Sunglasses

To protect eyes from ultraviolet (UV) damage, wear sunglasses that are:

- **close-fitting**
- **wrap-around and cover as much of the eye area as possible**
- **meet Australian Standard AS1067:2016 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 or higher), use all five SunSmart steps:

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

The free SunSmart app tells you the sun protection times for your location and provides current UV levels.

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?

SunSmart recommends wearing sunglasses or UV protective eyewear that meet the Australian Standard. Wearing a broad-brimmed hat can also help reduce UV radiation to the eyes by 50%.[10]

What to look for in sunglasses

Choose large, wrap-around, 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 (AS 1067) in category 2 or higher. These lenses absorb more than 95% of UV radiation to prevent it reaching your eyes.

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.

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Glasses that are marked ‘Fashion spectacles’ do not offer protection from UV.

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. Talk to your optometrist to see if your lenses provide UV protection.

Children and sunglasses

Sunglasses designed for babies and toddlers 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.

Toy sunglasses do not meet the Australian Standard and should not be used for sun protection.[13]

Eye protection for outdoor workers

Some outdoor workers need eye protection. 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.com.au.

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

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