

**Safety Tip of the Month – June 2008**  
**VSI Safety Committee**  
**“Safety in the Sun - Why Make Skin Cancer Number One?”**

There's no denying that swimming is a healthy activity. It builds muscle, develops aerobic capacity, and burns calories. But swimming, coaching, and officiating in the summer sun is not without its risks. Increased exposure to the sun leads to increased exposure to ultraviolet (UV) radiation. UV radiation can damage the genetic material in cells, and the damage increases as exposure to the sun increases. One outcome of this exposure is skin cancer. Over one million Americans are diagnosed with skin cancer each year making it the most frequent cancer in the United States. Most of these cancers are basal cell or squamous carcinomas which seldom cause death, but more than 62,000 of these individuals will have melanoma, the deadliest form of skin cancer. Melanoma causes over 8,400 deaths in the United States each year.

Melanoma occurs when melanocytes, the pigment producing cells that give color to your skin, become cancer cells. Melanoma frequently appears as a change in a mole or the appearance of a dark spot in the skin. When diagnosed and treated early, melanoma is a very curable disease. When diagnosed late, melanoma cells are more likely to have spread to other organs in the body and death is more likely outcome.

***Am I at Risk for Developing Melanoma?***

Anyone can develop melanoma, but some people are more likely to develop the cancer than others. If you have a close relative (parent, sister, brother, child) who has had melanoma you are at increased risk. If you have many moles, irregularly shaped moles, or large moles you also have a high risk of developing melanoma.

If you are a fair skinned individual who easily burns and freckles, you are more likely to develop melanoma than someone with darker skin. If you are a natural blonde or red head, you also have a higher risk of developing the disease. If you're in these risk categories, you are more likely to burn in the sun, and serious sun burns, even at an early age, are associated with melanoma.

Your environment also plays a role in determining your risk for developing melanoma. If you are exposed to high intensity sunlight and for long periods of time, your risk of developing melanoma also increases.

While some people have an increased risk of developing melanoma, no one is without risk of developing the disease. Even if you have dark brown or black skin you can develop melanoma.

***What are the Warning Signs of Melanoma***

Only a physician can diagnose melanoma, but there are warning signs that you should watch for. Many melanomas develop from ordinary moles which are pigmented spots on the skin, but melanoma can also develop as a new growth. To catch melanoma early when it is most treatable, you should check your skin once a month and look for changes in moles, freckles, and birthmarks. The **ABCDE** system helps you to remember the warning signs:

**Asymmetry:** One half of the spot doesn't match the other half of the spot.

**Border irregularity:** Normal moles are usually round or oval, while the borders of a melanoma are uneven, notched, or jagged.

**Color:** Normal moles are usually one color throughout, while melanomas may have several colors or may change colors.

**Diameter:** Normal moles are usually less than ¼" in diameter (about the diameter of an eraser on a pencil) while melanomas are usually larger (but they may be smaller when first detected).

**Evolving:** Any change in size, shape, or color of a spot, or the development of bleeding, itching or crusting of a spot.

If you have one of the warning signs you should contact your physician for follow-up.

### ***What Can I do to Lower My Risk of Developing Melanoma?***

You can follow the American Cancer Society's recommendation to Slip, Slop, Slap, and Wrap.

**Slip** into a shirt. You should wear clothing that protects as much skin as possible. Long-sleeved shirts, long pants or skirts, dark colors and tightly woven fabrics offer the best protection.

**Slop** on sunscreen. You should use a sunscreen with a sun protection factor (SPF) of 15 or greater and follow the label directions. Sunscreen should be applied 20-30 minutes before going outdoors so that it can be absorbed by the skin. You should apply the sunscreen to any skin that is not covered by clothing.

Most sunscreens need to be reapplied at least every 2 hours and they should be applied more frequently if you are swimming or sweating. Some sunscreens are labeled as waterproof or water resistant, but these too need to be reapplied according to the label. Sunscreen usually rubs off when you dry yourself with a towel, so remember to reapply after drying yourself off.

**Slap** on a hat. Wearing a hat can offer important protection because sunburn occurs more frequently on the face and neck than anywhere else on the body. A tightly woven hat with a wide, wrap-around brim will offer you the most protection as it will shade the scalp, face, eyes, ears, and neck. A baseball cap offers more protection than no hat at all, but it does not shade the back of the neck where skin cancers frequently develop and they do not shade the ears.

**Wrap** on a pair of sunglasses. Your sunglasses don't need to be expensive, but they should block 99-100% of UVA and UVB radiation. Some labels may indicate "UV absorption up to 400 nm" which is the same as 100% UV absorption. "Meets ANSI UV Requirements" means that they block at least 99% of UV radiation. Don't assume that the sunglasses provide UV protection unless they are labeled as doing so.

**Limit** your exposure. UV radiation is strongest during the middle of the day (10 am to 4 pm). If your shadow is shorter than you, you are being exposed to UV radiation when it is at its strongest intensity. This is a good time to stay inside or in the shade.

Just because it's a cloudy day or you're in the water and feeling cool doesn't mean that you aren't being exposed to UV radiation as it passes through clouds and water. And remember, the water in pools and cement decks all reflect sunlight which further increase your exposure to UV radiation.

### ***How is Skin Cancer Treated?***

Most basal cell and squamous cell carcinomas are cured by minor surgery. Surgery is also used to treat melanoma, but successful treatment most often occurs when melanoma is detected in its earliest stages. Your best bet is prevention through risk reduction and early detection (think **ABCDE**).

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*Keep the health in the sport of swimming by limiting your exposure to intense sunlight. By doing so you'll reduce your chances of developing skin cancer and you will help drop skin cancer from its number one ranking as the most frequent cancer in the United States.*

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For more information:

American Cancer Society ([www.cancer.org](http://www.cancer.org))

National Cancer Institute ([www.cancer.gov](http://www.cancer.gov))