Eye Surgeons & Consultants, P.A.
www.myeyesurgeons.com

Alan D. Mendelsohn M.D., F.A.C.S. • Nathan Klein, O.D.

OCULAR TOXICITY FROM UV LIGHT

Ultraviolet Light ("UV Light") is a known significant contributor to the development and progression of damaging eye diseases. While the primary source of UV Light is the sun, other sources include desktop computers, laptops, tablets, cell phones, and fluorescent lighting. UV Light exposure predisposes to eyelid cancers, growths on the outer exposed areas of the eyeball such as pingueculas and pterygium; cataracts; drusen; macular degeneration; and ocular melanomas.

There is a geometric increase in UV Light exposure from the sun as one approaches the Equator. Therefore, for those of us in South Florida, the prevalence and severity of these eye diseases is greater than those living up north.

The vast majority of sunglasses sold in the United States offer negligible to zero protection. Prominent researchers advocate for all of us to wear sunglasses with maximal protection on front and back surfaces of lenses consisting of UV400 blocker and polarization. This sunglass protection greatly reduces the incidence and severity of ocular diseases, such as ocular melanomas, macular degeneration, drusen, pterygium, pingueculas, and eyelid cancers.

It is unfair and most unfortunate that most people, despite wearing sunglasses are essentially "naked" outdoors. Very surprisingly, even with the purchase of a stylish or "high end" pair of sunglasses, the level of ocular protection can be shameful.

Ophthalmic lenses should also have maximal UV protection, which can be achieved with lenses made from products such as Crizal Prevencia, Crizal Avance, and Maui Blue Blocker. Indoor exposure comes from UV rays emitted from digital devices including computers, tablets, smartphones; fluorescent light bulbs; and sunlight coming through windows in your home or office. While outside, sunlight emits UV rays, including when it is cloudy or rainy and we are not wearing our sunglass protection, thereby leaving us exposed. As an example, ophthalmic lenses made with Crizal Prevencia have an Eye-Sun Protection Factor (E-SPF) of 25, which provides wearers' eyes with 25x more protection from UV than with no lens at all.