Eye Damage Due to Sunlight Meeting Kit



EYE HEALTH

Our eyes play a powerful role in bringing the world around us into focus and giving us visual perception of our surroundings. But none of this would be possible without light. In order for us to see, light enters our eyes where it is refracted and focused into a specific point on the retina at the back of the eye called the macula and then translated into electrical signals that travel to the brain via the optic nerves. However, while light is essential for sight, certain types of light, particularly ultraviolet A (UVA) and ultraviolet B (UVB) light, can cause significant damage to the eye over time if not guarded against. Unfortunately, the source of harmful UV light is also the most prevalent and difficult to avoid – the sun.

UV LIGHT AND WAVELENGTHS

UVC is the most damaging to the skin. However, the majority of UVC is absorbed by the ozone layer and doesn't reach us.

UVB affects the epidermis, or outer layer, of the skin. This results in sunburn, blistering, or possibly skin cancer. In relation to the eyes, it affects the corneas, or the clear front part of the eyeballs. This can cause severe irritation, light sensitivity, and lots of tearing.

UVA is the one that penetrates the skin the most. This is because even though it isn't as strong as UVB rays, it is more prevalent. UVA light makes up 95% of the UV radiation that reaches the earth and is the one that causes tanning and aging of the skin. But because it penetrates more deeply, it affects the inner layers of the skin and eyes.

UV Light and Our Eyes

The sun emits UV light and this light can be harmful to our eyes. There are several different eye diseases caused by UV light.

- A cataract is a cloudiness of the natural lenses of your eyes.
- Growths on the eyes. There are two types of growth on the eyes. **Pinguecula and pterygium** are growths on your eye's conjunctiva, the clear covering over the white part of the eye. **Pinguecula** is a growth that looks like a yellow spot or bump. **Pterygium** is a growth of fleshy tissue that can get large enough that it covers your cornea affecting your vision.
- Snow blindness is a painful eye condition caused by exposure to ultraviolet (UV)

rays reflected from ice and snow, particularly at high elevation. Symptoms include blurry vision, swelling, and watery eyes.
- Cancer called ocular melanoma can result in part or directly from exposure to UV light.

PROTECT YOUR SIGHT BEST PRACTICES

Here are the necessary precautions to protect eyes from UV light radiation, inducting:

- Do not use sunlamps, tanning beds, or tanning booths
- Wear UV-blocking goggles when surfing, swimming, or snowboarding
- Avoid prolonged exposure to direct sunlight by staying in the shade, especially between 10 am and 4 pm
- Avoid being out in excessively sunny conditions when possible, especially unprotected.
- Wear sunglasses that block 100% of UV rays. They should be marked if they do. Also the bigger the sunglasses the better for protecting your eyes.
- Wear a hat that blocks the sunlight from your eyes and face.
- Protect your eyes even on a cloudy day.
- Wear a hat along with your sunglasses. Broad-brimmed hats are best.
- Protect children and senior citizens with hats and sunglasses. Everyone is at risk for sun damage.
- Clouds don’t block UV light. The sun’s rays can pass through haze and clouds.
- Sunlight is strongest midday to early afternoon, at higher altitudes and when reflected off of water, ice or snow.
- Never look directly at the sun. Doing so at any time, including during an eclipse, can damage the eye’s retina and cause a serious injury known as solar retinopathy.

FINAL WORD

Our eyes are our window to the world. Ensure you are protecting your eyes from the sun. Once you damage your vision you may never get it back.