

PROTECTING YOUR EYES FROM THE SUN

Why Quality Sunglasses are a Must-have



(STOCK PHOTO¹)

A famous philosopher once said, "The eye is the jewel of the body."² And like any priceless jewel, eyes are to be treasured and protected. The sun can rob your eyes of their health, but a good pair of sunglasses can help guard against damage.³

Short-term Dangers of the Sun

The sun's Ultraviolet UV-A and UV-B radiation can damage your eyes in much the same way as your skin. Even one day in the sun without proper sunglass protection can cause a "sunburn of the eye" called photokeratitis. But deliberate tanning is not the only way to risk excessive exposure to UV radiation; it can happen during everyday activities like shoveling snow, swimming, fishing, or just walking down the street. While typically temporary, photokeratitis can be painful and make the eye red and teary.⁴

Long-term Damage

Long-term exposure to UV radiation can cause serious and often irreversible damage including:

- Cataract -- UV radiation over time can increase the risk of developing a cataract, which is a clouding of the eye's naturally clear lens.⁵
- Macular degeneration -- Chronic exposure to UV radiation and shorter wavelength visible light can damage the retina, the part of the eye responsible for vision. Age-related macular degeneration is a breakdown of the eye's macula, a small area in the retina lining the back of the eye.^{6,7}
- Pterygium: A growth in the corner of the eye that can grow over the cornea, partially blocking vision.⁸
- Cancer: The most common form of skin cancer, basal cell carcinoma, can develop anywhere around the eye – in the corner, eyelids or brow area.^{9,10}

Best weapon -- Sunglasses

Short of never leaving the house to see the light of day, wearing quality sunglasses is one of the best protections against the sun's rays. Quality sunglass lenses:

- Block out 99 to 100 percent of both UV-A and UV-B radiation.
- Screen out 75 to 90 percent of High Energy Visible (HEV) light.

- Protect against glare and reflection of the sun to reduce squinting and allow the eyes to see clearly.^{11,12,13,14,15}
- Shield the eyes from wind, dust and pollen.
- Protect night vision. Eyes exposed to sun all day have a harder time adjusting to darkness at night.
- Reduce tearing and squinting. The sun's brightness and glare can cause people to squint and their eyes to water, making it harder to see clearly.^{16,17}
- Keep eyes from becoming dry. By blocking the sun's heat, the eye's natural moisture does not evaporate.¹⁸
- Provide high-quality optics, free of distortions and imperfections and a scratch-resistant surface to maintain vision clarity
- Provide anti-fog; anti-glare and anti-reflective coatings^{19, 20,21,22,23,24}
- Include lightweight, impact-resistant materials that enhance visual contrast and protect against shattering.
- Come in a variety of colors so you can select the right color for your needs. Gray-colored lenses reduce light intensity without altering the color of objects to provide the most natural color vision. However, brown or amber-colored lenses may be better for those who are visually impaired because they increase contrast as well as reducing light intensity.



Who Should Wear Sunglasses?

Everyone! But for some people, it's even more important than others The Vision Council identifies the following high-risk groups:²⁵

- Children. Children's eyes do not block as much UV radiation as adult eyes, increasing their risk for sun damage.²⁶
- People who have light-colored eyes or light-sensitivity.
- Contact lens wearers.
- People who spend time outdoors.
- People who live in areas with high altitudes and/or high sun exposure.
- People taking medications which cause photosensitivity such as antibiotics and anti-inflammatories.
- People who frequently drive or walk, exposing their eyes to high glare.
- Seniors who because of advanced age are already at risk for eye disease.



Choices of Lenses to Suit Individual Needs

Your ophthalmologist or optometrist can help advise on the many types of lenses available to find one that will be right for the places you go and the activities you do. Some types of lenses they will consider with you:

- **Hi-Index:** Can correct vision with less material than regular lenses, allowing the lens to be much thinner, lighter and more comfortable to wear.
- **Polycarbonate:** Impact-resistant to reduce potential for shattering like glass lenses or regular plastic lenses. Needed for hazardous work or sports.
- **Aspheric:** Reduces potential distortions to make vision crisper.
- **Polarized:** Reduces glare and reflections off sand, water, snow and concrete.
- **Photochromatic:** Automatically darkens in sunlight and lighten indoors.²⁷

- **Anti-reflective:** Coating reduces distracting reflections from the sun to improve quality of vision. This is key all-year round.
- **Scratch-Resistant:** Coating makes lenses resistant to scratches that can happen if glasses hit against a hard surface.
- **Anti-glare:** Coating reduces water spotting and dirt accumulation.²⁸

Framing Your Face

Quality is also important when it comes to frames to ensure proper fit, appearance, comfort, safety and durability. Well-made frames:

- Are resistant to corrosion, wear and scratches.
- Retain their shape for lens stability and long-lasting comfort.
- Are shatter-resistant to minimize the risk of injury from breakage.^{29,30,31,32,33,34}
- Look and feel good!

1 Available at: <http://www.fotosearch.com/photos-images/sunglasses.html>

2 <http://quotationsbook.com/quote/13551/>

3 <http://www.epa.gov/sunwise/doc/eyedamage.pdf>

4 <http://www.epa.gov/sunwise/doc/eyedamage.pdf>

5 <http://www.aao.org/eyesmart/diseases/cataracts.cfm>

6 American Academy of Ophthalmologists

7 <http://www.aao.org/eyesmart/diseases/amd.cfm>

8 <http://www.epa.gov/sunwise/doc/eyedamage.pdf>

9 <http://www.epa.gov/sunwise/doc/eyedamage.pdf>

10 <http://www.aao.org/eyesmart/summer.cfm>

11 http://www.luxottica.com/en/activities/production/made_in_italy/

12 http://www.luxottica.com/en/activities/production/global_quality/

13 http://www.luxottica.com/en/activities/production/made_in_italy/

14 <http://www.aoa.org/x6385.xml>

15 <http://www.thevisioncouncil.org/consumers//media/PDFs/UnderTheSun.pdf>

16 <http://www.thevisioncouncil.org/consumers/media/PDFs/SunwearSupp.pdf>

17 <http://www.aoa.org/x6385.xml>

18 <http://www.freevisioninfo.com/sunglasses/206-medical-reasons-for-wearing-sunglasses>

19 <http://www.aoa.org/x6385.xml>

20 http://www.luxottica.com/en/activities/production/made_in_italy/

21 http://www.luxottica.com/en/activities/production/global_quality/

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24 <http://www.thevisioncouncil.org/consumers//media/PDFs/UnderTheSun.pdf>

25 <http://www.thevisioncouncil.org/consumers/media/PDFs/SunwearSupp.pdf>

26 http://www.thevisioncouncil.org/consumers/content_224.cfm

27 http://vision.about.com/od/eyeglasses/p/Lens_options.htm

28 <http://www.articlebliss.com/Art/447893/4/Benefits-Of-Anti-Glare-Anti-Reflective-Coatings-On-Sunglasses.html>

29 <http://www.aoa.org/x6385.xml>

30 <http://www.aoa.org/x6385.xml>

31 http://www.luxottica.com/en/activities/production/made_in_italy/

32 http://www.luxottica.com/en/activities/production/global_quality/

33 http://www.luxottica.com/en/activities/production/made_in_italy/

34 <http://www.aoa.org/x6385.xml>