

Stronger Laws Are Needed to Protect Teens From Indoor Tanning

The article by Balaraman et al¹ in this issue of *Pediatrics* examines practices of indoor tanning facilities in Missouri, 1 of 17 states with no regulations regarding minors' use of these facilities. More than two-thirds of respondents working at the facilities stated that they would allow children as young as 10 to 12 years old to tan, some without parental consent. More than 40% claimed that there were no tanning-associated health risks. The study's findings are alarming but unfortunately not surprising given that there is no law in Missouri protecting minors from indoor tanning.

Indoor ("artificial") tanning is a \$5 billion dollar industry with 19 000 freestanding salons employing 160 000 individuals.² Tanning is inexpensive. Access is easy with more tanning salons in an average city than Starbucks or McDonald's.³ Tanning is especially popular with teenage girls and young women. Data from the national 2009 Youth Risk Behavior Survey show that 15.6% of high school students (including 25.4% of girls) used an indoor tanning device ≥ 1 times in the past year; 49% of all patrons (especially female and white students) used them ≥ 10 times in the past year.⁴

Indoor tanning has severe health consequences. Molecular evidence reveals that DNA damage is an integral part of the tanning response,^{5,6} refuting the concept of the "safe tan." Epidemiologic evidence increasingly links artificial tanning to higher skin cancer risk, including melanoma risk⁷⁻¹¹; risk increases when tanning starts at an early age.^{7,8}

Melanoma incidence has risen dramatically in recent years, especially in young women.¹² There will be about 76 690 new melanomas diagnosed in the US in 2013, and about 9480 people are expected to die from melanoma.¹³ Although the prognosis is excellent when melanoma is detected early, metastatic disease remains deadly. Each year, young people are among those who succumb to melanoma.

The International Agency for Research on Cancer has stated that UV radiation-emitting tanning devices are carcinogenic to humans.¹⁴ The World Health Organization, the American Academy of Pediatrics, the American Academy of Dermatology, and others recommend that legislation ban minors from indoor tanning. Nations including the United Kingdom, France, and Germany have banned teen tanning.¹⁵ Brazil and the state of New South Wales in Australia banned indoor tanning for everyone.

In the United States, the US Food and Drug Administration (FDA) regulates tanning beds as class I medical devices, the same category as tongue depressors and elastic bandages. Although the FDA recommends that specific precautions be taken when consumers use an indoor tanning facility,¹⁶ the agency places no age restrictions. It is therefore up to state governments to regulate minors' use of these devices, including imposing age restrictions. In October 2011, California

AUTHORS: Sophie J. Balk, MD,^a David E. Fisher, MD, PhD,^b and Alan C. Geller, RN, MPH^c

^aChildren's Hospital at Montefiore, Albert Einstein College of Medicine, Bronx, New York; ^bDepartment of Dermatology, Cutaneous Biology Research Center, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts; and ^cHarvard School of Public Health, Massachusetts General Hospital, Boston, Massachusetts

KEY WORDS

indoor tanning, artificial tanning, tanning legislation, teenagers, skin cancer, melanoma, prevention, tanning legislation

ABBREVIATION

FDA—US Food and Drug Administration

Opinions expressed in these commentaries are those of the authors and not necessarily those of the American Academy of Pediatrics or its Committees.

www.pediatrics.org/cgi/doi/10.1542/peds.2012-3367

doi:10.1542/peds.2012-3367

Accepted for publication Dec 4, 2012

Address correspondence to Sophie J. Balk, MD, 1621 Eastchester Rd, Bronx, NY 10461. E-mail: sbalk@montefiore.org

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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FINANCIAL DISCLOSURE: The authors indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

COMPANION PAPER: A companion to this article can be found on page 415, and online at www.pediatrics.org/cgi/doi/10.1542/peds.2012-1781.

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became the first state to ban under-18 salon tanning; Vermont followed in May 2012. As of November 2012, 33 states had some kind of restriction regarding salon use by teens. Some states place bans at 14, 15, or 16 years of age; New York passed an under-17 ban in July 2012. Some states require that a parent accompany his or her child younger than a certain age; some require written consent, or written consent with the parent physically present, or a physician's order or prescription.¹⁷

In 2011–2012, tanning bed legislation was introduced in states, including Missouri, with no legislation regarding minors.¹⁷ Pediatricians can advocate for new enforceable age bans and advocate for stronger laws in the majority of states that still allow minors younger than 18 years to tan. For most pediatricians, our main

influence is in the office. Most pediatricians do not discuss indoor tanning with teens and families.¹⁸ This situation should change: skin cancer prevention should become a regular discussion topic. The US Preventive Services Task Force concluded that counseling by primary care clinicians may reduce indoor tanning among late-adolescent women and recommended counseling fair-skinned children, teens, and young adults aged 10 to 24 years about minimizing UV radiation exposure.¹⁹ Parents should be included in these discussions. These conversations may prevent skin cancer in some patients and are opportunities we should not miss.

According to the FDA, the “agency is considering revising some requirements for tanning beds, including strengthening the warning labels to make consumers

more aware of the risks.”²⁰ Far stronger laws are required to protect youth and young women who frequent tanning beds at unprecedented rates. Given that one-third of states have no laws of any kind regulating minors' tanning-bed use, and nearly all remaining states have a patchwork of regulations such as age bans, parental consent, or performance standards, it is incumbent upon the FDA to enact a national under-18 salon tanning ban. Without strong FDA authority, the current approach will not work to protect the millions of teens in the 17 states with no laws, or those in the majority of states with weak restrictions. For those states that recently passed age bans, new battles will arise, including funding states to mandate enforcement of these laws.

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YOUR DAILY MULTIVITAMIN TO PREVENT CANCER: *For many, the morning routine involves brushing one's teeth, eating breakfast, and taking a daily multivitamin. While originally intended to prevent malnutrition, a recent study discussed in The New York Times (Well: October 22, 2012) demonstrated that daily multivitamins reduce the risk for malignancy. In a randomized, double-blinded, placebo-controlled study, 14,641 male physicians initially aged 50 years or older were assigned to take either a daily common multivitamin or placebo, and were followed from the trial initiation in 1997 until 2011 for the development of cancers. When compared to the placebo group, the men taking a daily multivitamin experienced 8% fewer cancers. Multivitamin consumption was associated with a smaller but statistically insignificant decrease in cancer death. However, there was no reduction in cancer incidence for specific diagnoses such as prostate or colorectal cancer. While 8% is not a large reduction, in the general population the effects could add up. Others argue that other health interventions, such as smoking cessation are likely to have a far greater impact on cancer incidence. Moreover, the trial was conducted only in men who were generally healthier, had better diets, smoked less, and were more fit than the general population. While many may interpret the study findings as a reason for vitamin supplementation, it is important to recognize that previous investigations into the beneficial effects of vitamins have had decidedly mixed results. Some studies have even ended early because of an increased risk of cancer. In addition, there is always a possibility that taking more than the recommended daily dose of vitamins could have detrimental effects. Despite this study's strength, more research is needed to support firmly a confirmation of the benefit of a daily morning multivitamin in addition to brushing one's teeth.*

Noted by Leah H. Carr, BS, MS-III

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Pediatrics originally published online February 25, 2013;

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OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

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Pediatrics originally published online February 25, 2013;

The online version of this article, along with updated information and services, is
located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/early/2013/02/20/peds.2012-3367.citation>

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