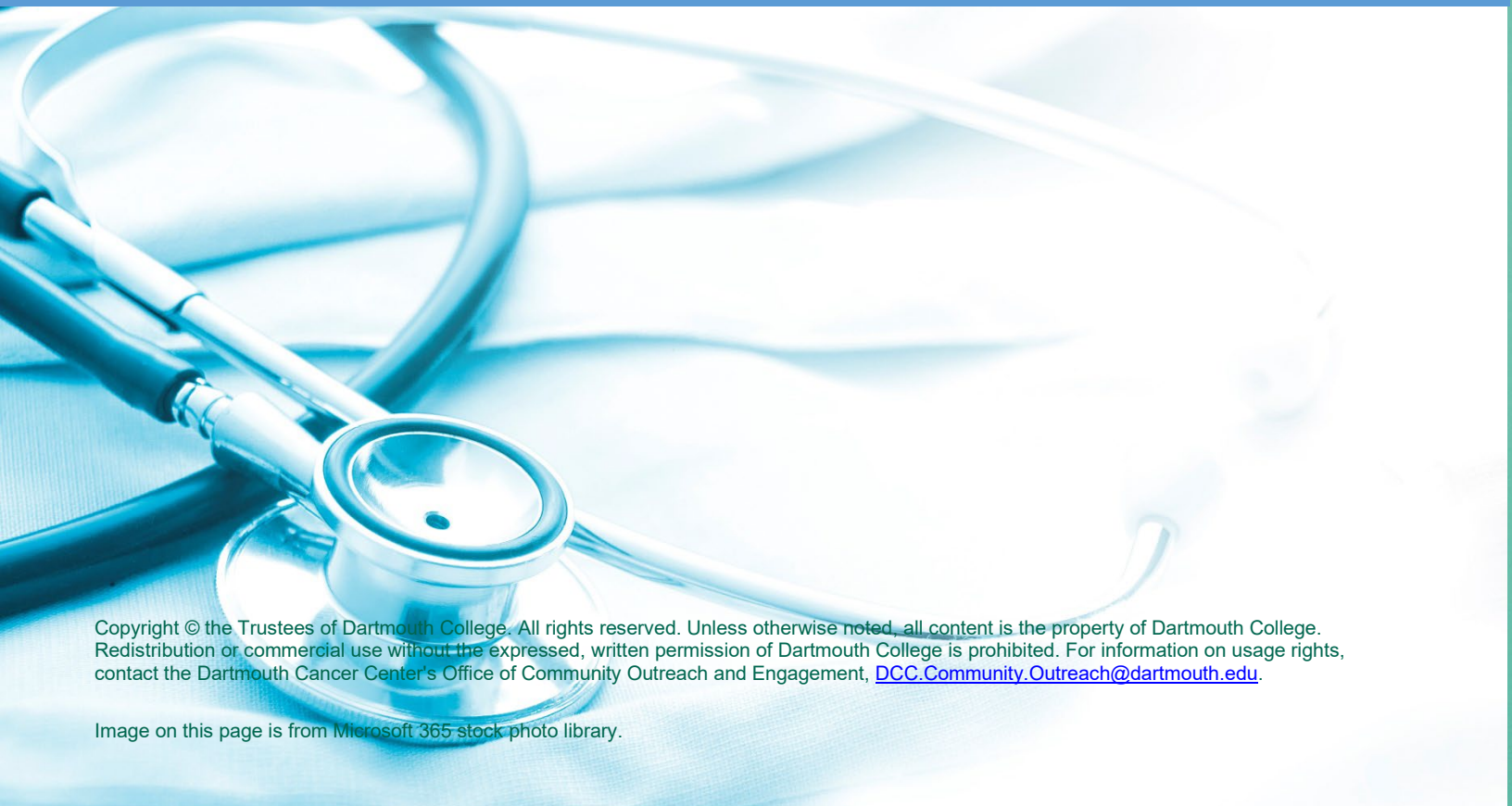
SunSafe in the Middle School Years

PRIMARY CARE PRACTICE MANUAL



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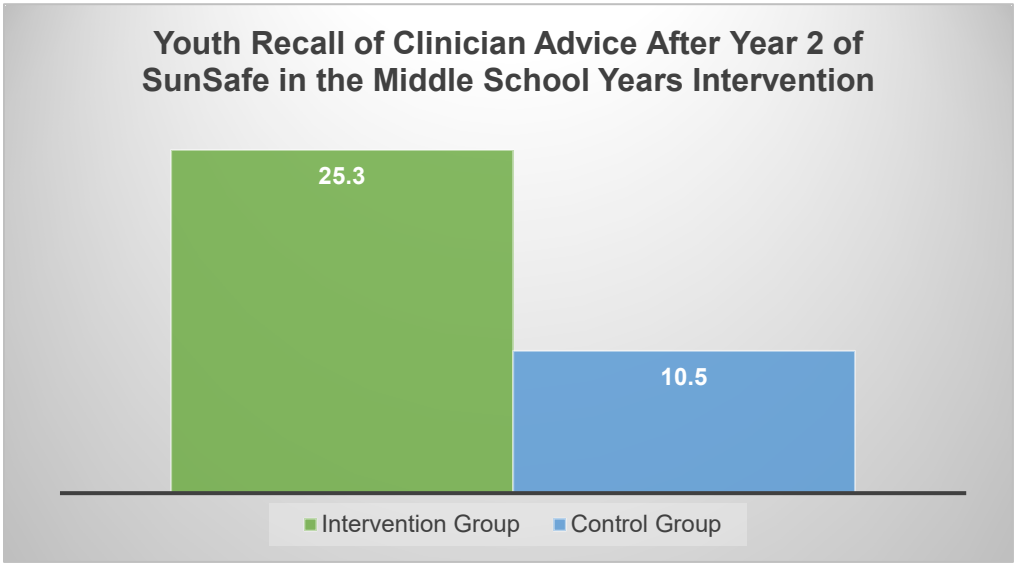
Project Background

SunSafe in the Middle School Years is designed to improve sun protection behaviors of middle school students (10- to 13-year-olds). Originally developed in 2000, SunSafe in the Middle School Years was developed and tested using funding provided by the National Cancer Institute, and the project was directed by Ardis Olson, M.D. At the time, the project worked with schools, coaches, town recreation programs, parents, and health care providers in 10 communities throughout Vermont and New Hampshire.

This multi-component intervention demonstrates that community members can serve as role models and educators to change youth sun protection actions and thus reduce skin cancer risks. Findings from the original study include[i]:

- Youth in the intervention communities were more likely to use sunscreen and to apply it more thoroughly than those in the control communities.
- Youth in the intervention communities reported receiving sun protection advice from more adults than those in the control communities.
- Youth in the intervention communities protected more of their body from the sun than those in the control communities.

Further, youth living in the intervention communities where the pediatric practices implemented the changes suggested in this manual were 2.5 times more likely to report that they heard sun protective messages from their provider after the second year of the intervention versus the control (25.3% versus 10.5% respectively).[i]



Why Middle School Students?

Middle school is an important time to work with youth. During this age, youth are making more independent health behavior choices but are still willing to listen to adults' advice and they are still influenced by the role modeling of parents, teachers, and coaches.

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- 80% of lifetime sun exposure occurs before age 18.[ii] Less than one out of three youth protect themselves from sun damage effectively.[iii]

- One or more blistering sunburns in childhood or adolescence doubles the risk of developing melanoma later in life.[iv]

- Data from the *SunSafe in the Middle School Years'* baseline study (unpublished) shows that in 2000, 84% of middle school youth understood protecting themselves from sun damage can prevent skin cancer. However, less than one third (29%) used sunscreen and only 7% wore a hat.

- Data from the 2019 Vermont Youth Risk Behavior Survey indicates little progress has been made regarding youth's sun safe behaviors since 2000. In 2019, 66% of VT middle school students reported having at least one sunburn in the past 12 months. The percent of students who had sunburns increased with each grade level.[v]

Why Primary Care Providers?

- The well child visit is an opportunity to help middle school children learn to take responsibility for their own health habits, including sun protection.

- One in 5 Americans will develop skin cancer in their lifetime.[vi] Sun exposure is associated with most of these skin cancers.

- The U.S. Preventative Services Task Force (2018) recommends "counseling young adults, adolescents, children, and parents of young children about minimizing exposure to UV radiation for persons aged 6 months to 24 years with fair skin types to reduce their risk of skin cancer."[vii] (B recommendation).

SunSafe in the Middle School Years for Primary Care Practices

Discuss sun safe behaviors with 10- to 13-year-old patients and their parents.

The well child visit is an opportunity to help middle school youth take responsibility for their own health habits, including sun protection. The goal of this program is to enhance sun safety discussions during well–child visits or physicals with 10–13-year-old patients and their parents.

While middle schoolers may understand that sun protection prevents skin cancer, only a small percentage use sun protection and few have heard messages from their providers. If youth start making UV protection part of their daily routine, their risk of skin cancer and other skin problems can be greatly reduced.

Discussing sun safe behaviors and helping youth protect themselves from too much sun exposure is an important but often overlooked preventive health message. Everyone in your practice can contribute to educating youth and their parents about sun safe behaviors. With a few changes to your well-child visits, counseling for sun protection can become a regular part of your patient care.

This guide provides suggestions and resources that can be incorporated into your existing practice routine. Including:

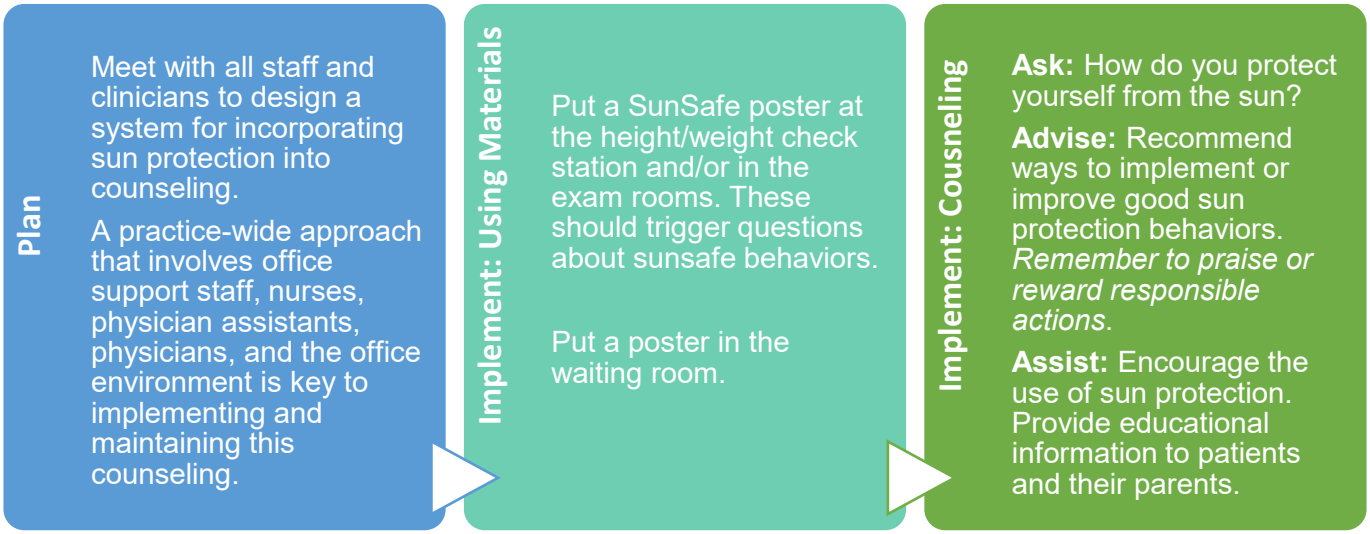
- An implementation guide.
- Messages that resonate with youth.
- A list of common myths that youth may believe regarding sun safety and tanning.

In addition, please consider using the following *Fun in the Sun: Skin Protection Guide for Families* and the *Love the Skin You're In* poster. These materials can be requested from the Dartmouth Cancer Center Community Outreach and Engagement team (DCC.Community.Outreach@dartmouth.edu) at no cost to you. Please view these materials on the last page of this document.

Implementation Guide

Clinicians should talk with youth *early* and *routinely* about protecting their skin and eyes from overexposure to the sun. Kids can have fun outdoors and protect themselves from too much sun. Sun safe habits include wearing sunscreen, a hat, protective clothing, sunglasses, and finding shade in the middle of the day.

Practices that have successfully integrated SunSafe into their routines have used the approach outlined below.



Messages that Resonate with Youth

Middle school students present counseling challenges. Prevalent attitudes influence how well they receive messages from authority. Regarding sun protection behaviors, youth often think they are not vulnerable. In addition, youth may think that skin cancer is distant to their lives, tan skin is attractive, or protecting their skin from the sun is too much trouble.

What Messages Work?

Youth respond best to messages that have immediate, relevant benefits to them. Examples of these types of messages include:

- Be active outdoors, just remember to protect yourself from sun damage.
- Prevent sunburns. They hurt, look bad, and cause wrinkles.
- Protect your skin from the sun and prevent premature wrinkles.
- Dark tans lead to deep wrinkles.
- Melanoma is the most common cancer for people in their teens and 20s.

Common Myths (and Facts)

Myth Tan skin is healthy skin.

Fact Tanned skin is damaged skin. A tan is caused by an increase in melanin in your skin. Your skin produces melanin to protect itself from UV rays. One reason we think tans look good is because athletes and models are often pictured with tanned skin in the media.

Myth A tan protects your skin from getting burned.

Fact A tan **does not** protect your skin from getting burned. A dark tan gives you about the same protection as sunscreen with an SPF of 4. It is recommended that people use a broad-spectrum, water-resistant sunscreen with SPF of 30 or higher and **reapply** the sunscreen at least **every 2 hours** to protect from sunburn.

Myth Waterproof sunscreen does not need to be reapplied.

Fact There is no such thing as "waterproof" sunscreen. Sunscreen may be water resistant (up to 40 minutes) or very water resistant (up to 80 minutes). However, water resistant sunscreen should still be reapplied after drying your skin. **Reapply all sunscreens at least every 2 hours.**

Myth Tanning lights are safer than natural sunlight.

Fact UV radiation from tanning lights is very damaging to your skin. When under artificial UV lights, a person gets a huge dose of UV in a short time. **A tan is your skin's response to radiation exposure and indicates skin damage**. UV radiation from tanning lights is also harmful to your eyes.

Myth We all get wrinkled skin when we get older… What I do now won't make any difference.

Fact The major cause of wrinkled skin is sun damage, not age. Exposure to UV rays damages skin and causes **premature aging and wrinkling**.

Myth I'll worry about skin cancer later…Only old people get skin cancer.

Fact Melanoma is the third most diagnosed cancer among men aged 15 – 29 years old, fourth most diagnosed cancer among women aged 15 – 29 years old, and it is **the most common cancer among people 25 - 29 years old.**[viii]

Myth I live in New England – only people who live in places like Florida or Australia should worry about skin damage from too much sun.

Fact Vermont has **the third highest rate of skin cancer** in the United States and New Hampshire is in the **top five** for skin cancer rates.[ix]

Myth I only need to wear sunscreen when I go to the beach.

Fact You should wear sunscreen **anytime you will be outside for a prolonged period**. UV ray intensity and outside temperature are unrelated. **The UV Index** is the best indicator of UV intensity.

Myth You cannot get sunburned on a cloudy day.

Fact Clouds block some UV rays, but when you stay outside long enough, **you can still get burned**. Even though we often have cloudy days in our area or hazy sunshine we still get enough UV to do damage.

Myth Sun protection deprives you of vitamin D which you need.

Fact We get vitamin D from food, supplements, and the sun. Most people get an adequate amount of vitamin D in their diets and **do not need the sun to get vitamin D**. Also, just being outside, even while using sunscreen and SPF, you still get some sun-related generation of vitamin D.[x]

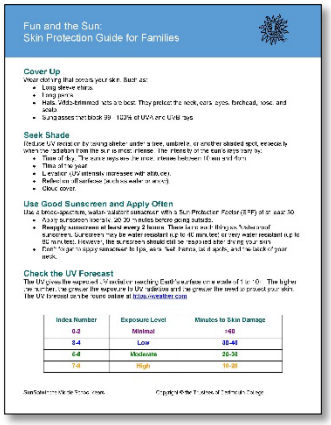
Myth I don't need to wear sunglasses to protect my eyes.

Fact Excessive exposure to UV rays is one of the risk factors for **cataracts**. Cataracts are a leading cause of impaired vision in the United States. **Wearing UVA/UVB sunglasses helps keep eyes healthy**.

Myth I wear sunscreen with a SPF of 45. That means I can stay out in the sun 3x longer than if I used a sunscreen with a SPF of 15.

Fact There are two types of UV rays, UVA and UVB. SPF only tells you how well the sunscreen will protect against *UVB* rays. **A sunscreen with an SPF of 45 <u>is not</u> 3x stronger and <u>does not</u> stay on your skin 3x longer than a sunscreen with an SPF of 15**.[xi] You should use a broad-spectrum, water resistant sunscreen with and SPF of 30+ and reapply it at least every 2 hours.

Print Resources



Additional Resources

- Sun Safety Toolkit, Dartmouth Cancer Center (2024). https://cancer.dartmouth.edu/cancer-community/resources
- Behavioral Counseling to Prevent Skin Cancer: US Preventive Services Task Force Recommendation Statement (2018). https://doi.org/10.1001/jama.2018.1623
- Sun Safety, Centers for Disease Prevention and Control (2022). https://www.cdc.gov/cancer/skin/basic_info/sun-safety.htm

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[i] Ardis L. Olson, Cecelia Gaffney, Pamela Starr, Jennifer J. Gibson, Bernard F. Cole, Allen J. Dietrich; SunSafe in the Middle School Years: A Community-wide Intervention to Change Early-Adolescent Sun Protection. Pediatrics January 2007; 119 (1): e247–e256. 10.1542/peds.2006-1579. https://doi.org/10.1542/peds.2006-1579

[ii] Cleveland Clinic (2022). Ultraviolet Radiation and Skin Cancer. https://my.clevelandclinic.org/health/diseases/10985-ultraviolet-radiation

[iii] Centers for Disease Prevention and Control (2022, April). Guidelines for School Programs to Prevent Skin Cancer. https://www.cdc.gov/cancer/skin/what_cdc_is_doing/guidelines.htm

[iv] Skin Cancer Foundation. (2021). Sunburn & Your Skin. www.skincancer.org/risk-factors/sunburn/

[v] Vermont Department of Health. (2020). 2019 Vermont Youth Risk Behavior Survey Report, 173. www.healthvermont.gov/sites/default/files/documents/pdf/CHS_YRBS_statewide_report.pdf

[vi] Stern R. S. (2010). Prevalence of a history of skin cancer in 2007: results of an incidence-based model. *Archives of dermatology*, *146*(3), 279–282. https://doi.org/10.1001/archdermatol.2010.4

[vii] US Preventive Services Task Force. (2018). Behavioral Counseling to Prevent Skin Cancer: US Preventive Services Task Force Recommendation Statement. JAMA, 319(11):1134–1142. https://doi.org/10.1001/jama.2018.1623

[viii] Melanoma Research Alliance (n.d.). Melanoma statistics. https://www.curemelanoma.org/about-melanoma/melanoma-101/melanoma-statistics

[ix] Dartmouth Cancer Center. (2022). Skin cancer screening and prevention. https://cancer.dartmouth.edu/melanoma-skin/skin-cancer-screening

[x] Moriarty, C. (2018). Vitamin D myths 'D'-bunked. Yale Medicine. https://www.yalemedicine.org/news/vitamin-d-myths-debunked

[xi] MD Anderson Cancer Center. (2021, May). Should you use very high SPF sunscreen? https://www.mdanderson.org/cancerwise/should-you-use-very-high-spf-sunscreen.h00-159460845.html

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