SunSafe in the Middle School Years

Coach 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 advise 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 coaches?**
- Research has found that coaches’ can positively influence teens’ sun protection behaviors.
- Sun protection can prevent injury from sunburns.
- Intensity of UV radiation is as high in spring as summer - during games and practice you and your players are exposed to UV rays for hours at a time.
- Coaches are important role models for their players.
- Sun damage to skin is cumulative - it is never too late to adopt sun safe behaviors
How Coaches Can Protect their Players Skin

As a coach, you work hard to prevent injury to your players. Ensuring they practice sun safe behaviors is another aspect of protecting your players from injury.

Coaches have a duel role of teaching children how to protect themselves from the sun while role modeling sun safe behavior themselves. 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 your players learn that the lighter the “tan,” the healthier the skin. Promote the idea that being an athlete means taking care of yourself as much as working on your game.

Make YOUR SunSafe Behaviors a Daily Habit

- Apply sunscreen before you come to practice or games. Reapply at least every 2 hours.
- Wear a hat that protects your face, neck and ears.
- Wear a shirt with sleeves (at least upper arm) and wear lightweight pants rather than shorts when possible.
- Wear sunglasses.
- Seek shade whenever possible or make your own with an umbrella (may choose colors to encourage school/team spirit).

The biggest impact on your players is to have them see someone they respect model a healthy behavior!
Adopt a Sun Safe Policy for Your Team

- Encourage players to come to practice and the games with sunscreen already applied. Make sure they are wearing a broad spectrum UVA/UVB SPF of at least 15. Ask them to bring sunscreen in their sports bag.

- At the beginning of practices and games, ask if they are safe with sunscreen. If they are not, ask them to put it on before practice or the game.

- At all day tournaments, make sure they reapply sunscreen at least every 2 hours.

- Encourage players to bring sunglasses to wear when they are sitting on the sidelines.

- Encourage players to bring a hat to wear when they are sitting on the sidelines. The hat should protect the face, neck, and ears.

- When possible, ask them to play in an area protected from the sun. Especially at tournament, encourage players to seek shade between games. This will help them conserve energy as well as protect them from the sun.

- Encourage adequate rehydration by drinking plenty of water

Make it a team goal to block the sun!

SunSafe in the Middle School Years
Developed at Norris Cotton Cancer Center
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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.

<table>
<thead>
<tr>
<th>UVI</th>
<th>Exposure Level</th>
<th>Minutes to Skin Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0, 1, 2</td>
<td>Minimal</td>
<td>More than 60 minutes to skin damage</td>
</tr>
<tr>
<td>3, 4</td>
<td>Low</td>
<td>45 minutes to skin damage</td>
</tr>
<tr>
<td>5, 6</td>
<td>Moderate</td>
<td>30 minutes to skin damage</td>
</tr>
<tr>
<td>7, 8, 9</td>
<td>High</td>
<td>15 minutes to skin damage</td>
</tr>
<tr>
<td>10+</td>
<td>Very High</td>
<td>Less than 10 minutes to skin damage</td>
</tr>
</tbody>
</table>

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 you or your players’ 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 call 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 UVA/UVB 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 10-15 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 COACHES?

• Sun damage to skin is cumulative – it's never too late to adopt sun safe behaviors

• Research has found that coaches can positively influence teens’ sun protection

• Coaches are important role models for their players

• Coaches who practice sun protection will influence their players’ sun protection behaviors

• Sun protection can prevent injury from sunburns

• Intensity of UV radiation is as high in spring as in summer – during games and practice you and your players are exposed to UV rays for hours at a time

Sun safety messages pack the biggest punch when your players see you changing your own behavior!

SunSafe in the Middle School Years

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How Coaches Can Make Sports Sun Safe!
If sun safety is practiced on the field UV rays you will shield

Why encourage middle school students to protect themselves

- Adolescents assume responsibility for their own health and establish lifetime habits
- More young teens are increasing their use of tanning lights. New studies find tanning light users in their 20’s have a 150% greater risk than nonusers of developing melanoma, a form of skin cancer. Another study reports people that have ever visited a tanning booth are 2.5 times more likely to get other skin cancers.
- UV rays cause deep damage that leads to deep wrinkles – it is not worth that bronze look!
- 75% of teens had sunburns last summer
- Only 35% of middle school students protect themselves from sun damage

Dear Coaches,

- We know you work hard to protect your players from injuries.
- Remember, sunburns are injuries too!

It is easy and quick to remind your players to:

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

Kids tell us that their coaches are reminding them to be sun safe.

Keep up the good work!

Last November Derek Lowe, only 29 years old, noticed a pimple-sized growth on the tip of his nose that then changed size and color. “It just got big, big, big. And when I touched it, it made my eyes water,” said Lowe.

It turned out that Lowe, having ignored sun safety much of his life, had a serious, but treatable cancer that when he finally paid attention to it had burrowed, finger-like, under the skin, much deeper than the surgeons had anticipated.

Surgeons were able to remove all of the cancer and Lowe reports that he is now the sun block king!