



Be Sun Safe: Help Prevent Skin Cancer

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Pediatric Nursing Clips by Pediatric Advanced Practice Nurses at Dayton Children's provides quick reviews of common pediatric conditions.

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ONE IN SIX AMERICANS WILL DEVELOP SKIN CANCER

Skin cancer is the most common form of cancer in the United States. The Centers for Disease Control and Prevention (CDC) has estimated that there are more than one million new cases every year. The most serious form of skin cancer, malignant melanoma, is expected to be diagnosed in 89,580 persons in 2009.¹

The risk of developing skin cancer is highest among people with lightly pigmented skin who burn easily and rarely tan. Their risk is greater because they are more likely to have acute burns when exposed to the sun. Although light skin persons are 10 times more likely than dark skin persons to develop skin cancer, everyone is at risk.

THERE ARE THREE TYPES OF SKIN CANCER

The most common and least aggressive type of skin cancer, basal cell carcinoma, represents about 75 percent of the skin cancers reported every year. Basal cell carcinomas most often occur on the face, neck and upper body but can manifest anywhere. The lesions grow slowly and may appear as a lump or scaling area that is red or a pale pearly color. Lesions may crust, ulcerate and sometimes bleed. They may become like a sore that does not heal, or one that heals and breaks down again.

The second most common type of skin cancer is squamous cell carcinoma. It accounts for 20 percent of all skin cancers. This cancer is more aggressive than basal cell carcinoma and if not treated, can spread to other parts of the body. Squamous cell carcinomas appear on the skin

most often exposed to the sun and grow over many months. The lesions look like thickened red, scaly spots. Later, they may bleed easily or ulcerate. This cancer commonly occurs in people over the age of 40 and is the result of many years of exposure to the sun without protection. If an African-American or Hispanic-American develops skin cancer, it will most likely be squamous cell carcinoma.²

The most deadly type of skin cancer is melanoma. If untreated, cancer cells spread to other parts of the body; however, if treated early, 95 percent are cured. This type of skin cancer is most common between 30 and 50 years but can occur from childhood onward. It grows over weeks to months, anywhere on the body. Melanoma may appear as a new spot or as an existing spot, freckle or mole that changes color, size or shape. The lesions usually have an irregular or smudgy outline and are more than one color.

A TAN IS NOT HEALTHY

A tan is often viewed as "healthy," but it actually represents damage to skin cells. Tanning results when ultraviolet (UV) rays penetrate the skin's inner layer and cause more melanin to be produced. The melanin then moves up to the outer layers of the skin and becomes visible as a tan. Chronic exposure to UV rays changes the skin texture leading to wrinkles and varying degrees of skin thickening or thinning.

Researchers have found that three or more episodes of sunburn before the age of 20 that require more than three days to heal increase the risk of developing melanoma by two to five times. Since sun exposure

during childhood (up to 18 years) is estimated to account for almost 80 percent of an individual's lifetime sun exposure, the sooner preventive behaviors begin, the better.

UV RADIATION COMES IN TWO WAVELENGTHS

There are two types of ultraviolet radiation: ultraviolet A (UVA) and ultraviolet B (UVB). UVB has long been associated with sunburn; however, the sun also gives off UVA. Both UVA and UVB are present year-round.² The total amount of harmful UV radiation that reaches the skin at any given time is influenced by such factors as season, time of day, conditions of the earth's atmosphere and nearness to the equator where the UV rays are the greatest. Chances of developing sunburn are greatest between 10:00 am and 4:00 pm when the sun's rays are the strongest.

The UV Index was developed by the National Weather Service. It is a number from 0 to 10+ that indicates the amount of UV radiation reaching the earth's surface around noon. The higher the number, the greater the exposure to UV radiation if outdoors. The National Weather Service forecasts the UV Index daily in many United States cities based on local conditions. The Index covers a 30 mile radius around each city.³ Local newspapers, radio, television and internet are sources for the UV Index.

A SKIN SELF-EXAMINATION IS IMPORTANT FOR EARLY DETECTION OF SKIN CANCERS

Self-examination increases chances of finding a precancerous skin condi-

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tion or a skin cancer. The earlier these lesions are found and treated, the greater the chances for successful treatment. The best time to do skin exams is after a shower or bath. Everyone should be familiar with their birthmarks, moles and blemishes so that they can easily tell if there are any changes or if new ones have developed. Things to look for are changes in size, texture, shape and color, or a blemish or sore that does not heal. If any changes are found, a doctor should examine them.¹

REFERENCES:

1. Centers for Disease Control and Prevention Skin Cancer Primary Prevention and Education Initiative www.cdc.gov/cancer/nscpep
2. National Association of State Boards of Education Report "Fit, Healthy, and Ready to Learn: Part II Sun Safety" www.nasbe.org/Educational_Issues/Safe_Healthy.html#Reports www.nasbe.org/HealthySchools/sun_safety.html (Executive Summary and Sample Policies) www.aad.org
3. Cokkinides, V., Weinstock, M, et al. *Trends in Sunburns, Sun Protection Practices, and Attitudes Toward Sun Exposure Protection and Tanning Among Us Adolescents, 1998-2004. Pediatrics* Vol. 118, Number 3. September 2006.

FEATURED NURSE SPECIALISTS



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inside Dayton Children's and provides extensive services to children through 21 years of age with blood disorders or malignancies. For children with a malignancy, state-of-the-art care is provided through collaboration with the Children's Oncology Group. The cancer care program is accredited by the American College of Surgeons Commission on Cancer. Off-site clinics for hematology/oncology are located in Lima at St. Rita's Medical Center and in Middletown at Dayton Children's Specialty Care Center – Warren County. Call 937-641-3111 for referrals or more information.



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