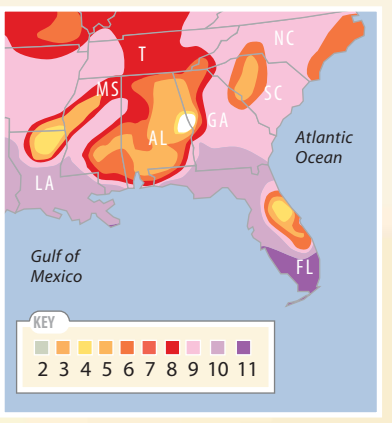
**UVA (315-400nm)** Long waves penetrate deeper, weakening the skin's inner connective tissue. Can lead to mutation of the immune system. In addition, can cause permanent eye injury, damage to retina and burning of the cornea, forming a cataract overtime.




## DANGERS OF TANNING

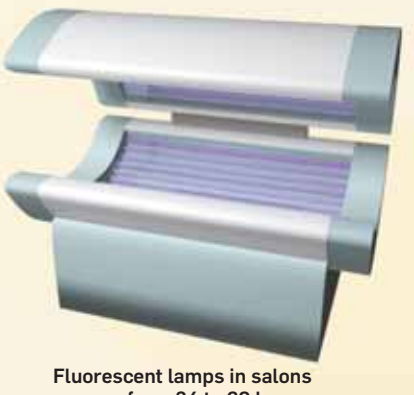
Tanning occurs when skin produces additional pigment (coloring) to protect itself against damage from ultraviolet (UV) rays that come from the sun or tanning booths.

**SUN'S UV INDEX**
About 60,000 cases of melanoma are likely to be diagnosed this year, with almost 8,000 resulting in death. That is even more reason to avoid too much sun, especially in Florida. The state averages eight to nine months a year in the very high to extreme levels, the most in the country. Also, beach sand can reflect 15 percent of UV radiation.




**RECENT STUDIES**
Exposure to tanning beds before age 35 increases melanoma risk by 75 percent. Men and women who used sunbeds were 15 percent more likely to develop melanoma.

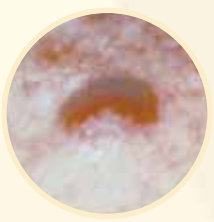
**TANNING LAMPS**
New high pressure sunlamps emit doses of UVA that can be as much as 15 times that of the sun. UVA bulbs used by tanning salons still emit 0.3-7.5 percent UVB, a potentially significant amount.



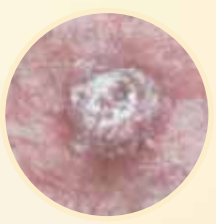
Fluorescent lamps in salons can run from 24 to 60 lamps consuming 100-200 watts.

## DIFFERENT SKIN CANCERS

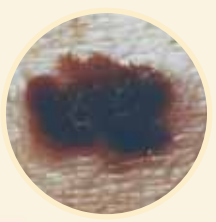
1. Basal cell carcinoma begins as a non-healing scabby area that doesn't go away. It is most common, but highly treatable.



2. Squamous cell carcinoma begins with a sore that never heals. It can be painful and spread to other parts of the body.



3. Malignant melanoma looks like a dark lesion with uneven color and surface and could rise from existing mole. It's the deadliest if detected late.



## SELF-EXAMINATION

Almost 95 percent of skin cancers are highly treatable if detected in their early stages. Here's what to look for:

**Asymmetry**



**Irregular border**

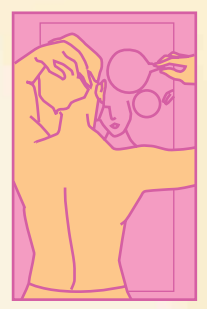
**Color varies in shades**

**Diameter greater than 6 mm.**

Examine your body front and back in the mirror, then right and left with arms raised.

Bend elbows and look carefully at forearms, upper underarms and palms.

Look at the backs of your legs and feet, the spaces between your toes and on the sole.



Examine the backs of your neck and scalp with a hand mirror. Part hair for a closer look.

Finally, check your back and buttocks with a hand mirror.

## GUIDELINES AND PROTECTIVE MEASURES TO FOLLOW

1. Topical sunscreen
FDA approved Mexoryl SX for sale in the United States, which blocks UVA rays (290-400nm). Lancome's UV expert with mexoryl is also available at department stores. Also, Anthelios SX is available at CVS or online.

Other broad spectrum sunscreens include Blue Lizard and Neutrogena's Helioplex products available at drugstores.


2. Wear sunglasses to prevent eye damage.
3. Avoid sunlamps.
4. Avoid direct sunlight from 10 a.m. to 4 p.m.
5. Use SunSignals UV sensors, stickers that change colors to indicate too much sun exposure. Available at www.SunSignals.com

6. UPF (ultraviolet protection factor clothing). Rashguard has UPF 50+.
7. Solarweave line of clothes found at www.shadyladyproducts.com perfected 100% cotton T-shirt that achieves UPF up to 40-50+.
8. Casual everyday clothes, such as the Solumbra line with 30+ SPF clothes found at www.sunprecautions.com.


Sources: Federal Trade Commission; U.S. Food and Drug Administration; U.S. Environmental Protection Agency SunWise Program; International Journal of Cancer; Skin Cancer Foundation; American Cancer Society; American Academy of Dermatology; The Wall Street Journal Online; Abclocal.go.com

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