The ABCD's of Cancer

Clearly, everyone who sits in the sun is not going to get skin cancer. But the numbers do make you think twice: This year more than one million Americans will develop one of the three forms of skin cancer — basal cell carcinoma, squamous cell carcinoma, and malignant melanoma — and over 90 percent of these cancers will appear on sun-exposed skin, usually on the face, neck, ears, forearms, and hands. What's more, *every hour an American dies from skin cancer*.

How it happens

The connection between the sun's powerful ultraviolet UVA and UVB rays and skin cancer is indisputable. In a nutshell, overexposure to those rays ravages our skin cells, which are made up of two layers. The top layer, or epidermis, includes three types of cells: flat, scaly squamous cells; round basal cells; and melanocytes, the cells that give skin its color. It's these last cells that are most vulnerable. Too much sun prompts visible damage (like sunburn or tanning) as well as invisible, cellular-level damage that adds up over the years. Depending on the individual, that damage can eventually prompt wrinkles, age spots, and, often, skin cancer.

Melanoma

Of the three cancers, potentially fatal melanoma is the most serious. Nearly 40,000 Americans will develop it this year. "Malignant melanoma is the emerging common cancer in young adults and in women in their 20s and 30s, second only to breast cancer," says Alan M. Houghton, M.D., the principal investigator in a melanoma vaccine study sponsored by the Memorial Sloan Kettering Cancer Center in New York. Squamous cell carcinoma and basal cell carcinoma are just as dangerous if they spread, but they're curable if you catch them early; that's why detection is so important. So if you see any changes in the skin, such as a growth, a sore that doesn't heal, or moles that are starting to look irregular, consult your dermatologist immediately. And if a family member has had melanoma or you have a high number of moles, Dr. Houghton suggests seeing a dermatologist once or twice a year.

Melanoma usually begins as a dark brown or black patch with irregular borders and is characterized by the uncontrolled growth of pigment-producing tanning cells. It may appear anywhere on the body without warning or start near a mole. It has a tendency to spread, making it essential to treat it right away. Since melanoma is often linked to a change in one of your moles (most of us have 100 or so), you should inspect them regularly and look for any changes in their size and color, such as the appearance of a bump or the spreading of pigment around the border. The Skin Cancer Foundation and the American Academy of Dermatology recommend using the ABCD method (see photos above) to help detect melanoma: A (most early melanomas are *asymmetrical*); B (*borders* of melanomas are uneven); C (*color*; varied shades of brown, tan, or black are often the first sign of melanoma); and D (*diameter*; early melanomas tend to grow larger than common moles).

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Squamous and basal cell carcinomas
The second most common skin cancer in Caucasians is squamous cell carcinoma, which begins in the squamous cells of the epidermis. You'll often see scaly patches or raised growths on your skin in such places as the tip of your nose, or on your forehead, lower lip, or hands. Since this carcinoma can spread, spotting these growths early on is critical. The third kind of cancer, basal cell carcinoma, often starts as small, fleshy bumps on your face, ears, lips, or around your mouth. These bumps may become crusty or may not heal easily and, even though the tumors rarely spread to other parts of the body, they can continue to grow, making it essential to have them removed.

"If you have a question about a change in your skin or a mole, don't wait," says Wilma Bergfeld, M.D., a dermatologist at the Cleveland Clinic. "One of my patients was a young dentist who had just finished with his training. He had a brown mole on his belly and never removed it. Two years later, it bled. And, even though we removed it, the cancer had already spread to his brain and liver. Don't put off removing something suspicious."

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