

Sunscreen: Striking Out Skin Cancer

Skin cancer is a risk that all of us face, particularly those of us with fair skin and significant sun exposure. As an occupational hazard all baseball umpires get a lot of sun exposure and thus increase their risk of sunburn, hyperpigmentation of the skin, premature aging, wrinkling of the skin, and skin cancer. As a general rule the lighter your skin color, hair color, and eye color then the higher your risks are for developing sun related issues.

There are three main types of skin cancer: 1) Melanoma, which is the most dangerous. 2) Squamous cell skin cancer and 3) Basal cell skin cancer. All of these are cancers with melanoma having the greatest risk of spreading to other areas of the body and potentially even causing death. On the other end of the spectrum is basal cell carcinoma which essentially never spreads to other areas of the body but can grow locally. Squamous cell carcinoma of the skin falls somewhere in between but on occasion can also spread particularly if ignored. Skin changes such as redness, peeling, bleeding, crusting, or changing color or darkness are some of the changes that should dictate you getting evaluated by your doctor. Sometimes skin can be treated, if it is severely sun damaged, with topical medications which can reduce the risk of some skin cancers.

There are several factors in addition to your genetics that can contribute to increasing or decreasing your risk with sun exposure, including time of year, geographic location, type of clothing, sun block etc. The damaging effect of sun can build up over time and non-melanoma skin cancers typically occur on exposed areas such as the head and neck, arms, or legs.

Some general guidelines to prevent skin cancer include:

- 1) Staying out of the sun in the middle of the day
- 2) Wearing sunscreen and reapplying often
- 3) Wearing hats
- 4) Avoiding tanning beds and burns
- 5) Wearing ultraviolet shielding clothing when possible

Note: Sun exposure can also cause cataracts so UV blocking sunglasses are important.

Ultraviolet exposure can occur when we are not suspecting it, such as reflections from water or other surfaces, through closed car windows and even through clothing. The amount of sun to cause a burn varies with skin type, closeness to the equator, high altitudes, snow etc. Be careful if exposed to a breeze because it can mask the burning feeling you may normally get with sun exposure. Some medications can make the skin more sensitive to the sun, most notably non steroidal such as ibuprofen.

In addition to some of the things mentioned above to limit sun exposure, sun screen is very important, normally an SPF of 30 - 50 would provide the best protection. Going higher is unlikely to add to your protection and going less than SPF 30 for umpires is not advised. Everyone should have sunblock on, particularly during a game and given the occupational exposure all should consider putting sunblock on every day. Some people may ask about the effects on reducing Vitamin D but as umpires this is unlikely to be an issue.

What is SPF? SPF stands for sun protection factor and is a relative term. SPF is a measure of sunscreen protection from Ultraviolet B (UVB) rays. It is only an approximation and to some degree the greater the SPF the longer you can stay in the sun. Adding more sunscreen throughout the day does not reset the clock back to zero. As an example, if you burn at two hours with SPF 30, adding it a second time doesn't give you an additional two hours. Also going from and SPF 30 to and SPF 60 does not double your protection. The actual protective

change is likely to go from blocking 93% of the rays to 98% of the rays respectively. So not a big change. Also most people under apply sunscreen.

Sunscreen absorbs the sun's rays and sunblocks physically block or reflect the sun's rays. Sunblocks typically contain metallic ingredients such as titanium dioxide, zinc oxide or iron oxide. Sunscreen may contain a variety of ingredients. Generally it is better to use waterproof sun protection and even though it is waterproof it should be reapplied. Also sun protection should be used all year round. In a recent review one of the highest rated sunblocks is the Equate Sport 50 from Walmart. I mention this only because of its availability and it fares well against many other sunscreens/blocks when compared.

Stay healthy and strike out skin cancer.

Batter Up!

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