Cancer Council SA

Sunglasses

To protect yourself from damage from exposure to ultraviolet (UV) radiation, wear sunglasses that are:

- **close fitting**
- **wraparound and cover as much of the eye area as possible**
- **meet Australian Standard (AS/NZ 1067:2016 for sunglasses, lens categories 2, 3 or 4)**
- **marked eye protection factor (EPF) 9 or 10, or labeled UV 400**

For the best protection during the daily sun protection times (when the UV level is 3 and above), use all five SunSmart measures:

1. **Slip on clothing.**
2. **Slop on SPF30 (or higher) broad spectrum, water resistant sunscreen.**
3. **Slap on a hat.**
4. **Seek shade.**
5. **Slide on sunglasses.**

The free SunSmart app tells you the sun protection times for your location and provides current UV levels. Sun protection times can also be found at myuv.com.au, bom.gov.au and live UV levels are also available from arpansa.gov.au/uvindex.

How does UV radiation affect the eyes?

Too much UV radiation to the eyes can cause short-term problems, including:

- mild irritation
- photokeratitis (also known as snow blindness)
- inflammation
- excessive blinking
- photophobia (difficulty looking at strong light)

Exposure to UV radiation over long periods can lead to permanent damage to the eyes, such as:

- squamous cell cancers on the conjunctiva (membrane covering the white part of the eye)[1-3]
- skin cancer around the eyes and eyelids[4,5]
- cataracts (cloudiness of the lens)[6]
- macular degeneration (damage to the retina)[6,7]
- pterygium (an overgrowth of the conjunctiva on to the cornea)[8]
- climatic droplet keratopathy (or cloudiness of the cornea)[9]

How can I reduce UV damage to my eyes?

Cancer Council SA recommends wearing sunglasses or UV-protective eyewear that meet the Australian Standard (AS/NZ 1067:2016). Wearing a broad brimmed hat can also help reduce UV radiation to the eyes by 50 per cent.[10]

What to look for in sunglasses

Choose large, wraparound, close-fitting sunglasses to reduce reflected UV radiation and glare.

Check the swing tag to make sure the sunglasses meet the Australian Standard for eye protection in category 2 or higher. These lenses absorb more than 95 per cent of UV radiation to prevent it reaching your eyes. Lens category 4 is not suitable for driving.

Some sunglasses have an eye protection factor (EPF). Ratings of EPF 9 or 10 exceed the requirements of the Australian Standard, providing excellent protection.[11]

The colour or darkness of the lens does not indicate the level of UV protection; you still need to check the label.

Glasses that are marked ‘fashion spectacles’ or category 0 or 1 do not offer adequate protection from UV.

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SLIP SLOP SLAP SEEK SLIDE

Prescription glasses

UV-blocking contact lenses can reduce UV exposure, blocking 90 per cent of UVA.[12] Some prescription glasses may provide protection from UV radiation. Tinted or photochromatic (transition) lenses reduce glare but do not necessarily offer a higher level of UV protection. Prescription glasses used for sun protection should be close fitting and wraparound to provide maximum protection. Alternatively, sunglasses that fit over prescription glasses will offer good protection if they meet Australian Standards. Talk to your optometrist to see if your lenses provide UV protection.

Children and sunglasses

Sunglasses designed for babies and toddlers may have soft elastic to keep them in place. It is important to choose a style that stays on securely so that the arms don't become a safety hazard. Some young children may be reluctant to wear sunglasses. You can still help protect a child's eyes by ensuring they wear a broad-brimmed hat and play in the shade.

Novelty tinted glasses that do not meet the Australian Standard for sunglasses should not be used for sun protection.[13]

Eye protection for outdoor workers

Some outdoor workers need safety glasses (protection against impact). Tinted eye protectors that meet the Australian Standard AS/NZS 1337.1:2010 (Eye and face protectors for occupational applications) provide sun protection and reduce glare outside. Untinted eye protectors marked 'O' also have sufficient UV protection for outdoor use.

Eye protection in sport

You can buy sunglasses designed to suit specific sports, including golf, cycling, cricket and sailing. Swimming goggles with some UV protection are also available.

More information and resources

More information is available from sunsmart.org.au.

UV-protective clothing and accessories can be purchased at Cancer Council SA's shop, or online at www.cancercouncilshop.org.au.

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