



**Kentucky Public Health**  
Prevent. Promote. Protect.

## **Kentucky Department for Public Health ALERT**

### **Solar Eclipse and Eye Safety**

**August 21, 2017**

A total solar eclipse is probably the most spectacular astronomical event that most people will experience in their lives. There is a great deal of interest in watching eclipses, but it must be done safely. Because of this exceptional opportunity, there is concern that people will be more likely to stare at the Sun during this event. Improper viewing of the Sun during an eclipse can result in eye injuries such as the development of "**eclipse blindness**" or **retinal burns**.

The danger to vision is significant because retinal eye injuries occur without any feeling of pain (there are no pain receptors in the retina), and the visual effects do not occur for at least several hours or days after the damage is done.

**It is never safe to look directly at the Sun at any time. This includes looking during the partial phases of a total solar eclipse without the proper equipment and techniques.** Even when 99% of the Sun's surface is obscured during the partial phases of a solar eclipse, the remaining crescent Sun is still intense enough to cause a retinal burn. If you are in the narrow range of Kentucky where 100% of the sun will be blocked by the moon (totality), the Sun can **ONLY** be viewed without appropriate eye protection during that short time, approximately 2:30 minutes.

Studies have shown that most individuals who sustain eclipse-related eye injuries are children and young adults. Remember, the Sun can only be viewed directly when filters specially designed to protect the eyes are used. Eclipse glasses and handheld solar viewers verified to be compliant with the International Organization for Standardization (**ISO 12312-2** international safety standard) are safe products to use for viewing.

Be safe and enjoy this rare remarkable experience of nature.

More information may be found at:

<https://eclipse2017.nasa.gov/safety>

<https://www.nasa.gov/content/eye-safety-during-a-total-solar-eclipse>

*Information above from NASA Eclipse Web Site, EYE SAFETY DURING SOLAR ECLIPSES:*

<https://eclipse.gsfc.nasa.gov/SEhelp/safety2.html>