TANNING INDUSTRY EXPOSED:
EVIDENCE DEMONSTRATES LINK BETWEEN INDOOR TANNING AND SKIN CANCER; DERMATOLOGISTS COMMITTED TO EDUCATING PUBLIC ON RISKS

Information presented at American Academy of Dermatology’s Summer Academy Meeting by Bruce A. Brod, MD, FAAD, a board-certified dermatologist and clinical associate professor of dermatology at the University of Pennsylvania School of Medicine in Philadelphia.

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OVERVIEW:
The number of people affected by skin cancer has increased dramatically in the United States. By current estimates, more than 3.5 million skin cancers in more than 2 million people are diagnosed annually. The incidence rates of melanoma, the deadliest form of skin cancer, have been increasing for at least 30 years. In fact, melanoma is the most common form of cancer for young adults, 25-29 years old, and the second most common form of cancer for adolescents and young adults, 15-29 years old.

The major risk factor for melanoma is exposure to ultraviolet light, and studies show that exposure to tanning beds increases the risk of melanoma – especially in women aged 45 years or younger. Despite attempts by the tanning industry to convince the public that indoor tanning is safe, dermatologists have long argued that tanning beds are a public health hazard and strong new data continues to support these claims.

TANNING INDUSTRY CLAIM: THERE IS NOT STRONG EVIDENCE LINKING INDOOR TANNING TO SKIN CANCER

Over the past 20 years, dermatologists have been unwavering in their commitment to studying the association between skin cancer and indoor tanning. Now, a host of new studies released over the past five years provide strong evidence that tanning beds can cause skin cancer and are a serious health threat – especially to young people.

- The United States Department of Health and Human Services and the World Health Organization’s International Agency for Research on Cancer have classified UV radiation from tanning devices as dangerous to humans and carcinogenic (cancer-causing), just like tobacco smoke.
  - A review of seven studies found a 75 percent increase in the risk of melanoma in those who had been exposed to UV radiation from indoor tanning.
- A study released in 2010 examined 1,167 cases of melanoma diagnosed in people aged 25 to 59 in Minnesota between 2004 and 2007. Information gathered from participants included use of indoor tanning devices, age of first use of tanning beds, duration of use, years of usage and burns associated with indoor tanning. The study showed that 62.9 percent of participants diagnosed with melanoma had tanned indoors, and the risk increased with use of tanning beds regardless of the age when indoor tanning began.
TANNING INDUSTRY CLAIM: INDOOR TANNING IS A CONTROLLED WAY TO RECEIVE SUN EXPOSURE

- The tanning industry claims that if indoor tanning is banned, people will just go outside to receive sun exposure. However, dermatologists argue that people in northern states are not exposed to intense, natural ultraviolet light for most of the year. For example, without tanning beds, residents in Boston would not have a lot of access to sun exposure outdoors in January.
- Cities with long, gray winters have a higher number of tanning salons than in cities where the weather is warmer year-round. For example, a 2011 report found Minneapolis had 9.93 tanning salons per 100,000 people compared to Miami, which had 5.24 tanning salons per 100,000 people.9
  - Research shows that in the largest U.S. cities, there are nearly 12 indoor tanning salons for every 100,000 people.8

TANNING INDUSTRY CLAIM: INDOOR TANNING PROVIDES HEALTH BENEFITS

- Tanning beds emit two types of harmful rays – ultraviolet A (UVA) and ultraviolet B (UVB). While UVB rays are the burning rays (which are blocked by window glass) and are the main cause of sunburn, UVA rays (which pass through window glass) penetrate deeper into the thickest layer of the skin. Research shows that exposure to both rays from the sun or indoor tanning devices is a known risk factor for the development of skin cancer.9,10,11,12
- The tanning industry also touts UVA as a good source of vitamin D. However, the Federal Trade Commission (FTC) issued a consent order prohibiting the Indoor Tanning Association from making false claims about the health benefits of indoor tanning, and dermatologists point out that UV rays are not very efficient in creating vitamin D in the skin.13 In addition, the American Academy of Dermatology recommends that the public obtain vitamin D safely from a healthy diet that includes food naturally rich in vitamin D, foods and beverages fortified with vitamin D, and/or dietary supplements, rather than by sun exposure or indoor tanning, which can cause skin cancer.

TANNING INDUSTRY CLAIM: TANNING BED OPERATORS ARE WELL-TRAINED AND ADHERE TO HIGH STANDARDS

- A 2012 U.S. House of Representatives Committee on Energy and Commerce investigative report, "False and Misleading Health Information Provided by the Indoor Tanning Industry," found that “the vast majority of tanning salons contacted by the Committee investigators provided false information about the serious risks of indoor tanning and made specious claims about the health benefits that indoor tanning provides.”14
  - Specifically, the Committee report found that:
    - nearly all salons denied the known risks of indoor tanning;
    - four out of five salons falsely claimed that indoor tanning is beneficial to a young person’s health, and salons used many approaches to downplay the health risks of indoor tanning;
    - tanning salons fail to follow FDA recommendations on tanning frequency, and;
    - tanning salons target teenage girls in their advertisements.“
- The American Academy of Dermatology Association opposes indoor tanning and supports a ban on the production and sale of indoor tanning equipment for non-medical purposes. Unless and until the FDA is able to do so, the American Academy of Dermatology Association supports mandatory training of tanning device operators to correctly operate the tanning facility and tanning devices, recognize injury or overexposure to ultraviolet radiation, identify and discourage fair skinned patrons from tanning, and implement emergency procedures in case of injury.
Tanning Industry Claims

AMERICAN ACADEMY OF DERMATOLOGY EXPERT ADVICE:
"Dermatologists are working harder than ever to expose the aggressive and misleading claims by the tanning industry," said Dr. Brod. "While several states now have laws making it harder for teenagers to have access to indoor tanning and others are considering enacting some type of indoor tanning regulation, there are still many hurdles to overcome to persuade more legislators to take a stand against this controllable health risk – especially since an alarming number of young people are using tanning beds."

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Headquartered in Schaumburg, Ill., the American Academy of Dermatology (Academy), founded in 1938, is the largest, most influential, and most representative of all dermatologic associations. A sister organization to the Academy, the American Academy of Dermatology Association is the resource for government affairs, health policy and practice information for dermatologists, and plays a major role in formulating policies that can enhance the quality of dermatologic care. With a membership of more than 17,000 physicians worldwide, the Academy is committed to: advancing the diagnosis and medical, surgical and cosmetic treatment of the skin, hair and nails; advocating high standards in clinical practice, education, and research in dermatology; and supporting and enhancing patient care for a lifetime of healthier skin, hair and nails. For more information, contact the Academy at 1 (888) 462-DERM (3376) or visit www.aad.org. Follow the Academy on Facebook (American Academy of Dermatology) or Twitter (@AADskin).

References