



SUN PROTECTIVE CLOTHING

By Sarah Patton PA-C

These days, most people have made sunscreen a part of their routine when they know they'll be out in the sun. When applied properly, sunscreen is an excellent foundation for sun protection. On the other hand, sunscreen only protects the areas to which it is applied. What about what is going on underneath that t-shirt or bathing suit of yours? You may have learned the hard way that most warm-weather clothing does not provide ideal protection from the sun's damaging rays. Who applies sunscreen underneath clothing? Not many people do. In order to achieve more effective overall sun protection, we advise adding sun protective clothing to your warm-weather wardrobe.



Sun protective clothing has been used in other countries for over a decade. Most of the standards for developing this clothing originated in Australia where the term UPF (ultraviolet protection factor) in fabrics was first used in 1996.¹ UPF is similar to the SPF rating that most people are used to, but unlike SPF ratings, UPF ratings include both UVA and UVB protection. The UPF rating indicates how much of the sun's UV radiation is absorbed by the fabric. For example, a fabric with a UPF rating of 20 allows 1/20th of the sun's UV radiation through. This means the fabric would reduce your skin's UV radiation exposure by 20 times where it's protected by the fabric.²

It is important to note that the FDA currently does not regulate sun protective clothing. In the United States, two national standard setting organizations, the American Association of Textile Chemists and Colorists (AATCC) and the American Society for Testing and Materials (ASTM) have been involved in the testing and standardization of UPF in fabrics. There are three categories of UPF protection:

⚙️ A UPF between 15 and 24 provides "Good UV Protection"

⚙️ A UPF between 25 and 39 provides "Very Good UV Protection"

⚙️ A UPF between 40 and 50 provides "Excellent UV Protection"²

It has been suggested fabrics that are appropriate for the patient who is sensitive to the sun should have UPF OVER 30.³ Clothing that has a UPF of less than 15 shouldn't be labeled as sun protective. While manufacturers don't have to comply with the ASTM standard guide, those that say they do must label their garments with UPF values.²

The construction of fabrics is an important factor in determining the UPF. It has been found that darker, tightly woven fabrics have the highest protection. For example, a dark colored t-shirt offers more protection than a white t-shirt. Wool and synthetic materials such as polyester have high UPF whereas cotton, linen, acetate, and rayon have UPF less than 15.³ Denim has an extraordinarily high UPF (1700), but most people don't wear denim bathing suits! The majority of research has found that typical cotton t-shirts have a UPF of less than 10. It is also important to note that wet fabric has a decreased UPF (water increases UV transmission). Washing and wearing UPF clothing can affect its UPF value. The UPF value placed on a garment label needs to be the lowest UPF value expected during consumer use over a two-year period.⁴ There are several companies that currently make UPF clothing such as Coolibar, Solumbra (a local company), and Columbia Sportswear among others. You can find many items online and also at sports stores (e.g. REI).

¹Georgouras, KE, Standford DG, Pailthorpe MT. [Sun Protective Clothing in Australia and the Australian/new Zealand standard: an overview.](#) Australas J Dermatol 1197;38(suppl): S79-82.

²FTC Consumer Alert. [Federal Trade Commission: Bureau of Consumer Protection; Office of Consumer and Business Education, February 20, 2008; www.ftc.gov/bcp/conline/pubs/alerts/sunairt.shtml.](#)

³Kullavanijaya P, Lim, HW. [Photoprotection.](#) JAAD, 2005; 52:937-958.

⁴Edlich RF, Cox, MJ, Becker DG, et al. [Revolutionary Advances in Sun Protective Clothing—An Essential Step in Eliminating Skin Cancer in our World.](#) Journal of Long-Term Effects of Medical Implants, 2004(2)95-105

WELCOME!



On December 6, 2007, Melanie Somera, one of our Histotechs, and her husband, Chris, welcomed Jayden Alexander to their family.

Mel says she's tired but has had plenty of help from Jayden's proud grandparents.

WELCOME BACK!



Bridget Bender worked as a medical assistant in the Seattle office from 2002 to 2003 while attending nursing school at Seattle University. Upon graduation, she took a position in the Operating Room at Children's Hospital. Last October, Bridget decided to rejoin her family at the Skin Surgery Center as lead RN in our Bellevue office.

YOUR COMMENTS

Your comments and suggestions are always welcome. If you would like to offer any comments or suggestions please fill out this section, detach, and mail to:

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What about Vitamin D? By Sarah Patton, PA-C

Most people are aware that Vitamin D is important for healthy bones. Lately, there have been additional questions raised about a possible correlation with low Vitamin D levels and cancer rates including breast, colon and prostate cancers. Sunlight triggers vitamin D synthesis in the skin. As sunscreen blocks UV rays, it also blocks Vitamin D synthesis. In addition to sun exposure, Vitamin D, of course, can also be found in food. Fortified milk and orange juice as well as salmon, eggs and liver are good sources of Vitamin D. Working in a skin cancer clinic, I see patients with numerous skin cancers on a daily basis. As such, I don't usually recommend patients get more sun exposure as we *know* that sun exposure is directly related to skin cancer. On the other hand, I think low vitamin D levels is a valid health concern considering Seattle is a city with fewer days of sunshine than others. If you're worried about your vitamin D levels, I would recommend that you follow up with your primary care provider who may recommend checking your vitamin D levels and adding supplements to your diet on an as needed basis.



SUN TIPS

The clouds are parting and sunny weather is coming! Below are some tips to help you protect yourself in the sun.

☀️ Avoid direct sunlight between the hours of 10:00 am and 4:00 pm when the UV penetration is at its highest.

☀️ Wear a daily moisturizer with an SPF of 15 or higher. Apply it to your face, ears, neck and hands every day. Most people neglect their hands! Those little "age spots" that we get on our hands are actu-

ally from UV exposure.

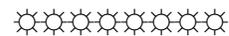
☀️ Wear a lip balm that contains sunscreen with an SPF of 15 or higher. It is common for people to get skin cancers, particularly squamous cell cancers, on their lips.

☀️ We recommend that you apply a sunscreen if you are going to be outside for greater than 20 minutes. This is in addition to a daily moisturizer with sunscreen. Sunscreen should contain both UVA and UVB protection. Look for the ingredients titanium dioxide, zinc oxide and/or parsol 1789 (avobenzone) as they protect against both UVA and UVB rays.

☀️ Reapply your sunscreen! Even if it says "waterproof" or "sweatproof", it is recommended that you reapply the sunscreen every 90 minutes, particularly if you are active.

☀️ If you're active outdoors, you may want to consider investing in UV protective clothing.

☀️ Do not use tanning beds! There is no such thing as a safe tan.



THANK YOU

Our sincere thanks goes out to all of you who participated in the letter writing campaign regarding the proposed Medicare change. This change pertained to the way Medicare reimbursed for Mohs surgeries. Unfortunately, our efforts were unsuccessful. We will keep you informed as more information becomes available.



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