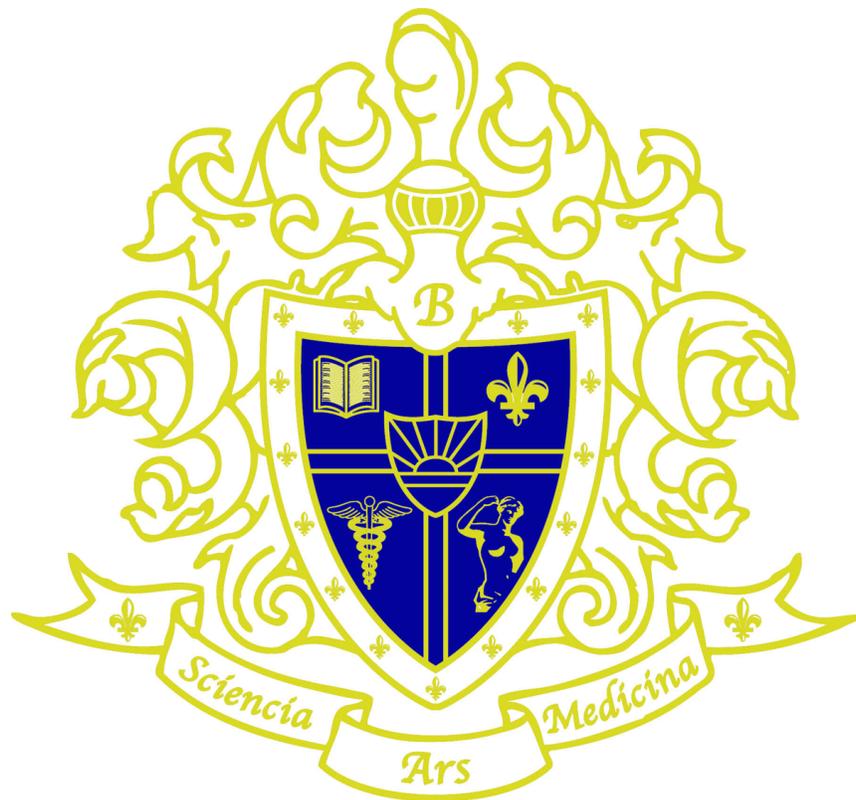


Protecting Your Eyes From The Sun



Beeson Cosmetic Surgery



Almost everyone is aware of the dangers of sun exposure to the skin. However, most people are not aware that sun exposure can also be detrimental to your eyes. Sunlight (ultraviolet or “UV” radiation) can cause significant damage to unprotected eyes.

There are two types of UV radiation. UV-A is longer wave radiation and usually induces skin tanning and browning. UV-B is shorter wavelength radiation that causes blistering sunburn and is associated with

skin cancer. Exposure to intense sunlight can result in a burn to the surface of the eye much like sunburn to the skin. With the earth’s diminishing ozone layer, much less UV light is filtered out, making humans much more susceptible to ultraviolet rays.

You do not have to be sunbathing at the pool or at the beach on a hot day to be at risk. Ultraviolet light is strongest when reflected off snow, sand or water. Even light reflected off pavement can produce injury.

Ultraviolet light in excess has been attributed to a number of eye medical problems—burns, cataracts, pterygium, macular degeneration and skin cancer of the eyelids.

Burns: over-exposure to ultraviolet light can cause a sudden but temporary painful burn to the eye surface. Photokeratitis can occur a few hours after activities such as skiing or sunbathing.

Cataracts: exposure to U radiation over many years is one cause of cataracts, a clouding of the lens.

Pterygium: (pronounced te-ri-je-um) is a benign growth on the eye’s surface which can be a result of chronic UV exposure and may require surgical removal to improve vision.

Macular Degeneration: a condition that causes age-related damage to the central vision area. It is a major cause of blindness in Americans over fifty and has been linked to chronic UV exposure.

Cancer: cancer to the eyelids and skin around the eyes has been traced to UV overexposure.



Protection

Sunglasses provide one of the sources of UV protection. While some contact lenses are now available with UV protection, they should not take the place of sunglasses. Sunglasses can block out 99%-100% of UV-A and UV-B radiation. As a general rule, if you are in enough sunlight to cause sunburn, you need to protect your eyes.

Tips for Purchasing Sunglasses

-Check the label for UV protection. Look for 99%-100% protection of UV-A and UV-B. Most sunglasses coated with UV blockers block the UV-B rays, but the cheaper sunglasses may have less blocking of UV A rays.

-Look for sunglasses that are close-fitting and have larger lenses or are wrap-around sunglasses to prevent light from entering through the sides.

-Look for polarized lenses to help reduce glare.

-These are very helpful in reducing glare from light reflected off snow, water or the road. Light consists of particles called photons, which travel in waves. Polarized sunglasses have a protective layer bonded on the lens, which allows only vertical waves. Most of the reflected waves are coming in a horizontal direction and are blocked, resulting in more clear vision with reduced glare.

-Dark-colored sunglasses do not necessarily provide better protection

A chemical coating applied to the lens is responsible for its UV protection, not the color of the lens. However, besides UV light, brightness is an issue as well. Clear glass transmits 90% of light. As the glasses get darker, less and less light goes through. Lightly tinted lenses let in 75%-80% of light. Military standards specify that only 15% of light should penetrate.



You can still see very well with 10%-12% light, but most people do very well in the 20% range. The overall best color is gray. It absorbs light across the spectrum equally. 8% of men and almost no women have color deficiencies (previously referred to as “color blindness”). Depending upon the deficiency, you need to select a certain tint of sunglasses. Gray is safest for men. Women should go with gray, green, or brown. Rose-colored sunglasses or mirror sunglasses are not good protectors.