

Saving Your Skin from Sun Damage **Tips from** **Baldwin School's Wellness Program** **Enjoy the Sun Safely During This Summer**

Summer Vacations are around the corner. This is the perfect time to get away from work and troubles of every day life, and to take time out to enjoy yourself.

Summer is synonym of fun, beach and sun. These are the most important requisites for perfect vacations. In order for this time to be really perfect, we need to learn to enjoy the sun safely. **Why?** Because the sun's rays, which are called ultraviolet A and ultraviolet B rays (UVA and UVB) damage your skin. This leads to early wrinkles, skin cancer and other skin problems.

The skin is the largest organ of the body. It covers the internal organs and protects them from injury. It also serves as a barrier between microbes and internal organs, and prevents the loss of too much water and other fluids. The skin regulates the body temperature and certain cells in the skin communicate with the brain and allow for temperature, touch, and pain sensations. The skin has two main layers and several kinds of cells.

Being in the sun often-over time, even if you don't burn, can lead to skin cancer. A tan is the body desperate attempt to protect itself from the sun harmful rays. The level of ultra violet light (UV) today is higher than it was 50 to 100 years ago. This is due to a reduction of ozone in the earth atmosphere. Ozone serves as a filter to screen out and reduce the amount of UV light that we are exposed to.

Skin cancer is a disease in which malignant cells are growing in the layers of your skin. There are several types of cancer that start in the skin. The most common are *basal cell and squamous cell cancer*. The most serious type of skin cancer is *melanoma*.

Skin cancer is the most common of all cancers. It accounts for nearly half of all cancers in the United States. One in five Americans and one in three Caucasians will develop skin cancer in the course of a lifetime (*American Cancer Society's 2007 Facts and Figures*). The American Cancer Society estimates that about 59,940 new melanomas will be diagnosed in the United States this year, with nearly 8,110 resulting in death.

Most skin cancers occur on parts of the body that are repeatedly exposed to the sun. These areas include the head, neck, face, tips of the ears, hands, forearms, shoulders, back, chests of men, and the lower legs of women.

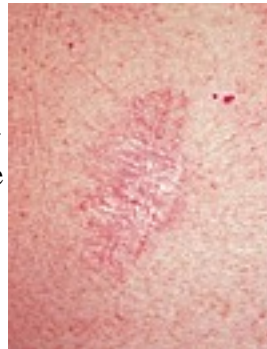


Let look to the different types of skin cancers.

Basal cell carcinoma is the most common form of skin cancer, with more than 800,000 new cases estimated in the United States each year. Basal cells are cells that line the deepest layer of the epidermis. An abnormal growth (a tumor) of this layer is known as basal cell carcinoma. The five most typical characteristics of basal cell carcinoma are shown in the pictures below. (The Skin Cancer Foundation provided the pictures and the information)



A Shiny Bump or that is pearly or translucent and is often pink, red, or white. The bump can also be tan, black, or brown, specially in dark-haired people, and can be confused with a mole.



A Reddish Patch or irritated area, frequently occurring on the chest, arms, shoulders, or legs. Sometimes the patch crusts. It may also itch or hurt. It may persist with no discomfort.



A Pink Growth with a slightly elevated rolled border and a crusted indentation in the center. As the growth slowly enlarges, tiny blood vessels may develop on the surface.



An Open Sore that bleeds, oozes, or crusts and remains open for three or more weeks. A persistent, non-healing sore is a very common sign of an early basal cell carcinoma.



A Scar- like Area, which is white, yellow or waxy, and often has poorly defined borders. The skin itself appears shiny and taut. This warning sign can indicate the presence of an aggressive tumor.

Squamous cell carcinoma is the second form of skin cancer, with over 220,000 new cases per year in the United States. Squamous cells are cells that compose most of the epidermis. An abnormal growth of these cells is known as squamous cell carcinoma. The warning signs for squamous cell carcinoma are shown in the following pictures provided by the Skin Cancer Foundation.



A wart-like growth that crusts and occasionally bleeds.



An elevated growth with a central depression that occasionally bleeds.



A persistent, scaly red patch with irregular borders that sometimes crusts or bleeds.



A persistent, scaly red patch with irregular borders that sometimes crusts and persists for weeks.



An open sore that bleeds and crusts and persists for weeks.



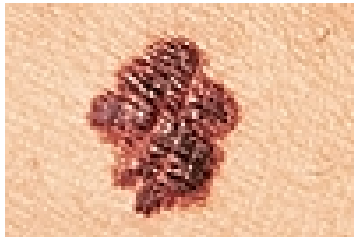
This is another kind of open sore that bleeds and crusts and persists for weeks.

Melanoma is the most serious form of skin cancer. If it is not treated early, the cancer can advance and spread to other parts of the body, where it becomes hard to treat and can be fatal. Melanoma is a malignant tumor that originates in the **melanocytes**, the cells that produce the pigment that colors our skin, hair and eyes. The number of new cases of melanoma is estimated at 59,940. Of these, 33,910 will be in men and 26,030 in women. Look for the **ABCDEs** of melanoma published by the Skin Cancer Foundation:



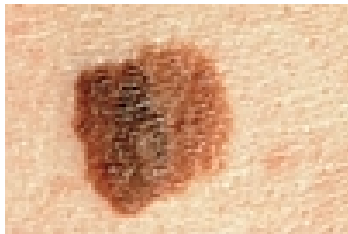
A for Asymmetry

If you draw a line through this mole, the two halves will not match.



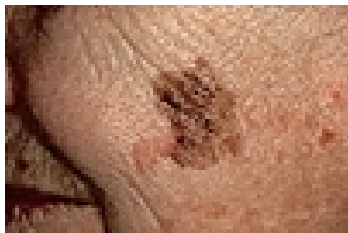
B for Border

The borders of an early melanoma tend to be uneven. The edges may be scalloped or notched.



C for Color

Having a variety of colors is another warning signal. A number of different shades of brown, tan or black could appear. A melanoma may also become red, blue or some other color.



D for Diameter

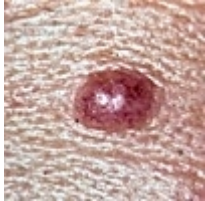



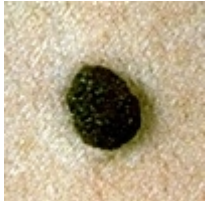



Melanomas usually are larger in diameter than the size of the eraser on your pencil (1/4 inch), but they may be smaller when first detected.



E for Evolving

Any change in size, shape, color, elevation, or another trait, or any new symptom such as bleeding, itching or crusting, points to danger.

The pictures below show a comparison between benign moles and malignant moles or melanomas. The comparison points are symmetry, borders, color and diameter. (This information was taken from The Skin Cancer Foundation).

	Benign	Malignant	
Symmetrical			Asymmetrical
Borders are even			Borders are uneven
One shade			Two or more shades
Smaller than 1/4 inch			Larger than 1/4

The Risk Factors for Skin Cancer are:

- **Skin Type:** People having fair skin that burns easily and severely and does not tan, with blue or green eyes, and blond or red hair are in higher risk than individuals with darker skin. That is because the first group has less melanin to protect their skin from the UV light than the second one.
- **Heredity:** Everyone is at risk for skin cancer, but if you have a family member who has or had skin cancer, you may be in a skin cancer- prone family.
- **Having Dysplastic Nevi Syndrome (DNS):** DNS is when a person have more than 100 atypical moles, which although benign, resemble melanoma and indicate an increased risk. The photo below shows a person with DNS.



- **Sun Exposure:** More than 90% of all skin cancers are caused by sun exposure (working or playing outside, being in the sun a lot as a child, having had serious sunburn, sun burning easily). A person's risk for skin cancer doubles if he or she had five or more sunburns.
- **Tanning Booths or Sunlamps:** Tanning booths and sunlamps use ultraviolet rays. Makers may claim that they use "harmless UVA rays". However, both UVA and UVB rays cause skin damage. While UVA rays take longer than UVB rays to damage the skin, they go deeper into the skin than UVB rays.

Tips on Preventing Skin Cancer

The key is to avoid being in the sun or using sunlamps. The Cancer Research UK developed a National Skin Cancer Prevention Campaign emphasizing this point. They called this campaign **The Sun Smart Code** and it consists of five affirmations:

- S**pend time in the shade between 11 a.m. and 3 p.m.
- M**ake sure you never burn
- A**im to cover up with a t-shirt, hat and sunglasses
- R**emember to take extra care with children
- T**hen use factor 15+ sunscreen



Also Remember: To check your skin yourself every month for signs of skin cancer. The best way is to use a full-length mirror and a hand-held mirror to check every inch of your body, from head to toe. If you see an area on your skin that looks unusual, ask your family doctor about it. Do not use tanning booths or lamps. Put the sunscreen everywhere the sunrays may touch you. Put more every hour if you are sweating or swimming and enjoy your summer vacations!

References: American Cancer Society. "Skin Cancer Facts".
<<http://www.cancer.org/doctor/PED/content/ped>>

The Skin Cancer Foundation. "Basal Cell Carcinoma".
<<http://www.skincancer.org/basal/index.php>>

The Skin Cancer Foundation. "Squamous Cell Carcinoma".
<<http://www.skincancer.org/squamous/index.php>>

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<<http://www.skincancer.org/melanoma/index.php>>