Sun's Ultraviolet Light Can Damage Eyes

Johnson & Johnson Offers UV Blocking Contact Lenses That Help Protect Against Transmission of Harmful UV Radiation to the Cornea and Into the Eye*

Most people know that exposure to the sun, especially at the height of summer, can damage their skin. But few people realize the serious toll the sun can take on their eyes. Extended exposure to the sun's ultraviolet (UV) rays is one of the risk factors associated with eye disorders such as cataracts.

"Without a doubt, the sun poses one of the biggest dangers to the eyes," said Robert A. Davis, O.D., F.A.A.O., head of the Florida Institute for Sports Vision and team optometrist for the Miami Dolphins. "Overexposure to the sun's ultraviolet rays can be painful - like a 'sunburn of the eye' - but it can also be more serious. A number of studies have shown that the effects of UV radiation are cumulative and may increase your chance of developing cataracts. It is crucial that people protect their eyes from the sun."

Ultraviolet light is the component of sunlight most responsible for eye damage. Ultraviolet light rays come in three main types - A, B and C - categorized according to their wavelengths. UV-C is the shortest and potentially the most dangerous wavelength, but it is largely absorbed by the Earth's atmosphere and therefore is less of a threat than UV-A or UV-B. UV-A, a longer wavelength, usually induces skin tanning and browning and is responsible for premature skin aging. UV-B, a shorter wavelength, causes sunburns and is most often associated with skin cancer.

Additional studies show that long term exposure to UV radiation is one of the risk factors associated with cataracts.

Excessive exposure to UV light, especially from light reflected off sand, snow, or pavement, can produce a burn on the surface of the eye. Like a sunburn on the skin, eye surface burns are painful but usually temporary. Long-term exposure of the eye to UV light affects not only its surface (cornea and conjunctiva), but also its internal structures (lens and retina). UV exposure is a risk factor in the development of cataracts, or clouding of the lens. Cataracts are one of the leading causes of reduced vision in the United States.