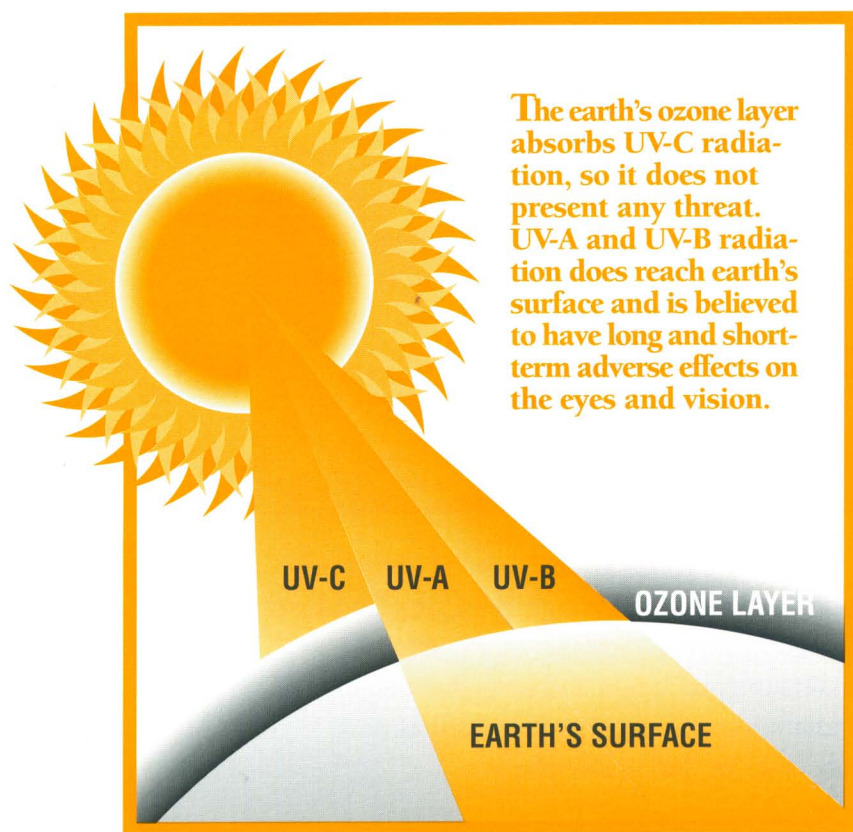


Protecting Your Eyes From UV Radiation

The sun, a ball of fire some 93 million miles away, supports all life on our planet. But, its life-giving rays also pose dangers.

The principle danger posed by the sun is in the form of ultraviolet radiation, or for short, UV radiation. UV radiation is a component of solar energy, but it can also be given off by artificial sources like welding machines, tanning beds and lasers.



You are probably aware of the danger posed by UV radiation to your skin, but you may not realize that exposure to UV radiation can harm your eyes and affect your vision as well.

There are three types of UV radiation. One type, called UV-C, is absorbed by the ozone layer and does not present any threat. That's not true of the other two types, UV-A and UV-B. More

and more scientific evidence is showing that exposure to both UV-A and UV-B can have adverse long and short-term effects on your eyes and vision.

If you are exposed, unprotected, to excessive amounts of UV radiation over a short period of time, you are likely to experience an effect called photokeratitis.

Like a "sunburn of the eye" it may be painful and you may have symptoms including red eyes, a foreign body sensation or gritty feeling in the eyes, extreme sensitivity to light and excessive tearing. Fortunately, this is usually temporary and rarely causes permanent damage to the eyes.

Long term exposure to UV radiation can be more serious. A number of scientific studies and research growing out of the U.S. space program have shown that exposure to small amounts of UV radiation over a period of many years may increase your chance of developing a cataract and may cause damage to the retina, the nerve-rich lining of your eye that is used for seeing. This damage to the retina is usually not reversible.





The effects of UV radiation are cumulative. This means the longer your eyes are exposed to UV radiation, the greater the risk of developing such conditions as cataracts or macular degeneration in later life.

Researchers have not yet specifically determined how much exposure to UV radiation will cause how much damage, but a good recommendation is to wear quality sunglasses that offer good protection and a hat or cap with a wide brim whenever you are working outdoors, participating in outdoor sports, taking a walk, running errands or doing anything in the sun.

Protecting Your Eyes From UV Radiation



To provide protection for your eyes, your sunglasses should:

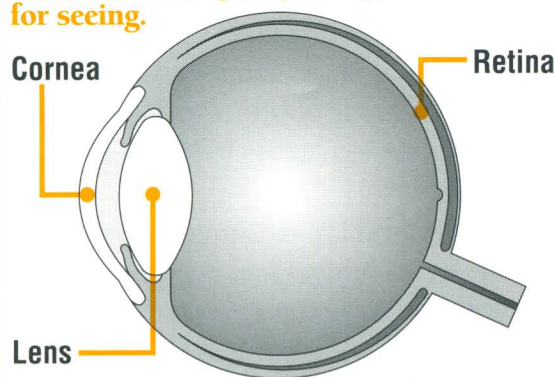
-  block out 99 to 100 percent of both UV-A and UV-B radiation;
-  screen out 75 to 90 percent of visible light;
-  be perfectly matched in color and free of distortion and imperfection; and
-  have lenses that are gray, green or brown.

Polycarbonate lenses are a must for your sunglasses if you participate in potentially eye hazardous work or sports. These lenses provide the most impact resistance.

If you spend a lot of time outdoors in bright sunlight, wrap around frames can provide additional protection from the harmful UV radiation.








Don't forget protection for children and teenagers. They typically spend more time in the sun than adults.

Long-term exposure to UV radiation may increase your chances of developing a cataract (a clouding of your eye's lens) and may cause damage to the retina, the nerve-rich lining of your eye that is used for seeing.



UV Radiation Checklist

If one or more of the following factors fits you, you could be in a higher risk category for damage to eyes from UV radiation:

-  Do you spend a great deal of time outdoors?
-  Do you spend time skiing, mountain climbing or at the beach?
-  Do you use a sunlamp or tanning parlor?
-  Do you live in the mountains or the U.S. Sunbelt?
-  Are you a welder, medical technologist or do you work in the graphic arts or in the manufacture of electronic circuit boards?
-  Do you take prescription or over the counter drugs that can increase your sensitivity to UV radiation (check with your optometrist, pharmacist or physician)?
-  Have you had cataract surgery in one or both eyes?

Be sure to see your doctor of optometry once a year for a thorough eye examination. It is a good way to monitor your eye health, maintain good vision and keep track of your UV radiation protection needs as well as new advances in that protection.