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Most people know the basic tips about preventing skin cancer, but a deeper insight can make a big difference in protection. An expert from UAB has compiled important information and actions consumers can take to better arm themselves against sun exposure.

Sunburn vs. moderate exposure

“The primary cause of melanoma, the most lethal form of skin cancer, is sun burning, more so than sustained moderate sun exposure,” said Robert M. Conry, M.D., associate professor in the Division of Hematology and Oncology and scientist at the UAB Comprehensive Cancer Center. “Sun burning involves high doses of ultraviolet light to the skin which can mutate the DNA of pigment producing cells in the skin called “melanocytes” and cause these cells to form a potentially lethal cancer called melanoma.”

Although sunburns at any age should be avoided, evidence indicates that sun burns during childhood and in young adults are particularly dangerous due to increased risk of melanoma.

Squamous and basal cell skin cancers typically occur from a lifetime of high cumulative sun exposure in moderate doses – people who are often outdoors, like farmers, construction workers and those with frequent recreational sun exposure.

“Even if you avoid burning, you are still adding more miles to your skin that can lead to premature aging and skin cancer,” said Conry.

Limit sun exposure

Most people’s exposure is when the sun’s intensity is greatest. “They go to the beach at high noon and lay out for three hours receiving a significant amount of exposure,” said Conry.

The sun’s ultraviolet rays are most intense surrounding the summer solstice on June 21, when the sun is directly overhead. This is generally between May 21 and August 21from 11 a.m. to 3 p.m.

“People need to be cognizant of the sun’s peak time of intensity, keeping in mind that June 21 is a peak day and 1 p.m. is a peak hour due to daylight saving time.”

Use the right sunscreen wisely

Although our beach bags are stocked with sunscreen, Conry recommends one based on your skin type – olive skinned using a SPF of 30 and fair skinned using a SPF 50 – and reapplying frequently.

“If you want to get some sun, I encourage people to use at least SPF 15, but if your goal is to block out the sun, I ideally recommend an SPF of 30 or greater,” Conry stresses. “Reapplying matters more than SPF greater than 50. Activities such as going in and out of the water or intense sports activities causing sweating require frequent reapplication for continuous protection.”

Many people wonder if continuous spray sunscreens are as effective as tradition lotion, Conry said.

“The newer continuous sprays are used for convenience and tend to be applied unevenly without being rubbed in,” he said. “They are fine only if applied carefully and rubbed in, covering all exposed areas. I prefer creams and lotions because they provide more precise coverage. Just don’t forget tops of feet and backs of hands, and be in the habit of wearing a lip moisturizer that contains SPF protection. Skin cancer can arise on the lips.”

Cover up

Although specially manufactured UV protected clothing has come out, Conry said that it is as simple as wearing a tee-shirt at the pool, lake or beach. “It is extremely uncommon to sunburn through clothing,” Conry said.

Even if it is not very fashionable, Conry suggests wearing a wide-brimmed hat that goes all around the head and protects your ears and neck as well as face. “We see a lot of skin cancers on the ears and back of the neck, particularly in men who just wear a baseball cap,” he said.

UAB Assistant Professor of Optometry Jamie Reid , O.D., added that a hat can also help with eye protection, but it should not be the only form used because it cannot completely shield the eyes. Sunglasses with 100 percent UVA/UVB protection are a must.

“The ocular structures such as the lens and retina are really sensitive to UVA/UVB rays,” Reid explained. “They absorb those rays. When left unprotected, this can lead to cataracts, macular degeneration and other ocular diseases, including melanoma.”

This is especially important for kids, as the lens inside children’s eyes is clearer and absorbs more harmful UV light.

The danger

Melanoma has been rapidly increasing in the last four years with one of every 85 Americans expected to develop it in their lifetime.

“People should be discouraged from trying to tan,” Conry said. “It is a growing problem that ends tragically for many people, robbing them of many productive years of their life.”

Conry recommends avoiding tanning beds; they have been added to the government list of cancer causing agents, alongside arsenic and tobacco.

“They increase the risk of skin cancers including melanoma,” he said. “Self-tanning skin products are a good option in moderation. I discourage people from using it constantly and year round.”

Check your skin

Although scientists have made strides in treating and understanding melanoma, people need to be vigilant about examining their skin for irregularities and bringing anything unusual to the attention of a dermatologist. If melanoma is caught early, it can be cured with surgery. However, if it is discovered in late stages, it can be fatal.

Melanoma skin check:

- pigmented spots greater than the diameter of a pencil eraser
- spots with a variety of color
- spots that have irregular borders
- spots or patches that change over time (e.g., growing, bleeding or itching)

For squamous or basal skin cancers, keep an eye on non-healing skin lesions that are persistent for an extended period of time.

The UAB Comprehensive Cancer Center is among the 41 cancer centers in the nation to meet the stringent criteria for the National Cancer Institute's comprehensive designation. The center is a leader in groundbreaking research and patient care, and in reducing cancer disparities.