# Sunsmarts

by Dr. Heidi Anderson

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Sunsmarts is necessary year round in Florida. We have had a cooler and cloudier winter so a reminder about the importance of sun protection is vital.

Gaining a perspective on why we preach sunsmarts entails understanding the statistics and causes of skin cancer. Skin cancer is the most common form of cancer in the United States which averages out that one in five Americans will have skin cancer in their lifetime. Skin cancer is divided into Nonmelanoma skin cancer: Basal cell & Squamous Cells Carcinoma, and Melanoma. These are types of cells in the epidermis that get reeved up or altered by ultraviolet light, chemicals, illnesses or medications. In 2008, 1 million new cases of Nonmelanoma skin cancer occurred and 62,480 cases of Melanoma with 8,420 fatalities were diagnosed. Melanoma is the most common form of cancer for young adults 25-29 years old and the second most common cancer in adolescents and young adults 15-29 years old.

An Australian campaign that incorporates many of the sun smart practices is "Slip – Slop – Slap." The focus is on all ages, but it is believed that 1 blistering sunburn under the age of 18, more than doubles a person's chances of developing melanoma later in life.

## Slip on a shirt

UPF , Ultraviolet Protection Factor, is a rating scale applied to clothing and fabrics. A fabric gets exposed to broad spectrum UV light and the amount of UV rays blocked

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is measured. A UPF of 50+ blocks 97.5% of the UVA and UVB and this is the highest rating. Variables that affect UPF are color, fiber type, weave, humidity, stretch and condition. My personal favorite is wearing a rash guard or surfer shirt while swimming.

## Slop on sunscreen

SPF. Skin Protection Factor, only indicates how well a product screens UVB rays. Even if a product has a high SPF, it might not effectively screen UVA rays so utilizing a broad spectrum sunscreen is key. The SPF number is determined by using a “standard” application amount of sunscreen and for the average adult, this is approximately golf ball sized. The SPF level compares the amount of time needed to produce a sunburn on protected skin compared to the amount of time needed to cause a sunburn on unprotected skin. For example, a person who normally turns red after 10 minutes in the sun would take 20 minutes to burn after applying an SPF of 2. The levels also block the UV and there is an advantage to going from an SPF of 15 (92 – 93% protection) to SPF 30 (97-98% protection), but there is not a dramatic increase beyond an SPF 30.

Sunscreens can be divided into physical vs chemical blockers. The chemical blockers absorb UV rays and convert their energy to heat. There are many chemical ingredients (cinnamates, octinoxate and PABA) approved by the FDA for use in sunscreens. They primarily block UVB. An exception is avobenzone (Parsol 1789®) and mexoryl which have some UVA protection. There are also newer formulations with stabilizers that prevent the chemical sunscreens from breaking down.

The physical blockers reflect UV rays off of the skin (UVA as well as UVB). The two that are used in sunscreens are zinc oxide and titanium dioxide. These are also relatively inert and hypoallergenic ingredients.

Sunscreen can also dissipate due to sweating, rubbing, and penetration into the skin. To maintain maximum effect, sunscreen should on average, be re-applied every two hours.

## Slap on a hat

Hats that are wide brimmed with 3 inches of coverage provide the most protection.

## Wrap on sunglasses

EPF, eye protection factor, is a 1 – 10 rating scale for sunglasses . Glasses should provide broad spectrum coverage and wide rims to protect from UV light on the sides.

Knowledge is power and hopefully this reminder will help keep you active, but protected and Sunsmart!

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