

**Testimony of  
Leah M. Ferrucci, PhD, MPH**

**SB 872 – An Act Concerning the Use of Indoor Tanning Devices by Persons under Eighteen  
Years of Age**

Senator Gerratana, Representative Johnson, and other distinguished members of the Public Health Committee:

My name is Leah Ferrucci and I am a cancer epidemiologist at the Yale School of Public Health. Scientific evidence is clear that indoor tanning is a serious risk to public health. I urge you to take action on this bill to more closely regulate indoor tanning to protect the young people of Connecticut.

Skin cancer is increasing in incidence, especially in young people. The causal association between indoor tanning and melanoma, the most lethal type of skin cancer, has been confirmed, with the most harmful effects in individuals who used tanning beds under the age of 35 (1, 2).

Recent work done by our research team at the Yale School of Public Health and Yale Cancer Center extended these findings to link indoor tanning with basal cell carcinoma, a type of non-melanoma skin cancer, in people under age 40. Basal cell carcinoma is not only the most common form of skin cancer, but also the most common cancer in humans; surpassing all other cancer types combined.

We found that young people who had tanned indoors had a 69 percent increased risk of early-onset basal cell carcinoma compared to those who never used tanning beds (3). **Based on our study of young people in Connecticut, approximately a quarter of the overall cases of early-onset basal cell carcinoma—including 43 percent of cases in young women—could be prevented if individuals never tanned indoors.** A very recent 2012 meta-analysis of all epidemiologic studies found indoor tanning was significantly associated with non-melanoma skin cancer; again a stronger association was present for indoor tanning at younger ages (4).

Recent studies on indoor tanning are most relevant to the issue being discussed today. Our data show the true picture of indoor tanning among young people in Connecticut. Indoor tanning in our study was done almost exclusively in commercial facilities, and there was an increased risk of skin cancer even for individuals who never experienced a burn while using tanning beds.

The landscape of indoor tanning initiation and patterns of use further strengthens the need for a ban on indoor tanning by minors. Tanning beds are used primarily by older adolescents and young adults (5). In our study in Connecticut, half of those who had tanned indoors started using tanning beds before age 18 (3).

Legislative action is also necessary because the risks of indoor tanning are not well understood by the general public. Much of this confusion may stem from the indoor tanning industry's marketing practices and conveyance of false and misleading health information. A recent investigative report prepared by the Minority Staff of the Committee on Energy and Commerce

in the United States House of Representatives found that the indoor tanning industry targeted teenage girls with advertising, denied known health risks, provided false information on health benefits, and did not follow Food and Drug Administration recommendations on frequency (6).

The changing pattern of skin cancer incidence connected to indoor tanning has important implications. Currently, on a population level, initial skin cancers are occurring at younger and younger ages than seen historically. As a result, we will likely see significant increases in second and recurrent skin cancers in these individuals, and all their associated medical costs for decades to come — unless something is done to halt this disturbing trend.

In 2009, the World Health Organization's International Agency for Research on Cancer classified ultraviolet-emitting tanning devices as carcinogenic to humans, akin to tobacco smoke and asbestos (7). Our research, reflecting what is happening to the young people in our state, further strengthens a compelling body of evidence showing that indoor tanning is carcinogenic.

Current public health policies protect children from other known carcinogens, such as tobacco products. It is inconceivable that we should allow children to engage in indoor tanning, a behavior that is a known human carcinogen and will adversely impact their health in a predictable fashion. As stated in a perspective piece in the *New England Journal of Medicine* (8), "Regulation of this [the indoor tanning] industry may offer one of the most profound cancer prevention opportunities of our time." I urge you to take this opportunity for the young people of Connecticut.

#### References

1. International Agency for Research on Cancer Working Group on artificial ultraviolet (UV) light and skin cancer. The association of use of sunbeds with cutaneous malignant melanoma and other skin cancers: A systematic review. *Int J Cancer*. 2007;120(5):1116-22.
2. Boniol M, Autier P, Boyle P, Gandini S. Cutaneous melanoma attributable to sunbed use: systematic review and meta-analysis. *BMJ*. 2012;345:e4757.
3. Ferrucci LM, Cartmel B, Molinaro AM, Leffell DJ, Bale AE, Mayne ST. Indoor tanning and risk of early-onset basal cell carcinoma. *J Am Acad Dermatol*. 2012;67:552-62.
4. Wehner MR, Shive ML, Chren MM, Han J, Qureshi AA, Linos E. Indoor tanning and non-melanoma skin cancer: systematic review and meta-analysis. *BMJ*. 2012;345:e5909.
5. Coups E, Phillips L. A more systematic review of correlates of indoor tanning. *J Eur Acad Dermatol Venereol*. 2011;25:610-6.
6. U.S. House of Representatives Committee on Energy and Commerce - Minority Staff. *False and Misleading Health Information Provided to Teens by the Indoor Tanning Industry, Investigative Report*. February 2012. Available at: <http://democrats.energycommerce.house.gov/sites/default/files/documents/False-Health-Info-by-Indoor-Tanning-Industry-2012-2-1.pdf>
7. El Ghissassi F, Baan R, Straif K, Grosse Y, Secretan B, Bouvard V, et al. A review of human carcinogens--part D: radiation. *Lancet Oncol*. 2009;10:751-2.
8. Fisher DE, James WD. Indoor tanning--science, behavior, and policy. *N Engl J Med*. 2010;363:901-3.