



Sunglasses for Safety

Sunglasses aren't just fashion accessories now days. They are designed to provide necessary protection for your eyes. Most consumers are aware of sun exposure's danger to the skin, but don't know the sun's rays can also damage the eyes. To correctly shield the eyes, consumers must know how to select appropriate sunglasses, since wearing the wrong type can do more harm than good.



Sunglasses are designed to protect our eyes from the harmful UV rays of the sun. Ultraviolet (UV) radiation is the component of sunlight which is harmful to our skin. It can cause sunburns and sometimes even skin cancer. It is even more damaging to the face and the eyes, causing burning, wrinkling around the eyes, skin cancer of the face and premature eye damage.

Too much unprotected exposure to UV radiation can cause photokeratitis, cataracts and has been linked to causing some forms of macular degeneration. Furthermore, sunglasses without UV filtration might actually do more harm to your eyes than going without any shades; since your eyes are fooled into thinking it is dark out, your pupils dilate, letting in more UV radiation.

Like your skin, your eyes never fully recover from UV over exposure. Studies show the leading cause of vision loss among older adults is the result of long-term exposure to bright sunlight.



Safety Tips

- You should always wear sunglasses with at least 99% UV protection while spending time outdoors during the day, no matter the season. UV is not season-specific and can damage your

eyes at any time. Snowy winter days are especially deceiving because while there is a chill in the air, the sun's rays naturally reflect off the snow increasing the UV intensity.

- Long exposure to UV radiation can greatly increase the chances of developing cataracts (a clouding of the lens of the eye) and damage to the retina.
- Lenses should be **gray, green, rose, yellow, or brown** and the larger the lenses, the better.
 - Gray will reduce brightness without distorting colors.
 - Green will help reduce glare.
 - Rose lenses are good for water sports and outdoor activities because they provide contrast against blue and green backgrounds.
 - Yellow will reduce haze better than brown but will distort colors.
 - Brown will reduce glare and brightness.
- Wrap-around sunglasses provide an extra measure of protection, as does wearing a hat with a wide brim or a visor.
- Buying sunglasses from street vendors is risky. There's no assurance that the eyewear, no matter how dark the lens, will protect against UV rays.
- Polarized lenses normally include UV protection, can help cut down glare on sunny days and are especially useful for driving.
- Photo-chromatic and transition sunglasses will become darker when exposed to UV radiation. This is another safe option for protecting your eyes.

Don't be misguided by price--higher-priced sunglasses usually reflect fashion or durability, not UV protection--look for the label.



- Dark-colored sunglasses don't necessarily provide better protection. A clear chemical coating applied to the lens is responsible for UV protection, not the lens color.
- If you're going to work up a sweat, plastic is going to slide right off your nose. Sunglasses made specifically for sports will have nose pieces and temple grips that stay on no matter how much you perspire.
- Polarization is especially important for sports where glare is a problem. If you're spending a lot of time on the water (fishing, surfing, kayaking, sailing) or on the snow (skiing, snowboarding, snowshoeing), polarized lenses are probably definitely the way to go. Polarization is also a good idea for anyone who uses the road (runners and cyclists) since it cuts down on glare from wet streets and sidewalks.

Even if you're not participating in sports, many prefer polarized lenses simply for the protection and reduction of glare.

Keep these additional tips in mind:

- **Wear a hat** with a broad brim, in addition to sunglasses.
- **Don't be fooled by clouds:** The sun's rays can pass through haze and thin clouds. Sun damage to eyes can occur anytime during the year, not just in the summertime.
- **Take special care at peak sun times:** It's especially important to wear sunglasses between 10 a.m. and 2 p.m., when the sun's UV rays are the strongest.
- **Protect your eyes:** from over exposure to harmful UV-A and UV-B radiation by wearing sunglasses that block 100% of the UV-A and UV-B rays. By protecting your eyes with sunglasses you can reduce your risk.
- **Don't forget to get polycarbonate lenses:** they're stronger than glass and don't break as easily.
- **Look for close-fitting:** larger-lensed or wrap-around sunglasses. These will prevent UV rays from filtering in from around the edges.

UV-absorbing contact lenses: while some UV-absorbing contact lenses are now available, they do not provide adequate protection and should not replace sunglasses. Sunglasses are still needed to cover the entire eye area, including eyelids.



When buying for children: don't go with cheap, flimsy plastic frames. Children's eyes need to be protected too.

This information is provided to you by the IES Safety Committee