Promising strategies to reduce use of indoor tanning devices and prevent skin cancer

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Preventing skin cancer by reducing use of indoor tanning devices requires a coordinated approach at the national, state, and local levels suggests a pair of papers by CDC authors in a special theme issue of the *American Journal of Preventive Medicine*. Evidence has shown that use of indoor tanning devices increases the risk of developing skin cancer, including melanoma, and these papers discuss approaches that could help reduce use of indoor tanning devices and prevent future incidence of skin cancers.

Melanoma is one of the most commonly diagnosed cancers among adolescents and young adults in the United States. Skin cancer is an urgent public health problem, with treatment costing an estimated $1.7 billion each year, and costs due to lost productivity estimated at $3.8 billion each year.

"Melanoma causes more deaths than any other skin cancer, over 9,000 deaths each year," says Meg Watson, MPH, of the CDC Division of Cancer Prevention and Control in Atlanta. "And it has been increasing in recent years, particularly among non-Hispanic whites. Indoor tanning before age 35 increases the risk of melanoma by 60%-80% or more, so avoiding or reducing indoor tanning is a simple way to reduce risk of getting or dying from melanoma."

In the first paper, the authors provide an overview of indoor tanning as a risk factor for skin cancer and discuss possible approaches to reducing use of indoor tanning devices. The second paper presents highlights from

a meeting on indoor tanning convened by CDC in August 2012 where participants discussed ways to prevent skin cancer, and gaps in research that could be addressed to inform public health action.

In these two papers, the researchers note that:

- Approximately 32% of white women aged 18–21 years have tanned indoors in the past 12 months, with an average of more than 27 sessions per year.
- Data from the 2011 Youth Risk Behavior Survey indicates that frequent use of indoor tanning devices is common among U.S. high school students, with approximately half of indoor tanners reporting 10 or more sessions per year.
- Studies have found an association between indoor tanning and other risky behaviors, such as alcohol use, smoking, recreational drug use, poor sun protection behaviors, and unhealthy eating behaviors.
- A February 2012 investigative report from the U.S. House of Representatives Energy and Commerce Committee found that 74% of tanning salons failed to follow FDA recommendations on tanning frequency.
- Studies examining state indoor tanning laws and regulations in the U.S. demonstrate that compliance with these laws is low and not adequately enforced.
- State regulation and enforcement of indoor tanning devices, including restriction on youth access to indoor tanning devices, varies considerably throughout the country. Currently, 2 states

(California and Vermont) prohibit indoor tanning for minors under 18.

- Multiple options could be considered to reduce UV exposure from indoor tanning devices, including: FDA reclassification of tanning devices, age bans for minors, banning unsupervised tanning, licensing requirements for tanning salons, tanning time limits, and requiring users to wear protective eyewear.

Successful intervention efforts will likely need to address multiple levels of influence, from individual-level determinants (i.e., appearance-focused attitudes of those who tan) to the roles of parents, peers, clinicians, schools, the media, the tanning industry, and policymakers.

"Addressing these factors will require collaboration and coordination," says Dawn M. Holman, MPH, of the CDC's Division of Cancer Prevention and Control. "Key partners will need to work with each other and with new partners in various sectors, including media, education, and policy, to align efforts at the national, state, and local levels to reduce indoor tanning. Such an approach has the potential to change tanning attitudes and behaviors and prevent future cases of skin cancer, along with the associated illness, death, and health care costs."

More information: "Preventing Skin Cancer Through Reduction of Indoor Tanning: Current Evidence," by Meg Watson, MPH; Dawn M. Holman, MPH; Kate A. Fox, MPP; Gery P. Guy, Jr., PhD; Andrew B. Seidenberg, MPH; Blake P Sampson, BS; Craig Sinclair; DeAnn Lazovich, PhD (DOI: 10.1016/j.amepre.2013.02.015).

"Strategies to Reduce Indoor Tanning: Current Research Gaps and Future Opportunities for Prevention," by Dawn M. Holman, MPH; Kathleen A Fox, MPP; Jeffrey D. Glenn, MPA; Gery P. Guy, Jr., PhD; Meg Watson, MPH; Katie Baker, MPH, DrPH(c); Vilma Cokkinides,

PhD; Mark Gottlieb, JD; DeAnn Lazovich, PhD; Frank M Perna, EdD, PhD; Blake P Sampson, BS; Andrew B. Seidenberg, MPH; Craig Sinclair; Alan C. Geller, MPH, RN (DOI: 10.1016/j.amepre.2013.02.014)