

Tanning Beds: Neither Safe Nor For Your Good Health

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During the dark days of our Oregon winter many people, especially young women and teenagers, long to banish their pale skin in favor of a summer tan. The chaise lounge on the back porch not being an option, many turn to tanning salons.

Those in pursuit of the perfect off-season or pre-vacation tan are usually unaware of the real and serious long-term risks of excessive ultraviolet (UV) light. Worst among them is the risk of melanoma, the deadliest type of skin cancer. Teenagers, especially those fair-skinned and red-haired, are considered the most vulnerable.

Skin cancer is the most common type of cancer in the United States. According to American Cancer Society estimates, more than 1 million cases of basal cell or squamous cell cancers occur every year. These types of skin cancer are highly curable, but about 1,000 to 2,000 Americans die from them each year.

Melanoma, however, is more dangerous. This type of cancer strikes more than 59,000 people in the U.S. each year, and kills more than 7,000. Melanoma is becoming more common, and the popularity of tanning and tanning beds is part of the reason.

Like tanning in the sun, tanning in a bed exposes the skin to damaging UV radiation. This exposure raises the risk of developing skin cancer, even if a person doesn't get burned. Doctors have long known that melanoma is related less to steady daily exposure, and more to episodic intense exposure, to sun or other forms of UV light, particularly before the age of 18.

The sun's rays contain two types of UV radiation that reach your skin: UVA and UVB. UVB radiation burns the upper layers of the skin (the epidermis), causing sunburns, and premature skin aging. UVB rays can also lead to basal cell and squamous cell skin cancers, and contribute to the development of melanoma.

UVA radiation is what makes people tan. UVA rays penetrate to the lower layers (the dermis) of the skin, where they trigger cells called melanocytes to produce melanin, the brown pigment that causes tanning.

Melanin is the body's way of protecting skin from burning. Dark-skinned people tan more deeply than lighter-skinned people because their melanocytes produce more melanin. But just because a person doesn't burn does not mean that he or she is also protected against skin cancer.

UVA rays make you tan, but they can also cause serious damage. Because UVA rays reach the deepest skin layers, where blood vessels and nerves are found, the rays may damage a person's immune system, making it harder to fight off diseases, and leading to illnesses like melanoma.

In the past, melanoma mostly affected people in their fifties or older, but today doctors see patients in their teens and twenties with this type of cancer. Research is proving that this is in large part due to an increase in the use of tanning beds and sun lamps, which have high levels of UVA rays.

Contrary to industry claims, there is no evidence that tanning in a bed is any safer than tanning in the sun. In fact, some tanning beds release much stronger UV light than the sun. In July, the World Health Organization added tanning beds and sun lamps to its list of cancer-causing agents in humans, and stated that “the risk of cutaneous melanoma is increased by 75% when use of tanning devices starts before 30 years of age.”

In the U.S., there exists no nationwide regulation governing the use of tanning salons by young people. According to a 2004 survey, 1 in 10 youth ages 11 to 18 years uses a tanning bed each year. Young women in particular are the heaviest users of tanning beds, and are at the greatest risk of causing harm to themselves.

Wisconsin is the only state that bans indoor tanning among kids under 16. In 28 other states, teens under 16 or 18 years of age need parental consent or accompaniment. In Oregon, state regulations mandate that tanning facilities must post a sign that reads, “Persons under age 18 are required to have parent or legal guardian sign authorization to tan in the presence of a tanning facility operator.”

The U.S. Food and Drug Administration (FDA) requires tanning salons to direct all customers to wear protective eye goggles. The FDA also requires labels on tanning beds that warn of skin aging, skin cancer and permanent eye injury.

Additionally, the FDA recommends that adults keep tanning-bed exposure to no more than three times a week during the first week of tanning. However, a survey, published in the September issue of the journal *Archives of Dermatology*, of more than 3,600 tanning salons in 50 states found that nearly three in four would turn a blind eye to that guideline when it came to teenage customers.

Most salons said they would readily allow teenagers to tan seven times a week. Clearly, tougher warnings and restrictions should be placed on tanning bed use, and on tanning facilities.

In summary, young women and teens today are using tanning beds excessively to acquire tans which are seen as socially desirable. However, the consequence of this usage has been a precipitous rise in the number of skin cancer cases.

Most teens don't realize how serious skin cancer can be because it doesn't have an immediate detrimental effect. While roughly 80 percent of a person's lifetime sun exposure occurs before the age of 18, most skin cancers occur later in life.

But recent decades have seen melanoma and other skin cancers becoming a disease that strikes young adults and even older teens. Young people need to understand that skin cancer can be fatal, and even when not, treatment can be painful and lead to scarring.

Young people need also to understand that, contrary to the promotions of a tanning industry which makes billions off of marketing a carcinogenic product to them, tanning clearly does not make you healthy.