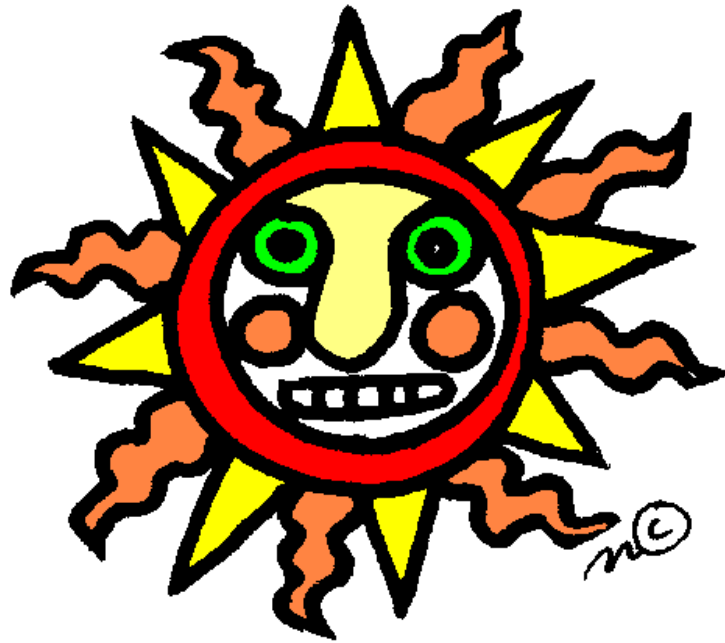


# SunSafe in the Middle School Years



Rec Staff/Lifeguard Manual



## Project Background

*SunSafe in the Middle School Years* was a research project aimed at improving sun protection in middle school students. Funded by the National Cancer Institute and directed by pediatrician, Ardis Olson, M.D., the project worked in 10 communities in VT and NH. Since reducing sun exposure may prevent 90% of skin cancers, the SunSafe Project worked with schools, coaches, town recreation programs, parents, and health care providers to improve middle school students' sun protection behaviors.

Middle school is an important time to work with adolescents since they are beginning to establish their own health habits. However, they still willing to listen to adult's advice and they are still influenced by the role model set by parents, teachers and coaches.

### **Why middle school students?**

- Only 35% of middle school students protect themselves from sun damage
- 75% of teens had sunburns in the previous summer
- 1 or more blistering sunburns before age 20 doubles the risk of melanoma
- Young teens start to use artificial tanning lights
- Children this age start taking responsibility for their health and establish lifetime habits

### ***Why lifeguards and recreation program staff?***

- ❖ Sun protection can prevent injury from sunburns and permanent skin damage.
- ❖ Intensity of UV radiation is highest in summer; skin damage can occur in as little as 15 minutes of sun exposure.
- ❖ Often outside for long periods and exposed to UV rays for hours at a time.
- ❖ UV rays reflect off water and hard surfaces, increasing their intensity
- ❖ Skin damage is cumulative - it's never too late to adopt sun safe behaviors.

# How Rec Staff and Lifeguards Can Protect Young People's Skin

As a lifeguard or recreation program staff, you work hard to prevent injury to children with whom you work or watch over. Ensuring they practice sun safe behaviors is another aspect of protecting them from injury.

Adults have a dual role of instructing children how to protect themselves from the sun AND role modeling sun safe behavior themselves. Young adults are especially important role models because young teens relate to them more than older adults. Many people associate tan skin with health - the media promotes this idea by showing models and athletes with tans. In fact, a "tan" is the body's signal that skin is injured. You can help youth learn that the lighter the "tan," the healthier the skin. Promote the idea that being healthy means taking care of your skin as much as being active or working out to build muscles.

## Make Sun Safe Behaviors a Daily Habit

- ✓ Apply sunscreen before you come to work. Reapply at least every 2 hours.
- ✓ Wear a hat that protects your face, neck and ears.
- ✓ Wear protective clothing when possible.
- ✓ Wear sunglasses.
- ✓ Seek shade whenever possible or make your own with an umbrella.

It's what we say..... and it's what we do.

**Seeing someone they respect practice sun safe behaviors has more impact than simply telling children and teens to change their sun protection behaviors.**

## Adopt a Sun Safe Policy for Recreation Center and Pool or Beach

- ◇ Encourage everyone to come to the pool, beach or rec center with sunscreen already applied. Make sure they are wearing a broad spectrum UVA/UVB sunscreen with an SPF of at least 15. Ask them to bring sunscreen with them.
- ◇ At the beginning of activities, ask if they are set to go *with* sunscreen. If they did not, ask them to put it on before they start swimming or other activities.
- ◇ During the day, make sure they reapply sunscreen at least every 2 hours.
- ◇ Encourage everyone to wear sunglasses when sitting near water or during outdoor activities.
- ◇ Encourage everyone to wear a hat when they are outdoors. The hat should protect the face, neck, and ears.
- ◇ When possible, ask them to play in an area protected from the sun, especially from 11 am to 3 pm (the times of most intense UV radiation).



**Make it a goal for everyone to be sun safe.**

**SunSafe in the Middle School Years**  
Developed at Norris Cotton Cancer Center  
E mail [sunSAFE@dartmouth.edu](mailto:sunSAFE@dartmouth.edu)  
Website: <http://sunSAFE.dartmouth.edu>

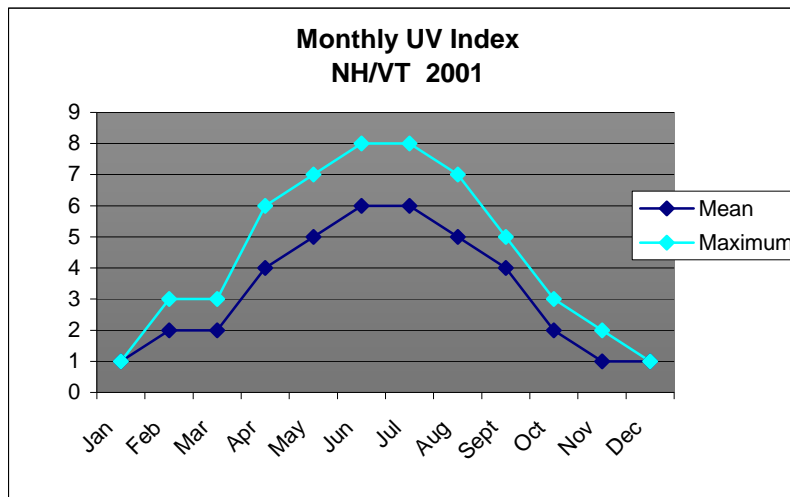
## The UV Index

The ozone layer shields the earth from harmful UV radiation. Ozone depletion, as well as seasonal and weather variation, causes different amounts of UV radiation to reach the earth at any given time. Clear skies allow 100% of incoming radiation (what gets through the ozone) to reach the Earth's surface. The UV Index provides a daily forecast of the expected risk of overexposure to the sun. A computer model is used to calculate the UV index based on the ozone conditions, elevation and cloud cover.

The UV Index predicts the intensity of UV radiation on a scale of 0 to 10+, where 0 indicates a minimal risk of overexposure and 10+ means a very high risk. Check the UV Index each day to plan for adequate protection against the sun's radiation.

UVI	Exposure Level	Minutes to Skin Damage
0, 1, 2	Minimal	More than 60 minutes to skin damage
3, 4	Low	45 minutes to skin damage
5, 6	Moderate	30 minutes to skin damage
7, 8, 9	High	15 minutes to skin damage
10 +	Very High	Less than 10 minutes to skin damage

In NH and VT, the UV Index on a clear day in early spring is often as high as the UV Index on a hot summer day. Sun damage to unprotected skin can begin within 15 minutes on sunny days as soon as late April.



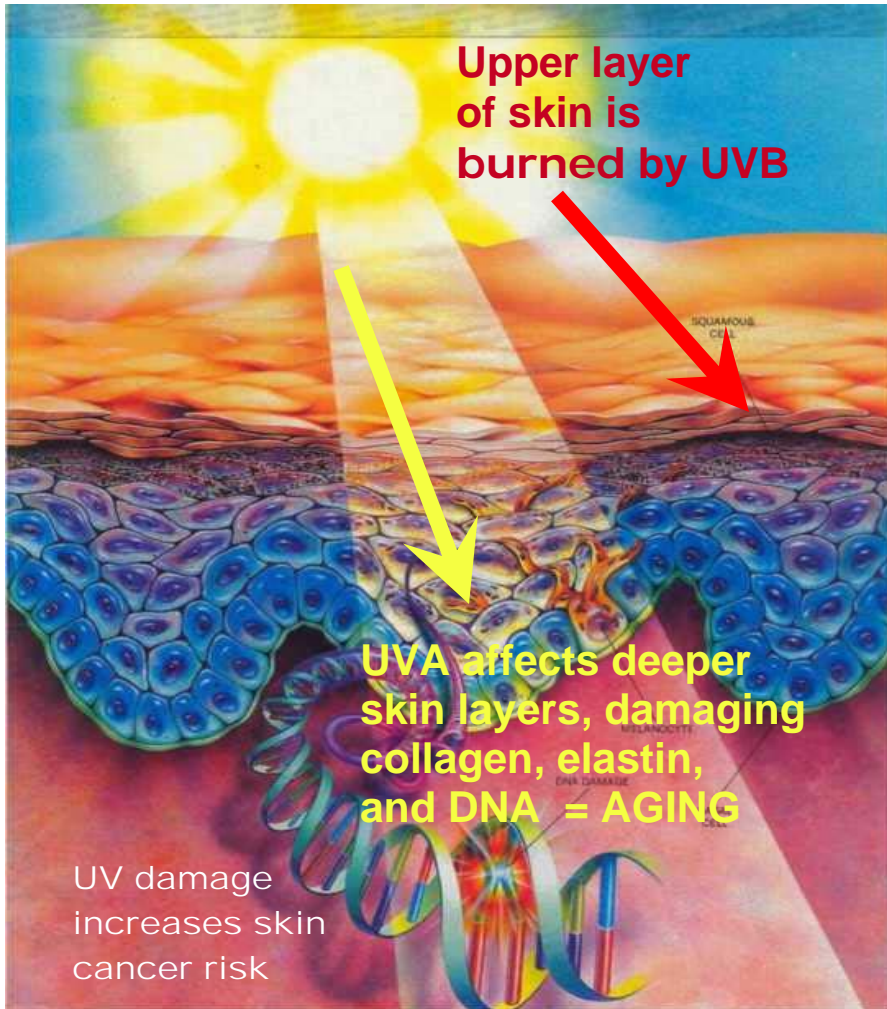
# SUNSCREENS

Skin protection is an important defense against skin cancer. The body's usual defense against the sun's damaging ultraviolet rays is a pigment in the skin called melanin. Some individuals have more melanin. The melanin in light brown or tanned skin provides only as much defense as a sunscreen with an SPF of 4. The melanin in dark black skin provides only as much defense as a sunscreen with an SPF of 8. This means that even people with the darkest skin can get sunburns!

So, to protect your skin from the sun's harmful rays, always wear a sunscreen with an SPF of 15 or greater on skin exposed to the sun.

- ❖ Always buy sunscreen with an SPF (Sun Protection Factor) of at least 15--
  - Look for sunscreen that provides protection against both UVA and UVB.
- ❖ Apply 20-30 minutes before going outside to give your sunscreen time to penetrate your skin and protect your cells
  - Pay particular attention to lips, ears, back of neck and tops of feet.
- ❖ Reapply every 2 hours.
  - Sunscreens labeled as "sport, waterproof, water resistant" are not more effective and must also be reapplied.
- ❖ Remember to apply enough sunscreen to cover well. The ingredients do degrade over time so be sure the bottle of sunscreen is not more than a year old.

# How do UVA/UVB rays damage skin?



UVA and UVB rays make it through our atmosphere

**UVB** rays cause sunburns.

**UVA** rays go deeper in the skin damaging the skin structure which causes wrinkles.

*All UV rays damage skin, increasing the risk of skin cancer*

# Sun Protection Facts

- We get about 80% of our total lifetime sun exposure by 18 years old.
- Ninety percent (90%) of skin cancer can be attributed to sun exposure.
- Just one sore blistering sunburn during childhood doubles the risk of skin cancer later in life.
- Regardless of skin color, *everyone* who has excessive unprotected UV exposure is at risk to get skin cancer.
- Ultraviolet (UV) rays are the harmful rays from the sun that can damage our skin and eyes.
- Intensity of UV rays varies by season - in NH and VT UV exposure in spring and fall is similar to exposure during the summer. It does not have to be hot for skin damage to occur.
- UV rays penetrate clouds and haze - although more slowly, skin burns occur on cloudy days.
- Excessive UV exposure can cause premature aging of the skin, cataracts, skin cancers, and immune system suppression. *Wrinkles* are from UV damage, any dermatologist or plastic surgeon will tell you most of the damage they see is from excessive UV rays.
- It may take only 15 minutes to burn during the sun's peak hours. The sun's peak hours are 11am - 3pm.
- Sunscreen contains chemicals that absorb ultraviolet rays.
- Sunblocks are zinc or titanium oxide that actually block UV rays
- When you apply sunscreen to your skin it becomes an invisible protective layer, a shield - almost like the ozone layer around the earth.
- All sunscreen is made of chemicals that break down when exposed to the sun or water or sweat. Reapply it about every 2 hours.
- A tan does not protect your skin from getting burned. A dark tan gives about the same protection as sunscreen with an SPF of 4.
- Practicing sun safe behaviors during childhood is the first step in reducing the chances of getting skin cancer later in life.

## WHY LIFEGUARDS?

- Lifeguards are important role models for teens
- Lifeguard who practice sun protection will influence teens' sun protection behaviors
- Intensity of UV radiation is highest in summer – skin damage can occur in as little as 10 minutes of sun exposure
- Young people are often outside for long periods and exposed to UV rays for hours at a time
- Sun protection can prevent injury from sunburns and permanent skin damage
- Sun damage to skin is cumulative – it's never too late to adopt sun safe behaviors



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Sun safety messages pack the biggest punch when the kids see you modeling healthy habits!

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**One in five Americans is expected to get skin cancer in his or her lifetime!**

**UV protection can prevent 90% of skin cancers as well as keeping wrinkles, and age spots away.**

**Have fun in the sun but be  
SunSafe!**

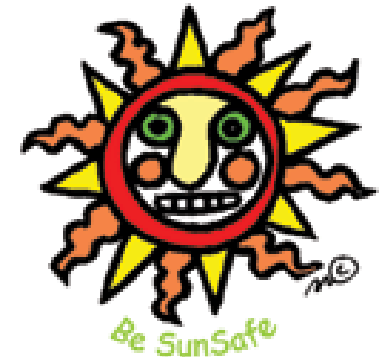
**SunSafe in the Middle School Years**

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Website: <http://sunSAFE.dartmouth.edu>

## SunSafe

A skin cancer prevention research project for adolescents. Lifeguards and staff are part of the community that educates and influences young teens.



**Lifeguards Can Protect  
Young People's Skin!**



### People Like You Get Skin Cancer

Holly McPeak, pro beach volleyball star, defends herself on the court not only from her opponent, but another foe – the sun.

McPeak says that her battle with the sun “is endless because there’s no escaping the sun exposure professional beach volleyball players get. But whether you’re a player or someone watching a match, you need to protect yourself from the effects of the sun at all times.”

Even though McPeak has been diligent about protecting herself from the sun, she discovered a small basal cell cancer on her chest last year. She’s still in the sun a lot and she still attacks sun exposure on the court as aggressively as she does her opponents.

USA Today, May 30, 2001  
By Mike Falcon, Spotlight Health  
With medical adviser Stephen A. Shoop, M.D.



Dear Lifeguards,

- ➔ As a lifeguard, you work hard to prevent injury to children you watch over.
- ➔ Remember, sunburns are injuries too! Sun safe behavior is another aspect of injury prevention.

It is easy and quick to remind kids to:

- put on UVA/UVB sunscreen with SPF 15 or greater
- reapply sunscreen every 2 hours
- cover up with a hat, shirt, and other protective clothing
- seek shade when they can

Keep up the good work!



Lifeguards are cool, to kids at the pool. Help prevent skin damage and make sun safety a rule.

### Why encourage young teens to protect themselves?

- Adolescents assume responsibility for their own health and establish lifetime habits
- UV rays cause deep damage that leads to skin cancer and deep wrinkles.
- 75% of teens had sunburns last summer
- Only 35% of middle school students protect themselves from sun damage

### Ways to encourage kids to protect themselves:

- Be sure to show your own sun safe behavior, hats, sunglasses, apply sunscreen
- Use umbrellas at guard stations
- Post a colorful sun safety message
- Make announcements