

Committee Chair and members of the Senate Committee on Public Health and Welfare:

I would like to support HB 2369 which recently passed the full House. My particular interest in this issue stems from my focus on the treatment of one of the deadliest form of skin cancer, malignant melanoma. I am a surgical oncologist (cancer surgeon) who cares for individuals with melanoma in Kansas City. On average, I see five new cases of melanoma weekly. While many of my patients will have earlier forms of the cancer, at best, they will bear significant scars from the needed effective surgical treatment of the disease. Even in early stages, however, my patients are at risk of dying of their disease. In more advanced stages of the disease there is an higher risk of succumbing to the disease. As the Kansas State Chair for the Commission on Cancer, I have noted that the state of Kansas has a higher incidence of melanoma than most of the rest of the nation. Like some other cancers, a strong focus needs to be placed on prevention.

Skin cancer is the most common cancer in the United States with more than 2 million cases every year. The incidence of malignant melanoma is increasing at a rate greater than any other type of cancer. The rate has been increasing every year for the last thirty years. The incidence is increasing the greatest in young women. The American Cancer Society estimates that there were 73,870 new cases of melanoma in the United States last year with 9,940 deaths (1). While some of the risk factors like the number of moles and skin color are inherent, other risk factors like ultraviolet exposure are modifiable.

Exposure to ultraviolet light is associated with an increased risk of skin cancer, including malignant melanoma. Ultraviolet light exposure can be from both natural and artificial sources, particularly tanning beds. In 2009, the World Health Organization's International Agency for Research on Cancer listed ultraviolet radiation and indoor tanning beds as a Class I carcinogen (same class as cigarettes, benzene, and asbestos) .(2) Indoor tanning beds use an ultraviolet bulb to great ultraviolet radiation that gets delivered in concentrated bursts, mostly ultraviolet A radiation. The body then responds by attempting to prevent further damage by stimulating melanocytes to produce more melanin. Even the best tan, however, leads to negligible protection (estimated to be approximately SPF4) so a tan does not mitigate the need for sunblock.

The Food and Drug Administration reports that more than 30 million Americans use tanning beds annually.(3) Furthermore, the Youth Risk Behavior Surveillance System reported in 2011 that 13% of high school students used indoor tanning. More specifically, 29% of white high school girls used indoor tanning.(4)

Exposure to ultraviolet radiation is associated with increasing the risk of skin malignancy at all ages. Exposure at earlier ages, however, is associated with a higher risk of skin malignancy. The latency period for developing skin malignancy is usually greater than a decade. Using a tanning bed increases the risk for squamous cell carcinoma by 67% and basal cell carcinoma by 29%. This risk is particularly higher when the tanning bed use begins before 25 years of age.⁽⁵⁾ Exposure to tanning beds before the age of 35 years is associated with a 75% increased risk of malignant melanoma. For this reason, limiting the use of tanning bed use by minors will have profound implications in reducing their risk of skin malignancy.

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State Chair for Kansas
Commission on Cancer

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2. El Ghissassi F, Baan R, Straif K, et al. A review of human carcinogens—part D: radiation. *Lancet Oncol* 2009; 10:751-2.
3. http://www.cdc.gov/cancer/skin/basic_info/indoor_tanning.htm
4. Guy GP, Berkowitz Z, Watson M, et al. Indoor tanning among young non-Hispanic white females. *JAMA Intern Med* 2013; Aug 19.
5. Wehner, et al. (2012). "Indoor Tanning and non-melanoma skin cancer: systematic review and meta-analysis." *British Medical Journal*. October 2012.
6. Dore, J-F and Chignol, M-C. (2012). "Tanning salons and skin cancer." *Photochemical and Photobiological Sciences* 2012; 11:30.