Some of the worst sunburns are acquired on a hazy day. Many people mistakenly assume that if it’s cool or cloudy outdoors they won’t get burned. They don’t realize that while clouds might block the heat (infrared) energy, the sun’s skin-damaging ultraviolet (UV) rays can still penetrate through quite strongly.

Probably the most common cause of sunburn is accidental overexposure. Falling asleep while trying to tan, forgetting to apply or re-apply sunscreen, or underestimating how quickly your skin will burn are a few typical mistakes. There may be no signs or symptoms while the overexposure is occurring and it usually takes a few hours following the exposure before the skin becomes red or tender. If you stay in the sun until your skin turns red, it may already be very severely damaged by that time.

The skin is capable of repairing a reasonable number of the mutations that result from UV exposure, but this safety mechanism can be overwhelmed by massive DNA damage caused by a sunburn. Mutations that are not repaired can lead to the development of skin cancer. This is the primary reason why we should all take careful precautions to prevent sunburn. But wait, there’s more. UV also produces free radicals in the skin cells, which can lead not only to cancer but also to wrinkles, blotches, and premature aging.

The development of a suntan is the skin’s method for trying to protect itself from additional sun damage. Because DNA or cellular damage is the prerequisite for pigment production, a suntan is a sure sign that the skin has been harmed. This is why it can be said that “there is no safe tan.”

Unfortunately, we do not yet have an effective treatment to reverse all the damage and mutations caused by a sunburn. First aid treatment is aimed at alleviating pain and inflammation, and preventing or treating any subsequent infection. In the most severe and debilitating cases, hospitalization may be required. Any area of skin that has sustained one or more sunburns will carry an increased risk for the development of skin cancer, and should be checked regularly and indefinitely for the development of any unusual or changing skin growths.

Tips for protecting against overexposure to the sun are provided by The National Council on Skin Cancer Prevention at: www.skincancerprevention.org

Be sure to make every day “Don't Fry Day”!