

## **Ultraviolet (UV) Radiation and Your Eyes**

Ultraviolet (UV) radiation is a component of sunlight. It can also be given off by artificial sources such as welding machines, tanning beds, and lasers. UV-A and UV-B, can have damaging long-term and short-term effects on your eyes and vision as well as your skin.

If you are exposed to excessive amounts of UV-A and UV-B and your eyes are unprotected, you will likely experience a sunburn of the eyes. This often causes painful symptoms, including red eyes, a gritty feeling in the eyes, sensitivity to light and excessive tearing. Fortunately, this condition is usually temporary and rarely causes permanent damage.

Long-term exposure to UV-A and UV-B, however, can have more serious effects such as cataracts or damage to the retina. Blue light, another part of light, is perhaps even more damaging.

### **Protecting Your Eyes from UV Radiation**

Wear a hat or cap with a wide brim of 3 inches or larger

Wear sunglasses that:

- # block out 99-100% of both UV-A and UV-B radiation; “UV absorption up to 400 nm” means the same as 100% UV blockage
- # screen out 75-90% of visible light
  - are perfectly matched in color and free of distortion and imperfection
  - have lenses that are grey, green, or brown, or red, orange, yellow, or amber (the latter four are best for blocking out blue light, another dangerous part of sunlight)

### **Other facts:**

- # Wrap around frames provide additional protection
- # Contact lenses with a UV-blocking feature are also now available
- # Glasses can be treated with a clear UV protective coating
- # Your optician can check your glasses to measure UV protection
- # “Polarized” has nothing to do with UV protection, but it reduces glare
- # Some medications may increase your sensitivity to UV radiation--consult your doctor or eye care provider
- # Protect children's eyes with a wide-brimmed hat and appropriate sunglasses