

Protecting Teens from Indoor Tanning Will Save Lives



Skin cancer is the most commonly diagnosed cancer in the United States, and rates have been rising for the past 30 years.¹ An estimated 108,420 *invasive* skin cancers will be diagnosed in the U.S. in 2020, and an estimated 100,350 of these cases will be melanoma, the most serious and deadliest form of skin cancer.¹ Additionally, 95,710 cases of *non-invasive* melanomas and millions of cases of basal (BCC) and squamous cell (SCC) skin cancers will also be diagnosed in 2020.¹ In total, 11,480 men and women are expected to die of skin cancer this year, and 6,850 of those deaths will be from melanoma.¹

The greatest avoidable known risk factor for skin cancer is the use of indoor tanning devices. In the U.S., more than 6,000 cases of melanoma can be attributed to indoor tanning annually.² Unfortunately, the desire for a tanned appearance still causes many people, especially young adults and teenagers, to ignore the serious risks and health warnings and use indoor tanning devices. Significant progress has been made in recent years in reducing teen usage of tanning devices, with prevalence dropping from over 15 percent in 2009 to 5.6 percent in 2017.³ This achievement surpassed the Healthy People 2020 goal of 14.0 percent. Work still needs done to further decrease tanning bed usage among teens, as use of indoor tanning devices remains common among high school aged girls.

Harms of UV Radiation and Indoor Tanning

- Indoor tanning devices include beds, booths, and sunlamps that emit ultraviolet (UV) radiation.
- Exposure to UV radiation can lead to DNA damage to skin, resulting in short-term adverse effects such as sunburn, eye damage, fainting, and suppression of the immune system.^{1,4,5}
- The damage of UV radiation is cumulative over an individual's lifetime, with repeated exposure resulting in long-term effects such as premature aging of the skin, wrinkles, solar keratosis, permanent eye damage, and skin and ocular cancers.^{1,5}
- Over 3,200 indoor tanning-related acute injuries are treated in U.S. hospital emergency departments each year, with over 400 of those injuries affecting individuals under the age of 18.⁵
- Tanning before the age of 35 increases the risk of melanoma by 59 percent, squamous cell carcinoma by 67 percent, and basal cell carcinoma by 29 percent.^{6,7} Rates increase even more when tanning devices are used before age 25.⁷
- Research estimates that direct medical care costs for cases of melanoma, squamous cell carcinoma, and basal cell carcinoma attributable to indoor tanning is \$343.1 million annually, with an estimated total economic loss of \$127.3 billion over the lifetime of the individuals affected.⁸

The effects of UV radiation are so harmful that local, state, national, and international officials are calling for additional restrictions on the use of tanning devices, especially among youth under age 18.

- The World Health Organization's (WHO) International Agency for Research on Cancer categorizes tanning devices as its highest cancer risk category (Class 1) – "carcinogenic to humans;"⁹ the same designation given to tobacco products.
- The U.S. Surgeon General released a call to action to prevent skin cancer, naming tanning devices as a risk factor for skin cancer and encouraging these devices be prohibited for individuals under 18, as well as proper enforcement of state laws.¹⁰



Image Citation: The University of Arizona Cancer Center. "Dangers of Tanning Beds." <http://uacc.arizona.edu/sci/skin-cancer-prevention/tanning-bed-danger>.

Teens and Tanning

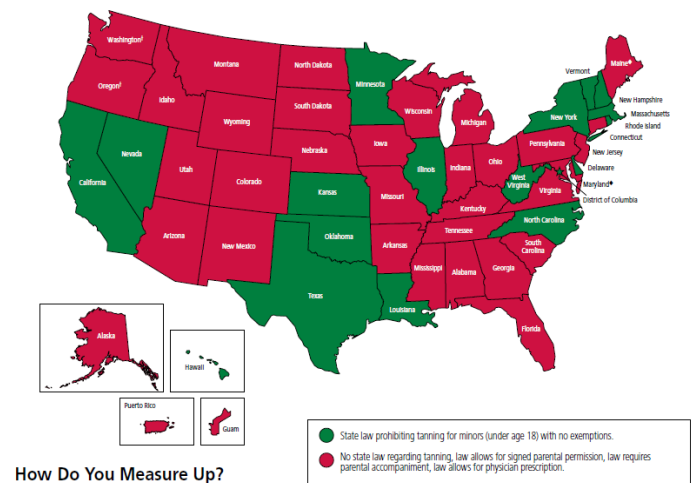
Despite the dangers, misconceptions about the risks of indoor tanning exist, due, in part, to misleading advertising and health claims by the tanning industry.^{11,12} Youth are especially susceptible to the industry's misleading claims, as the industry frequently targets youth in marketing promotions (i.e. back-to-school, prom, and homecoming specials).¹² These campaigns are cause for concern because teens continue to tan at elevated rates.

- One in thirteen high school girls have used a tanning device, with numbers increasing to one in eight by their senior year.¹³
- Nationwide, 5.6 percent of students used an indoor tanning device, but prevalence was higher among non-Hispanic white female high school students at a rate of 10.1 percent.¹³
- Just over 57 percent of teens reported getting a burn from a tanning device or sun within the past year.¹³
- Melanoma incidence rates have decreased slightly among younger non-Hispanic whites, particularly those between 15-24 years of age, thanks, in part, due to decreased use of indoor tanning.¹⁴
- Melanoma is currently the second most common cancer among females aged 15-29 and the third most common cancer among females aged 25-29.¹⁵

The Need for Laws to Prohibit Youth From Using Indoor Tanning Devices

If properly enforced, laws that prohibit the use of indoor tanning devices for individuals under the age of 18 effectively deter youth from using tanning devices and could help to reduce skin cancer incidence and mortality rates across the country.^{16,17,18,19} A recent study found that indoor tanning prevalence among female high school students in states with age restriction laws was 47 percent lower than among those not affected by such laws.²⁰ A Minnesota Department of Health survey found that, since the state's law prohibiting youth under the age of 18 from using indoor tanning devices was passed, the number of 11th grade white females using indoor tanning devices decreased over 70 percent—from 33 percent in 2013 to 9 percent in 2016.²¹ Additionally, a Centers for Disease Control and Prevention (CDC) study predicts that prohibiting indoor tanning among minors younger than 18 years could prevent 61,839 melanoma cases, prevent 6,725 melanoma deaths, and save the U.S. \$342.9 million in treatment costs over the group's lifetime.²²

State Laws Prohibiting Minors from Using Tanning Devices



Sources: Health Policy Tracking Service & individual state bill tracking
 † There is no medical indication for the use of a tanning device in the diagnosis or treatment of a disease.
 * Legislative or regulatory change made in 2019. MD law will go into effect on Oct. 1, 2019 and ME law will go into effect 90 days after the Legislature adjourns.

Parental Consent Provisions Are Inadequate to Protect Children and Adolescents

Laws that allow parents to give written permission to their children or adolescents to use indoor tanning devices or accompany them to tanning salons are not associated with reduced use of indoor tanning among youth.¹⁶ Multiple studies have shown that youth are able to purchase a tanning session without parental permission, even if it is required by law.^{23,24,25} Additionally, literature shows that parental permission and parental tanning bed use are strongly associated with the use of indoor tanning among youth.^{18,26,27,28}

ACS CAN Position

To protect youth from the harmful effects of artificial UV radiation, ACS CAN supports laws and regulations that prohibit access to tanning devices for individuals under 18, **without exceptions**. In addition, state and local governments need to ensure that enforcement measures and oversight mechanisms are in place to guarantee that youth are not gaining access to these harmful devices.

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