

## **It Pays to Know More about the Sun's Rays**

Now that camping season is in full swing, we're all outside more enjoying the beautiful weather and longer days. We often find ourselves spending hours in the sun at the pool, out in the canoe, golfing or fishing.

"Every time we're in the sun we damage DNA, the body's blueprint for healthy cells. The body is able to repair DNA almost every time," said Dr. Chris Langemo, Medical Director of Edgerton Hospital's ER/Urgent Care departments, "but sometimes it can't and a group of cells begins replicating in the wrong formation."

Those cells can grow out of control turning into spots or bumps on your skin which are cancer. Sun not only causes DNA damage, it also helps the cancer grow.

"Your body has the ability to find small cancerous growths and kill them. But sun suppresses your immune system's ability to do that," said Dr. Langemo.

It doesn't take much exposure. Just two to three blistering sunburns in your life can double your risk of developing skin cancer.

In general, Americans have a one in five chance of developing skin cancer in their lives. For malignant melanoma, the rarest and deadliest of these cancers, the risk is up 20 fold from the 1930s.

"Part of the increase is that we live longer and part of it is that people in the 1930s would wear protection such as long sleeve shirts and hats anytime they went outside," said Dr. Langemo.

### **Skin Cancer is Common**

Skin cancer is the most common form of all cancers. People are diagnosed more often with skin cancer than with breast, lung, prostate, colorectal and kidney cancer combined. Skin cancer cases fall into three main types: basal cell, squamous cell and melanoma.

Basal cell carcinoma is the most common of skin cancers accounting for about 75 percent of all cases. It appears primarily on highly exposed areas to the sun including the face, ears, lips and especially the nose. It can take a variety of shapes: it might look like a scab or it could be a shiny bump; in some cases a sore that won't heal. Rarely does it spread to other parts of the body.

Squamous cell carcinoma is second most common of all skin cancers making up 20 percent of the cases. It is a bit more aggressive than basal cell and can in some rare cases spread, resulting in death. These cancers show up as a scaly patch or warty growth usually on over-exposed areas to the sun. With treatment, there is more than a 95 percent cure rate for both squamous and basal cell cancers.

Malignant melanoma is the rarest of all skin cancers but it's by far the deadliest. Just five percent of all skin cancers fall into this category and one in ten diagnosed will die from its metastatic effects. These cancers are identified as dark brown or black mole-like patches with irregular edges.

“With men, melanoma tends to occur on their backs; for women it's the lower legs,” said Dr. Langemo. “Anywhere you have skin pigment, even between the toes, you can get a melanoma. But it's more likely to occur in places you've been tanned and burned.”

### **Treatment Options**

With all three types of skin cancer, surgery is the main treatment. And, in most cases these cancers can be cured. With malignant melanoma timing is the key. Once it grows deeper into the skin, it has a greater tendency to spread to other parts of the body. Small differences in depth make a big difference on prognosis.

“Most lesions are less than 2 millimeter. A bad prognosis occurs with three to four millimeters, so we're not talking very thick,” said Dr. Langemo.

## **Reducing your Risk**

How do you minimize your risk of skin cancer? Dr. Langemo says, “know the risk factors.” These include exposure to the sun, a history of blistering burns, a family history of melanoma and a large number of moles and atypical moles.

Minimizing your sun exposure is the best way to cut down the risk of skin cancer. Childhood exposure increases risk of developing cancer more than exposure as an adult. But Dr. Langemo says that doesn’t mean people can’t enjoy time outdoors.

“I’m all for moderation. I have patients who say they wear sunscreens every day of the year. I don’t. I don’t wear sunscreen when I go to work,” said Dr. Langemo. “I wear sunscreen when I’m out gardening for a long time. I’m all for a little bit of sun. The problem is some people take sunshine as an invitation to go out and roast themselves.”

On the topic of sunscreen Dr. Langemo says it’s not a magic bullet. In fact she points out that since many people started relying on it, the number of skin cancer cases in the country has actually risen.

“Sunscreen can decrease cancer risk, but must be combined with good judgment.” Dr. Langemo said. “What we think is that since people with sunscreen don’t burn, they stay out longer and are exposed to more UV rays. Sunscreen may block the burn, but not all the damaging rays.”

And Dr. Langemo says in many cases, sunscreen isn’t applied properly. “People use too little, rub it in and only get a little protection. But that doesn’t mean you shouldn’t use it said Dr. Langemo. “Sunscreen is like an airbag in a car: you ought to have it but don’t rely just on that one form of protection.”

## **ABC’s of Melanoma**

Think your mole is out of the ordinary? Here are some signs you may need to have it checked out:

A – Asymmetry: if you draw a line through the mole, both sides do not match.

B – Border: the edges of the mole may be uneven, scalloped or notched.

C – Color: moles with red, white, brown, black and blue patches are a warning sign of trouble.

D – Diameter: if the mole is larger than the diameter of a pencil eraser have it checked out.

E – Evolving: any change in size, color or elevation could be signs of melanoma.

### **Sunscreen Stats: When an SPF 30 Isn't a 30**

Most sunscreens are tested in laboratories using large amounts of the lotion. In reality, when scientists look at how much people actually use, it's about 1/5 that used in the test. So an SPF 30 really is more like SPF 6. To get the full protection put a thick coat on your skin, leave it white, and let it soak in.

### **The Skinny on Skin Cancer**

- Men get two times more skin cancer than women.
- In 2007: 59,940 will be diagnosed with melanoma and 8,110 people will die from it.
- Skin color is the most important factor in determining your risk for skin cancer. The lighter the skin, the greater the chance. No one is immune.
- African-Americans are more likely to develop skin cancer on areas not exposed to the sun. 32.1 percent of this group is diagnosed at stage 3 or 4, a more advanced stage that is usually fatal.

- Lighter colored clothing may feel better but darker colors absorb more UV rays and offer better protection.

### **Risk Factors**

People with the following traits are at greater risk for skin cancer:

- Family history of skin cancer
- History of severe sunburn
- Freckles from sun damage
- Many moles
- Blue, green or hazel eyes
- Fair skin
- Light brown, blonde or red hair

### **Protect Yourself**

The American Cancer Society has developed a clever catch phrase that can help you to remember the four key methods you can use to protect yourself from UV radiation - "Slip! Slop! Slap!... and Wrap:"

- Slip on a shirt.
- Slop on sunscreen.
- Slap on a hat.
- Wrap on sunglasses to protect the eyes and sensitive skin around them.

Following these practical steps can help protect you from the effects of the sun. These steps complement each other, and they provide the best protection when used together.