UV Protection for Your Eyes

Here comes the Sun – we hope!

Most people realise the need to protect their skin from sunlight but it is just as important to protect the eyes.

The dangers of UV light

Sunlight has three components: ultraviolet; visible and infrared light. Long-term exposure to UV rays can damage the eye's surface as well as its internal structures. This is because light is a source of energy and when the eye absorbs light a heat or chemical reaction occurs in the eye. UVA and UVB light have different wavelengths and are absorbed by different parts of the eye. The cornea and conjunctiva absorb UVB rays. This can lead to growths on the conjunctiva and lids. UVA light is absorbed by the crystalline lens and can cause early cataracts. Excessive blue light is thought to be a cause of macula degeneration.

Risk factors

Everyone is at risk from damage from the sun throughout the year, but the risk increases with altitude, reflections from snow and water, and proximity to the equator. UV levels are at a peak when the sun is high in the sky and where the Ozone layer is thin. On a clear mid-summer day in London the maximum recommended UV exposure can be reached in as little as fifteen minutes.

Protection of the eye

The best way to protect the eyes is to wear sunglasses or contact lenses that offer UV protection. Prescription spectacle lenses can also incorporate a UV filter. Lenses should carry CE or BS EN marks or a UV 400 label. Ideally the frames should be a close fitting design that covers the eyes completely and wraps around the face. If the sun can get into your eyes around the lenses you will still be at a considerably higher risk of eye complications. A wide brimmed hat can be very helpful in reducing the amount of UV light reaching the face. The lens choice can be a simple tinted UV filter lens or can be more advanced like a polarized lens or a transition lens. Your optician can provide expert advice on the levels of safety provided by specific products and the best choice of frames and lenses.