

Eye Protection

Eyes, like skin, are susceptible to damage from exposure to ultraviolet radiation (UVR). UVR from the sun or solarium is not seen or felt, but the damage it causes is cumulative.

Repeated exposures of unprotected eyes to UVR causes both short-term complaints and permanent damage. Short-term complaints include mild irritations such as excessive blinking, swelling or difficulty looking at strong sunlight. Additionally, over exposure can cause acute photo keratopathy, which is essentially sunburn of the cornea, like snow blindness or welders flash burns.

Exposure to UVR over long periods can result in more serious damage to the eyes. This includes cataracts (cloudiness of the lens); pterygium (pronounced tur-rig-i-um), an overgrowth of the conjunctiva on to the cornea; solar keratopathy (cloudiness of the cornea); cancer of the conjunctiva (the membrane covering the white part of the eye); and skin cancer of the eyelids and around the eyes.

It has been estimated that 10% of cataracts are potentially due to exposure to UVB by the eye.

Sunglasses, which meet British Standard for UVR transmission, and a broad brimmed hat can reduce UVR exposure to the eyes by up to 98%. A broad brimmed hat alone can reduce UVR to the eyes by 50%.

The British Standard measures only UVR transmittance through the lens. The use of wrap around, close fitting, large sunglasses, helps to reduce reflected UVR and glare which passes around the edge of the sunglasses and reaches the eyes. Up to 40% of UVR is reflected off surfaces like water, concrete and glass.

Children and Sunglasses

Since eye damage from UVR is cumulative, it is important to protect children's eyes. It is important that children always wear a hat, protective clothing and sunglasses when outside in order to reduce their UVR exposure.

When children are old enough to manage, sunglasses that meet British Standard should be worn. Toy sunglasses are just that, toys, and may not offer sun protection.

In relation to eye protection from UVR

the following is recommended:

- Reducing UVR as much as possible.
- Wearing a broad brimmed hat, bucket hat or legionnaire style cap.
- Wearing close fitting, wrap around style sunglasses which meet the British Standard.
- Sunglasses be worn by children and adults whenever outside during sunlight.
- Sunglasses should not be worn at night as this reduced visibility.
- If outdoor workers need protection from flying particles, dust, splashing materials and harmful gases, sunglasses which comply with the British Standard and eye protection for industrial applications complying with Personal Protective Equipment standards should be worn.