

Position Statement on

Indoor Tanning

**(Approved by the Board of Directors: October 1998;
Amended by the Board of Directors: February 7, 2004; November 14, 2009;
August 18, 2012; November 22, 2014; August 22, 2015; November 18, 2023)**

The American Academy of Dermatology/ Association (AAD/A) opposes sunlamps and sunlamp products (“sunlamp products”), otherwise known as indoor tanning beds and booths, and supports prohibiting the sale and use of sunlamp products. The United States Department of Health and Human Services and the World Health Organization classify ultraviolet (UV) radiation from sunlamps as carcinogenic to humans.¹ In addition, the then-Acting Surgeon General of the United States elevated skin cancer to a national health priority.² Use of sunlamp products represents a significant and avoidable risk factor for the development of both melanoma and non-melanoma skin cancers.³⁻⁸ Other adverse effects of sunlamp use include: burns, premature aging of the skin, infection, ocular disease, and exacerbation of certain serious light sensitive conditions including lupus.⁹⁻¹² Recognizing these risks, the Federal Trade Commission (FTC) has prohibited the Indoor Tanning Association from making any false or misleading claims with regard to the relationship between the use of sunlamp products and the risk of skin cancer, as well as asserted health benefits of indoor tanning.

With the rising incidence of melanoma and non-melanoma skin cancer in the United States¹³⁻¹⁹, as well as increasing usage of sunlamp products by the public^{10, 20-25}, the AAD/A encourages and supports implementation of federal, state and local initiatives aimed at regulating the use of all sunlamp products. The AAD/A encourages appropriate funding and resources for the regulatory agencies responsible for enforcement of those regulations.

The AAD/A commends the Food and Drug Administration (FDA) for reclassifying sunlamp products to allow for greater regulatory oversight due to the hazards associated with this device and requiring sunlamp manufacturers to label sunlamp products with a visible black-box warning that explicitly states that the sunlamp product should not be used on persons under the age of 18 years. Further, marketing materials must contain similar warnings and inform consumers of the risk of skin cancer. The AAD/A urges the FDA to take additional action that will prohibit the use of any sunlamp product by minors under the age of 18 years. Concurrently, AAD/A advocates at the state level to prohibit minors under 18 from using the devices. Additionally, we encourage education of the public on the dangers of sunlamps by educational institutions, government, industry, public health and medical professionals.

Unless and until the FDA takes action to prohibit the sale and use of sunlamp products, which would supersede state law, the AAD/A supports the following requirements for all sunlamp products (for commercial and unsupervised use):

1. No minor under 18 years old should be permitted to use sunlamp products.
2. A Surgeon General’s warning should be placed on all sunlamp products.
3. The warning label required of manufacturers for all sunlamp products should read,
“Ultraviolet radiation is a known human carcinogen and can cause melanoma and non-melanoma skin cancers and lead to other nonreversible forms of damage to the skin.”
4. A warning sign listing known hazards, including the development of melanoma and non-melanoma skin cancer, must be placed in an accessible location next to the sunlamp product when used in indoor tanning and other similar facilities. Additional warning information should include FDA’s recommended dose and frequency limits for usage of all sunlamp products.
5. Indoor tanning facilities should be required to provide each patron with a written warning describing the known hazards and consequences of exposure to Ultraviolet A and Ultraviolet B radiation (UVA and UVB) from sunlamp products, and patrons should be required to sign the warning statement before they can receive tanning services.

Owner: Advocacy & Policy

Reviewed: 11/18/2023

Indoor Tanning

Page 2 of 4

6. All sunlamp products should be inspected regularly for defects as well as compliance with all performance standards by a local or state agency; written reports should be kept for each inspection.
7. Sunlamp product operators should receive comprehensive training to correctly operate the sunlamp products, recognize injury or overexposure to ultraviolet radiation, and implement emergency procedures in case of injury.
8. Sunlamp product operators should be required to provide sanitary, protective eyewear to each patron for use during tanning. Sunlamp products must be thoroughly sanitized after every use.
9. Sunlamp product operators should limit exposure time to the period recommended by the device manufacturer on the sunlamp product or in the device operating manual. This exposure schedule must be in compliance with all FDA regulations and performance standards.
10. Published data assessing the use of commercial sunlamps for the treatment of skin disease in pediatric and adolescent populations is lacking. Commercial sunlamps should not be considered a substitute for physician-directed and supervised phototherapy in these populations. Current medical literature assessing the use of commercial sunlamps as a treatment for skin disease in adult populations is extremely limited. As such, the use of commercial sunlamps should generally not be considered a substitute for physician-prescribed phototherapy in adults.
11. No person or facility should advertise the use of any sunlamp devices as having positive health benefits, including use of phrases such as “safe,” “safe tanning,” “no harmful rays,” “no adverse effect,” or similar wording or concepts. In addition, advertisements touting benefits of vitamin D should contain a disclosure: “You do not need to become tan for your skin to make vitamin D. The safest way to obtain vitamin D is through diet and supplementation. Exposure to ultraviolet radiation is a known risk factor in the development of melanoma and non-melanoma skin cancers and can cause serious eye injury.”

REFERENCES

- ¹ NTP (National Toxicology Program). 2021. Report on Carcinogens, Fifteenth Edition. Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service. <https://ntp.niehs.nih.gov/go/roc15>
DOI: <https://doi.org/10.22427/NTP-OTHER-1003>
- ² U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Prevent Skin Cancer. Washington, DC: U.S. Dept of Health and Human Services, Office of the Surgeon General; 2014.
- ³ Boniol M, Autier P, Boyle P, Gandini S. Cutaneous melanoma attributable to sunbed use: systematic review and meta-analysis. *BMJ*. 2012;345:e4757.
- 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 Green A, Autier P, Boniol M, Boyle P, Dore JF, Gandini S, et al. The association of use of sunbeds with cutaneous malignant melanoma and other skin cancers: a systematic review. *Intl J Cancer*. 2007;120(5):1116-1122
- ⁶ Karagas MR, Stannard VA, Mott LA, Slattery MJ, Spencer SK, Weinstock MA. Use of tanning devices and risk of basal cell and squamous cell skin cancers. *J Natl Can Inst*. 2002;94(3):224-226.
- ⁷ O'Sullivan DE, Hillier TWR, Brenner DR, Peters CE, King WD. Indoor tanning and the risk of developing non-cutaneous cancers: a systematic review and meta-analysis. *Cancer Causes Control*. 2018;29(10):937-950. doi:10.1007/s10552-018-1070-8
- ⁸ O'Sullivan DE, Brenner DR, Demers PA, et al. Indoor tanning and skin cancer in Canada: A meta-analysis and attributable burden estimation. *Cancer Epidemiol*. 2019;59:1-7. doi:10.1016/j.canep.2019.01.004
- ⁹ Cokkinides V, Weinstock M, Lazovich D, Ward E, Thun M. Indoor tanning use among adolescents in the US, 1998 to 2004. *Cancer* 2009;115(1):190-198.
- ¹⁰ Lostritto K, Ferrucci LM, Cartmel B, Leffell DJ, Molinaro AM, Bale AE, et al. Lifetime history of indoor tanning in young people: a retrospective assessment of initiation, persistence, and correlates. *BMC Pub Health*. 2012;12:118
- ¹¹ Whitmore SE, Warwick ML, Potten CS. Tanning salon exposure and molecular alterations. *J Amer Acad Dermatol*. 2001;44(5):775-780.
- ¹² Walters BL, Kelley TM. Commercial tanning facilities: a new source of eye injury. *Am J Emerg Med*. 1987;5(5):386-389.
- ¹³ American Cancer Society. *Cancer Facts & Figures 2023*. Atlanta: American Cancer Society; 2023.
- ¹⁴ Rogers HW, Weinstock MA, Feldman SR, Coldiron BM. Incidence Estimate of Nonmelanoma Skin Cancer (Keratinocyte Carcinomas) in the US Population, 2012. *JAMA Dermatol*. 2015 Apr 30. doi:10.1001/jamadermatol.2015.1187.
- ¹⁵ Christenson LJ, Borrowman TA, Vachon CM, Tollefson MM, Otley CC, Weaver AL, et al. Incidence of basal cell and squamous cell carcinomas in a population younger than 40 years. *JAMA*. 2005;294(6):681-690.
- ¹⁶ Little EG, Eide MJ. Update on the current state of melanoma incidence. *Derm Clin* 2012;30(3):355-361.
- ¹⁷ Guy GP Jr, Thomas CC, Thompson T, et al. Vital signs: melanoma incidence and mortality trends and projections - United States, 1982-2030. *MMWR Morb Mortal Wkly Rep*. 2015;64(21):591-596.
- ¹⁸ Saginala K, Barsouk A, Aluru JS, Rawla P, Barsouk A. Epidemiology of Melanoma. *Med Sci (Basel)*. 2021;9(4):63. Published 2021 Oct 20. doi:10.3390/medsci9040063
- ¹⁹ Aggarwal P, Knabel P, Fleischer AB Jr. United States burden of melanoma and non-melanoma skin cancer from 1990 to 2019. *J Am Acad Dermatol*. 2021;85(2):388-395. doi:10.1016/j.jaad.2021.03.109
- ²⁰ Centers for Disease Control and Prevention (CDC). Use of indoor tanning devices by adults--United States, 2010. *MMWR*. 2012;61(18):323.
- ²¹ Eaton DK, Kann L, Kinchen S, Shanklin S, Flint KH, Hawkins J, et al. Youth risk behavior surveillance - United States, 2011. *MMWR Surveill Summ* 2012;61(4):1-162.
- ²² Buller DB, Cokkinides V, Hall HI, Hartman AM, Saraiya M, Miller E, et al. Prevalence of sunburn, sun protection, and indoor tanning behaviors among Americans: review from national surveys and case studies of 3 states. *J Am Acad Dermatol*, 2011;65(5 Suppl 1): S114-123.
- ²³ Choi K, Lazovich D, Southwell B, Forster J, Rolnick SJ, Jackson J. Prevalence and characteristics of indoor tanning use among men and women in the United States. *Arch Dermatol*, 2010;146(12):1356-1361.
- ²⁴ Robinson JK, Kim J, Rosenbaum S, Ortiz S. Indoor tanning knowledge, attitudes, and behavior among young adults from 1988-2007. *Arch Dermatol* 2008;144(4), 484-488.

²⁵Gambla WC, Fernandez AM, Gassman NR, Tan MCB, Daniel CL. College tanning behaviors, attitudes, beliefs, and intentions: A systematic review of the literature. *Prev Med.* 2017;105:77-87. doi:10.1016/j.ypmed.2017.08.029

²⁶<https://www.fda.gov/radiation-emitting-products/home-business-and-entertainment-products/sunlamps-and-sunlamp-products-tanning-bedsbooths>

This Position Statement is provided for educational and informational purposes only. It is intended to offer physicians guiding principles and policies regarding the practice of dermatology. This Position Statement is not intended to establish a legal or medical standard of care. Physicians should use their personal and professional judgment in interpreting this Position Statement and applying the information provided herein to the particular circumstances of their individual practice arrangements