

# **The Darker Side of Tanning**

Public health experts and medical professionals are continuing to warn people about the dangers of ultraviolet (UV) radiation from the sun, tanning beds, and sun lamps. Two types of ultraviolet radiation are Ultraviolet A (UVA) and Ultraviolet B (UVB). UVB has long been associated with sunburn while UVA has been recognized as a deeper penetrating radiation.

Although it's been known for some time that too much UV radiation can be harmful, new information may now make these warnings even more important. Some scientists have suggested recently that there may be an association between UVA radiation and malignant melanoma, the most serious type of skin cancer.

## **What are the dangers of tanning?**

UV radiation from the sun, tanning beds, or from sun lamps may cause skin cancer. While skin cancer has been associated with sunburn, moderate tanning may also produce the same effect. UV radiation can also have a damaging effect on the immune system and cause premature aging of the skin, giving it a wrinkled, leathery appearance.

## **But isn't getting some sun good for your health?**

People sometimes associate a suntan with good health and vitality. In fact, just a small amount of sunlight is needed for the body to manufacture vitamin D. It doesn't take much sunlight to make all the vitamin D you can use certainly far less than it takes to get a suntan!

## **Are people actually being harmed by sunlight?**

Yes. The number of skin cancer cases has been rising over the years, and experts say that this is due to increasing exposure to UV radiation from the sun, tanning beds, and sun lamps. More than 1 million new skin cancer cases are likely to be diagnosed in the U.S. this year.

## **But aren't the types of skin cancer caused by the sun, tanning beds, and sun lamps easily curable?**

Not necessarily. Malignant melanoma, now with a suspected link to UVA exposure, is often fatal, if not detected early. The number of cases of melanoma is rising in the U.S., with an estimated 38,300 cases and 7,300 deaths anticipated this year.

## **Why doesn't the skin of young people show these harmful effects?**

Skin aging and cancer are delayed effects that don't usually show up for many years after the exposure. Unfortunately, since the damage is not immediately visible, young people are often unaware of the dangers of tanning. Physicians and scientists are especially

concerned that cases of skin cancer will continue to increase as people who are now in their teens and twenties reach middle age.

**But why is it that some people can tan for many years and still not show damage?**

People who choose to tan are greatly increasing their risk of developing skin cancer. This is especially true if tanning occurs over a period of years, because damage to the skin accumulates. Unlike skin cancer, premature aging of the skin will occur in everyone who is repeatedly exposed to the sun over a long time, although the damage may be less apparent and take longer to show up in people with darker skin.

**Who is at greatest risk in the sun?**

People with skin types I and II are at greatest risk. Which skin type are you?

**Skin Sunburn and Tanning History**

Type	According to Skin Type
I	Always burns; never tans; sensitive ("Celtic")
II	Burns easily; tans minimally
III	Burns moderately; tans gradually to light brown (Average Caucasian)
IV	Burns minimally; always tans well to moderately brown (Olive Skin)
V	Rarely burns; tans profusely to dark (Brown Skin)
VI	Never burns; deeply pigmented, not sensitive (Black Skin)

**Since most sun lamps and tanning beds emit UVA radiation, doesn't that make them safer than natural sunlight?**

No. It's true that most sun lamps emit mainly UVA radiation, and that these so-called "tanning rays" are less likely to cause a sunburn than UVB radiation from sunlight. But, contrary to the claims of some tanning parlors, that doesn't make them safe. UVA rays have a suspected link to malignant melanoma, and, like UVB rays, they also may be linked to immune system damage.

**What's the government's position on using sun lamp products found in tanning parlors and in homes?**

The Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) encourage people to avoid use of tanning beds and sun lamps.

You can get a fact sheet on the hazards of indoor tanning from FDA's Facts on Demand system by calling 18008990381; the information will be faxed to you on the same day (select 2 and then Division of Device User Programs and Systems Analysis or

DDUPSA). You can also go to the FDA Home Page on the World Wide Web at <http://www.fda.gov>. At this point, click on the Medical Devices and Radiological Health icon, click on Program Areas, then Research Areas and choose [Radiation Injuries](#).

Information on skin cancer is available on the American Academy of Dermatology (AAD) Home Page on the World Wide Web at <http://www.aad.org>.

### **What do medical professionals say about tanning?**

The American Medical Association (AMA) and the AAD have warned people for many years about the dangers of tanning. In fact, AMA and AAD have urged action that would ban the sale and use of tanning equipment for nonmedical purposes. Doctors and public health officials have recommended the following steps to minimize the sun's damage to the skin and eyes:

- Plan your outdoor activities to avoid the sun's strongest rays. As a general rule, avoid the sun between 10 a.m. and 4 p.m.
- Wear protective covering such as broadbrimmed hats, long pants and longsleeved shirts to reduce exposure.
- Wear sunglasses that provide 100% UV ray protection.
- Always wear a broadspectrum sunscreen with Sun Protection Factor (SPF) 15 or more, which will block both UVA and UVB when outdoors and reapply it according to manufacturer's directions.

For more information on the levels of ultraviolet radiation reaching your area at noon, you can get the Ultraviolet Index (UVI) from local newspapers, radio or TV in many cities. The UVI is a number from 0 to 10. The higher the number, the more intense the exposure. Call the EPA Hotline for more information on the UVI at 18002961996.

If you believe that some damage has already been done:

- Seek immediate medical attention if you receive skin or eye damage from the sun or if you experience an allergic reaction to the sun.
- See your dermatologist or personal physician if you develop an unusual mole, a scaly patch or a sore that doesn't heal.
- Always wear a broadspectrum sunscreen with Sun Protection Factor (SPF) 15 or more, which will block both UVA and UVB when outdoors and reapply it according to manufacturer's directions.

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