

## Safeguarding Your Eyes during the 2024 Total Solar Eclipse

The celestial event of a total solar eclipse is a rare spectacle that captivates the world. As we eagerly await the Total Solar Eclipse of 2024, it is crucial to emphasize the importance of eye safety during this awe-inspiring occurrence. While witnessing such a phenomenon can be a breathtaking experience, it is essential to take precautions to protect your eyes from potential harm.

As we learn more, we understand a total solar eclipse happens when the moon completely covers the sun, casting a shadow on Earth. This event creates a momentary twilight in the middle of the day, providing a unique and mesmerizing view of the sun's corona. The upcoming Total Solar Eclipse of 2024 is anticipated to be a spectacular display, visible across Perry County, Missouri.

While the allure of witnessing a total solar eclipse is undeniable, staring directly at the sun without proper eye protection can lead to severe eye damage, including permanent blindness. The sun emits harmful ultraviolet (UV) radiation, which can cause damage to the sensitive cells in the eyes' retina. The intensity of this radiation during an eclipse is particularly hazardous, as the moon's covering may tempt onlookers to observe the event without proper precautions.

To safely observe the Total Solar Eclipse of 2024, it is imperative to use certified solar viewing glasses or solar viewers. These specialized glasses are equipped with solar filters that meet the ISO 12312-2 international safety standard. Regular sunglasses, no matter how dark, are not sufficient for protecting your eyes during the eclipse. Only approved solar filters can effectively block harmful UV, visible, and infrared radiation. If you have solar glasses from the 2017 total solar eclipse ensure that they are not scratched, or damaged as wear and tear can compromise their effectiveness. Always make sure the glasses you are using are certified by checking the American Astronomical Society's website for reputable manufacturers or vendors as many fake glasses are circulated on the internet. The Perryville Welcome Center has certified eclipse glasses for \$2 per pair for your convenience and safety.

Other safe viewing techniques may include solar viewers or handheld solar telescopes with built-in solar filters to safely observe the eclipse. Ensure that the filters are securely attached and in good condition. Pinhole Projectors are another indirect method for viewing the eclipse and most widely used by children. This involves creating a pinhole projector, a simple device that projects an image of the sun onto a surface, allowing you to observe the event indirectly.

As the Total Solar Eclipse of 2024 approaches, it is essential to prioritize eye safety while enjoying this rare cosmic phenomenon. The allure of witnessing such an event should not compromise the well-being of our eyes. By using approved solar viewing glasses or other safe viewing techniques, we can ensure that the experience remains not only unforgettable but also free from any lasting harm to our vision. Let us come together to celebrate this celestial wonder responsibly and protect our eyes for the wonders yet to come. For more information on our certified viewing glasses or eclipse weekend events contact Trish Erzfild at [trish@perryvillemo.com](mailto:trish@perryvillemo.com) or 537-517-2069.