

UV Safety Month: Shedding Light on Melanoma Treatment and Prevention

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In 2014, an approximate 77,000 Americans will be diagnosed with melanoma, culminating in nearly 10,000 deaths. Every eight minutes, an American is diagnosed with melanoma, and every hour, an American dies from it. Despite accounting for only four percent of all skin cancer cases, melanoma results in 80 percent of all skin cancer-related deaths. In observance of [UV Safety Month](#), *Real World Health Care* is examining what's working and what's new in the prevention and treatment of melanoma.

In almost all cases of melanoma and other skin cancers, the main cause is genetic damage from ultraviolet (UV) rays from the sun or from tanning beds. We are exposed to UV light throughout almost all of our lives, and much of the risk of developing skin cancers like melanoma is genetic and runs in the family. However, if the skin absorbs too much UV radiation due to prolonged exposure to sunlight or time spent in a tanning bed, this can cause direct damage to DNA, resulting in genetic mutations that often lead to cancer. About 90 percent of all melanoma cases are associated with overexposure to UV rays.

If detected early, melanoma is easily treated with surgery. If a tumor in the epidermis – the upper-most layer of skin – is removed before it deepens into the skin or spreads to other parts of the body, the likelihood of completely curing melanoma is high. When melanoma spreads, other treatment options include chemo- and radiation therapy.

Once melanoma has progressed to its later stages, however, treatment of the disease becomes much more difficult. For these patients, treatment options usually focus on extending life expectancy and improving quality of life.

Within the last few years, developments in melanoma research have provided promising leads on how to increase a patient's lifespan beyond the capabilities of existing treatments. Certain activation immunotherapies – drugs that activate the immune system's ability to fight disease – are showing potential in their ability to combat the



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spread of melanoma by killing tumors. Though these treatments do not work in all melanoma patients, in some cases they have been associated with unprecedented increases in lifespan.

“All of these trials involve late stage cancer patients. Suddenly we’re seeing those same patients getting two years or more survival time,” said Ashani Weeraratna of the Wistar Institute, the nation’s first independent institution devoted to medical research and training. “Enhancing the immune system such that it can effectively target and destroy your tumor has been a goal for many years. That’s [the field’s] big advance.”

Melanoma is almost always curable when detected and treated early on. Monthly self-examinations and yearly visits to the dermatologist are highly advised, even for those not predisposed to skin cancers. More information on how to perform a self-examination can be found online in guides from the [Skin Cancer Foundation](#) and the [Melanoma Research Foundation](#).

Among other important measures like self-examinations and avoiding tanning booths, the American Academy of Dermatology (AAD) advises that wearing sunscreen when spending time outdoors is vital, especially during peak daylight hours between 10 AM to 2 PM. The AAD suggests using sunscreen with a sun protection factor (SPF) of 30 or above. With a range of sunscreen products on the market, choosing the right one can be difficult. Different products are more effective for different people depending on [skin type](#). Visit the Skin Cancer Foundation’s [guide](#) for more information on choosing the right sunscreen product for you. For more information and tips on preventing and detecting melanoma, visit the AAD’s [online guide](#).

How do you stay safe in the sun? Let us know in the comments section.

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