



PREVENT EYE DAMAGE

Protect Yourself from UV Radiation



Most Americans understand the link between ultraviolet (UV) radiation and skin cancer. Many are less aware of the connection between UV radiation and eye damage. With increased levels of UV radiation reaching the Earth's surface, largely due to stratospheric ozone layer depletion, it is important to take the necessary precautions to protect your eyes.

Potential Effects of UV Radiation on Eyes

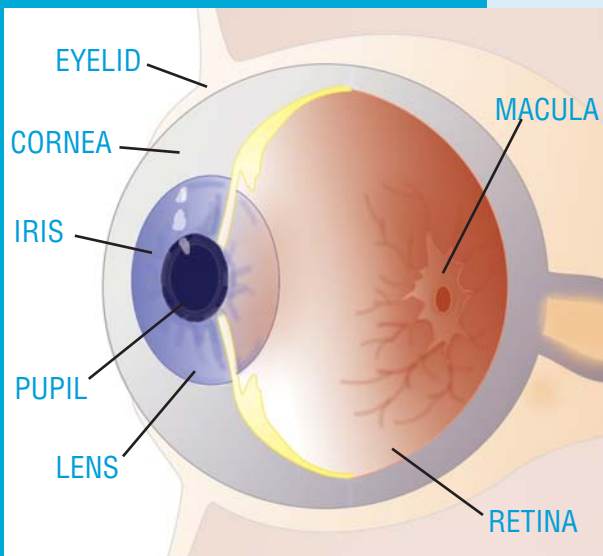
UV radiation, whether from natural sunlight or artificial UV rays, can damage the eye, affecting surface tissues and internal structures, such as the cornea and lens.

Long-term exposure to UV radiation can lead to cataracts, skin cancer around the eyelids, and other eye disorders.

In the short-term, excessive exposure to UV radiation from daily activities, including reflections off of snow, pavement, and other surfaces, can burn the front surface of the eye, similar to a sunburn on the skin.

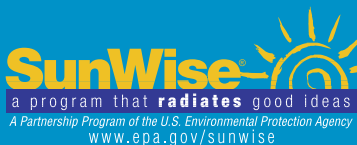
The cumulative effects of spending long hours in the sun without adequate eye protection can increase the likelihood of developing the following eye disorders:

- **Cataracts:** A clouding of the eye's lens that can blur vision.
- **Snow Blindness (Photokeratitis):** A temporary but painful burn to the cornea caused by a day at the beach without sunglasses; reflections off of snow, water, or concrete; or exposure to artificial light sources such as tanning beds.
- **Pterygium:** An abnormal, but usually non-cancerous, growth in the corner of the eye. It can grow over the cornea, partially blocking vision, and may require surgery to be removed.
- **Skin Cancer around the Eyelids:** Basal cell carcinoma is the most common type of skin cancer to affect the eyelids. In most cases, lesions occur on the lower lid, but they can occur anywhere on the eyelids, in the corners of the eye, under the eyebrows, and on adjacent areas of the face.



EPA's SunWise Program: Educating Youth About Sun Safety

The SunWise Program is an environmental and health education program that aims to teach people how to protect themselves from overexposure to the sun. The school element of the program uses classroom, school, and community components to develop sustained sun-safe behaviors in children. Additional partnerships with local broadcast meteorologists, science centers, children's museums, and health experts provide numerous opportunities to deliver the SunWise message to youth, their care givers, and the general public. For more information about SunWise and how you can participate, please visit www.epa.gov/sunwise.



Did You Know....

- 20.5 million Americans have cataracts.
- The economic costs of visual disorders and disabilities in the United States in 2003 was estimated to be \$68 billion.

Source: National Eye Institute www.nei.nih.gov, National Institutes of Health, U.S. Department of Health and Human Services

Preventative Measures for Eye Protection

The greatest measure of UV protection is achieved with a combination of UV-absorbing sunglasses, a wide-brimmed hat, and for those who wear contact lenses, UV-blocking contacts.

Look for sunglasses that block 99-100 percent of UV-A and UV-B radiation. Wrap-around sunglasses and wide-brimmed hats add extra layers of protection because they block UV rays from entering the eyes from the sides and above. UV-blocking contact lenses provide added protection against the direct and reflected rays that are not blocked by sunglasses or hats. As is the case with overall sun safety, a combination approach works best.

Frequently Asked Questions

Q: Does my eye color or skin color affect my risk for eye damage from UV radiation?

A: While studies show an increased incidence of cataracts in dark brown irises, people with all eye and skin colors are susceptible to UV eye damage.

Q: What should I look for when choosing a pair of sunglasses?

A: No matter what sunglass styles or options you choose, you should insist that your sunglasses:

- Block out 99-100 percent of both UV-A and UV-B radiation.
- Are perfectly matched in color and are free of distortion and imperfection.

Q: Do I have to buy expensive sunglasses to ensure that I am being protected from UV radiation?

A: No. As long as the label says that the glasses provide UV-A and UV-B protection, price should not be a deciding factor.

Q: Do all contact lenses block UV rays?

A: No. Not all contact lenses offer UV protection and not all provide similar absorption levels. Ask your eye care professional for more information, and remember, a combination approach works best!

For more information, contact:

The American Optometric Association www.AOA.org
The American Academy of Ophthalmology www.aao.org
The National Eye Institute www.nei.nih.gov

REMEMBER!

Exposure to UV radiation has cumulative effects on the eyes. Damage today leads to eye problems tomorrow.

**PROTECT YOUR EYES
ALL YEAR-ROUND—
WEAR UV-BLOCKING
LENSES AND A HAT!**

