Protecting Yourself Against Harmful Sunlight

Am I at Risk?

Did you know that the number of new cases of skin cancer, and the number of deaths caused by the most serious type of skin cancer are rapidly rising in the United States? This is particularly troubling since the numbers for most cancers have been declining. Sunlight is the main source of ultraviolet radiation (UV) known to damage the skin and to cause skin cancer. The amount of UV exposure depends on the strength of the light, the length of exposure, and whether the skin is protected. There are no safe UV rays or safe suntans.

Sun exposure at any age can cause skin cancer. Your skin and eyes are most susceptible to sun damage. You need to be especially careful in the sun if you have

- numerous moles, irregular moles, or large moles;
- freckles or burn before tanning;
- fair skin, or blond, red, or light brown hair; or
- spend a lot of time outdoors.

Melanoma is the most serious type of skin cancer, and accounts for more than 75 percent of the deaths due to skin cancer. In addition to skin cancer, sun exposure can cause premature aging of the skin, wrinkles, cataracts, and other eye problems.

How Do I Protect Myself From UV Radiation?

If you work outdoors, there are **five important steps** you can take to protect against UV radiation and skin cancer:

1. Cover up. Wear clothing to protect as much of your skin as possible. Wear clothing that does not transmit visible light. To determine if the clothing will protect you, try this test: Place your hand between the fabric and a light source. If you can see your hand through the fabric, the garment offers little protection against sun exposure.

2. Use a sunscreen with an SPF of 15 or higher. Experts recommend products with a Sun Protection Factor, or SPF, of at least 15. The number of the SPF represents the level of sunburn protection provided by the sunscreen. An SPF 15 blocks out 93 percent of the burning UV rays; an SPF 30 blocks out 97 percent of the burning UV rays. Products labeled "broad spectrum" block both UVB and UVA radiation. Both UVA and UVB contribute to skin cancer.

Apply sunscreen liberally at least 15 minutes before going outside. Reapply every 2 hours or more frequently if you sweat a lot or are swimming.

Warning: Do not depend on sunscreens alone. Combine sunscreen with wide-brimmed hats, UV-protective sunglasses, and tightly woven clothing to increase your protection against UV radiation.

3. Wear a hat. A wide brim hat is ideal because it protects the neck, ears, eyes, forehead, nose, and scalp. A baseball cap provides some protection for the front and top of the head, but not for the back of the neck or the ears where skin cancers commonly develop.

4. Wear sunglasses that block UV rays. UV-absorbent sunglasses can help protect your eyes from sun damage. Ideal sunglasses do not have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation. Check the label to make sure they do. Darker glasses are not necessarily the best. UV protection comes from an invisible chemical applied to the lenses, not from the color or darkness of the lenses.

5. Limit direct sun exposure. UV rays are most intense when the sun is high in the sky, between 10 AM and 4 PM. If you are unsure about the sun's intensity, take the shadow test: If your shadow is shorter than you, the sun's rays are the strongest. Seek shade whenever possible.

You may also want to check the UV Index for your area. The UV Index usually can be found in the local newspaper or on TV and radio news broadcasts. It gives the expected noon-time UV radiation reaching the earth's surface on a scale of 1 to 10+. It is forecast daily for 58 cities. The higher the number, the greater the exposure to UV radiation. The Index helps determine when to avoid sun exposure and when to take extra protective measures. (See http://www.nws.noaa.gov./om/uvi.htm.)

Should I Get Checked?

Yes. Skin cancers detected early can almost always be cured. The most important warning sign for skin cancer is a spot on the skin that is changing in size, shape, or color over a period of 1 month to 1-2 years. The most common skin cancers--basal cell and squamous cell--often take the form of a pale, wax-like, pearly nodule; a red scaly, sharply outlined patch; or a sore that does not heal; whereas melanoma often starts as a small, mole-like growth. So it's important that you examine your body, and see a health care clinician if you find an unusual skin change.

How Can I Learn More About Preventing Skin Cancer?

There are many websites with good information about preventing, detecting, and treating skin cancer, including the following:

American Cancer Society for melanoma and nonmelanoma skin cancers (scroll menu of common cancers) at http://www.cancer.org, or call 1- (800) ACS-2345.

Centers for Disease Control and Prevention, for various health materials including skin cancer at http://www.cdc.gov/ChooseYourCover, or call 1- (888) 842-6355.

For more information on **OSHA**, visit the agency's website at http://www.osha.gov, call 1- (800) 321-OSHA or your nearest OSHA office. Teletypewriter (TTY) number is 1- (877) 889-5267.

U.S. Department of Labor Occupational Safety and Health Administration OSHA 3166 (2000)