

Prevention - Adult Sun Safety

Skin Cancer and Melanoma Facts

- Cancer of the skin is the most common form of all cancer accounting for more than 50% of all cancers.
- More than 1 million cases of non-melanoma skin cancer are found in this country each year.
- During 2005, the American Cancer Society estimates that about 59,600 new melanomas will be diagnosed in the United States.
- About 79 percent of the new skin cancer cases will be basal cell carcinoma, 15 percent will be squamous cell carcinoma, and 5 percent will be invasive melanoma. The other 1 percent will represent rare types of skin cancer, such as Merkel cell carcinoma, adnexal carcinoma(s), dermatofibroma fibrosarcoma protuberans, etc.
- Both basal cell carcinoma and squamous cell carcinoma have a better than 95 percent cure rate if detected and treated early.
- There will be about 105,750 new cases of melanoma in 2005 – 46,170 in situ (noninvasive) and 59,580 invasive (33,580 men and 26,000 women).* This is a 10 percent increase in new cases of melanoma from 2004. In 2005, at current rates 1 in 34 Americans have a lifetime risk of developing melanoma and 1 in 62 Americans have a lifetime risk of developing invasive melanoma.
- The American Cancer Society estimates there will be about 10,590 deaths from skin cancer in 2005- 7,770 from melanoma and 2,820 from other skin cancers.
- One American dies of melanoma almost every hour (every 68 minutes). In 2005, 7,770 deaths will be attributed to melanoma – 4,910 men and 2,860 women.* Older Caucasian males have the highest mortality rates from melanoma.
- The incidence of melanoma more than tripled among Caucasians between 1980 and 2003.
- More than 73 percent of skin cancer deaths are from melanoma.
- Melanoma is more common than any non-skin cancer among women between 25 and 29 years old.
- Invasive melanoma is the fifth most common cancer in men and the sixth most common cancer in women.
- 1 in 5 Americans will develop some form of skin cancer during their lifetime.
- Five or more sunburns double your risk of developing skin cancer.

* Information taken from the American Cancer Society www.cancer.org and American Academy of Dermatology www.aad.org

Why Skin Cancer Rates Are Rising

- Increased leisure time devoted to outdoor activities.
- Decrease in coverage of clothing worn.
- Nation population migration to sunnier states.
- Decreasing amounts of stratospheric ozone that partially protects the earth's surface from receiving cancer-producing UV radiation.
- Tanning is falsely viewed as healthy.
- General aging of the population.

* Information taken from the Skin Cancer Prevention Program

Protection is Vital

Proper sun protection is the most important thing we can do to protect ourselves from skin cancer. Up to 90% of all skin cancers are caused by exposure to the sun's harmful ultraviolet (UV) rays.

While skin cancers are almost always curable when detected and treated early, the surest line of defense is to prevent them in the first place. Here are some sun-safety habits that should be part of everyone's daily healthcare:

Limit Time in Sun

- Avoid unnecessary sun exposure, especially during the sun's peak hours (10am to 4pm).
- Keep track of time spent in sunlight and do not stay in an unshaded spot for a long stretch of time.

Seek the Shade

- Always seek the shade.
- Be aware that sunlight bounces off reflective surfaces and can reach you even under an umbrella or tree.

Cover Up

- Cover up with clothing. Wear long-sleeved shirts and long pants. Tightly woven fabrics and dark colors, such as deep blue and black or bright colors such as orange and red offer the best protection. Change than to then if you can see light through fabrics, then the material is not protecting against harmful UV rays. Water also reduces fabrics ability to protect against UV rays.
- Wear a broad-brimmed hat, which protects head, face, ears and neck. A 3-4 inch brim that extends around the hat is best. If opting for a baseball cap or visor, be sure to use sunscreen as the lower face, neck and ears are left exposed.
- Wear UV-blocking sunglasses that wraparound or have large frames. Eyelids and the sensitive skin around your eyes are common sites for skin cancer and sun-induced aging. The use of sunglasses also helps reduce the risk of cataracts later in life.

Use Sunscreen

- Wear a broad-spectrum sunscreen with a sun protection factor (SPF) of 15 or higher.
- Use sunscreen that blocks both UVA and UVB rays.
- Apply generously to all exposed skin. The average adult should use approximately one ounce of sunscreen per application. Not using the proper amount will reduce the product's SPF and protection received.

- Be sure to cover often-missed spots- lips, ears, around eyes, neck, scalp, hands and feet.
- Choose products that suit your skin and activity level. Sunscreens come in lotion, gel, spray, cream and stick forms. Also products are available in water resistant, sweat proof, sport proof, fragrance-free, hypoallergenic or in sensitive skin formulas.

Avoid Tans

- Avoid tanning parlors and artificial tanning devices. The UV radiation emitted by indoor tanning lamps is many times more damaging than natural sunlight.
- Tanning is the skin's response to the sun's damaging rays.

Examine Your Skin

- Examine your skin from head to toe every month.
- Have a professional skin examination annually.

* Some information taken from the Skin Cancer Foundation www.skincancer.org

Sunless Tanning

For those people who wish to have a “healthy-looking” tan, there are alternatives. For instance, we recommend [sunless tanning products](#) to our patients because it allows them to achieve an instant, natural-looking tan without streaking or orange color. This product is all-natural and has a pleasant odor and in no way contributes to increasing the risk of developing skin cancers.

Outdoor Workers

Melanoma

[From the 2004 Burden of Skin Diseases prepared by the Lewin Group Inc. for the Society for Investigative Dermatology and the American Academy of Dermatology Association]

The most well-known form of skin cancer, melanoma, is also the most aggressive and deadly. In 2004, 7,900 of the approximately 55,000 individuals newly diagnosed with melanoma will die of their disease. In addition to its high mortality rate, melanoma is now the second leading cause of lost productive work years due to cancer.

Melanoma causes abnormal proliferation of specialized cells in the skin, eyes, and hair that produce the pigment melanin. According to the American Cancer Society (ACS), early diagnosis is the most important factor in successful treatment and ACS recommends annual skin examinations for everyone over the age of 40 and every three years for individuals between the ages of 20 and 40. A clear relationship between increased sun exposure and risk of melanoma has been established. Therefore, preventive efforts to reduce the incidence of the disease focus on increasing application of sunscreens and protective clothing when outdoors, eliminating the use of tanning beds, and reducing sun exposure between the hours of 10am and 4pm (when UV

rays are harshest). In addition to environmental factors, genetic factors contribute to risk for developing melanoma.

Epidemiology

Melanoma is one of the few skin conditions with comprehensive epidemiology statistics available in a nationally representative dataset. For this study, the NCI SEER database was used to estimate the incidence, prevalence, and mortality rates for melanoma, stratified by age and gender. According to the most recently available SEER data, adjusted to the 2004 US population, 55,100 individuals were diagnosed with melanoma and there were 7,920 deaths due to this cancer in 2004. Furthermore, its reported incidence has increased 690% from 1950 to 2001, and the overall mortality rate has increased 165% during the same period. The overall crude prevalence rate for all ages and both sexes is roughly 240 per 100,000 individuals. When this rate is applied to the 2004 US population, the overall prevalence of melanoma is 718,000 individuals.

Among all cancers in the US, the reported incidence of cutaneous melanoma ranks fifth among men and seventh among women. Melanoma is the most commonly diagnosed cancer among women ages 20-29. Individuals at highest risk for melanoma include those with fair skin, red or blonde hair, and those who are often and continuously exposed to sunlight (such as lifeguards and landscapers), who had multiple blistering sunburns as a child or adolescent, and/or with a family history of the disease.

Direct Costs

The estimated 2004 total direct cost associated with treatment of melanoma was \$291 million. This includes \$213 million in costs for care provided in hospital inpatient and outpatient departments, physicians' offices, and emergency rooms. There were 603,800 physician office visits due to melanoma, according to data from the National Ambulatory Medical Survey, making this the primary site of care for individuals with this condition. There were 57,000 visits made to hospital outpatient department and 6,000 visits made to emergency rooms for melanoma.

Inpatient hospital stays where melanoma was listed as one of the diagnoses totaled 10,400, with nearly half of these visits listing melanoma as the primary diagnosis. Of those cases where melanoma was listed as the primary diagnosis, the average length of stay was 3.6 days, according to the NIS. Hospital inpatient costs for melanoma amounted to \$35.4 million.

Indirect Costs

The indirect costs associated with melanoma are particularly high, at an estimated \$2.9 billion in annual lost productivity alone. The majority of this lost productivity is due to forgone future earnings due to premature death, since as many as 45% of melanoma deaths occur prior to retirement age. Due to its high incidence in younger individuals, melanoma is the second largest cause of lost productive years for all types of cancer. The average net present value of foregone future earnings is approximately \$364,000.

Outdoor workers have a higher risk of skin cancer than in any other field of work. This is due to the fact that much of the work done is between 10-4 where the sun rays are at the strongest. In addition, much of the work done happens in the spring and summer months where UV radiation is higher as well. Therefore, it is important that outdoor workers take precautions to protecting their skin and being safe. Steps listed above for adults should be taken, in addition to some other helpful hints listed below.

Know the Intensity of UV Rays

UV Radiation is more intense under certain time frames or conditions. Such as:

- From 10 a.m. to 4 p.m.
- When there is a lack of thick cloud cover
- From mid-spring through mid-fall
- At higher altitudes
- Reflective surfaces, such as water and glass can direct additional UV rays toward people.

Employers

- Crew supervisors should model sun protective behaviors
- Utilize a skin cancer prevention “buddy system” to reinforce and support commitment to practice sun safety
- Skin cancer prevention education materials should be taken home by employees to encourage their children
- Employees should use a hand mirror to perform a self skin examination every one to three months