



SOLAR ECLIPSE VIEWING BEST PRACTICES



The excitement is building for the 2024 total solar eclipse, but when you look toward the sky, make sure you are not damaging your eyes.

Failing to take proper precautions can result in severe and irreversible damage to one's eyesight. Staring at the sun during an eclipse, even for a few seconds, can lead to a condition known as solar retinopathy, which can result in permanent vision impairment or blindness.

Unlike the sun on a normal day, the eclipsed sun may appear less bright, making it tempting for some to glance at it without realizing the potential harm.

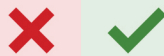
PROPER EYE PROTECTION

There is only one safe way to look directly at the sun, whether during an eclipse or not: through special-purpose solar filters. These solar filters are used in "[eclipse glasses](#)" or in hand-held solar viewers. They must meet a very specific worldwide standard known as ISO 12312-2.

Improvised or makeshift solutions like regular sunglasses, smoked glass or exposed film negatives are not a safe alternative to these specially designed filters.

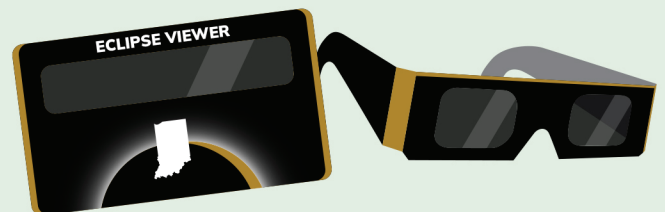
NOT SAFE

Ordinary sunglasses are not strong enough to protect your eyes.



SAFE

Use specially designed solar eclipse glasses and viewers to block the sun's harmful rays.



PROTECT YOUNG CHILDREN

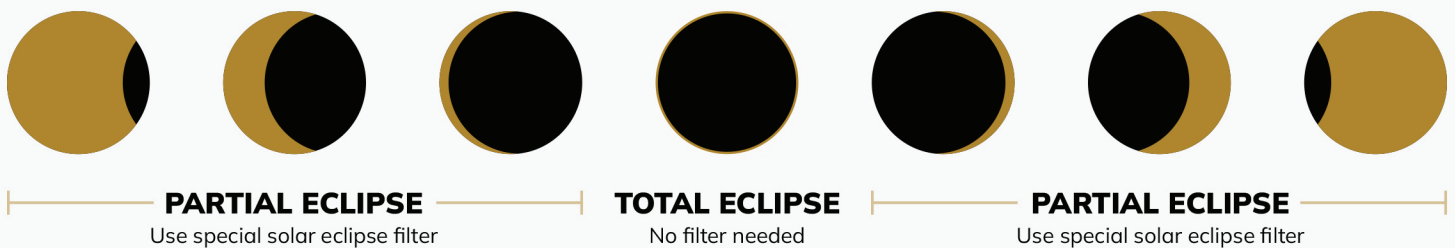
Eye safety extends to the proper supervision of children and individuals with limited understanding of the dangers posed by the sun.

Parents, educators and eclipse event organizers must take proactive measures to educate others, especially young children, about the importance of wearing protective eyewear and not looking directly at the sun during the eclipse.

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HOW TO SAFELY WATCH A SOLAR ECLIPSE

- Carefully look at your solar filter or eclipse glasses before using them.
 - If you see any scratches or damage, do not use them.
- Always read and follow all directions that come with the solar filter or eclipse glasses.
 - Help children to be sure they use hand-held solar viewers and eclipse glasses correctly.
- Before looking up at the bright sun, stand still and cover your eyes with your eclipse glasses or solar viewer.
 - After glancing at the sun, turn away and remove your filter — do not remove it while looking at the sun.
- The only time that you can look at the sun without a solar viewer is during totality.
 - When the moon completely covers the sun's bright face and it suddenly gets dark, you can remove your solar filter to watch this unique experience.
 - As soon as the bright sun begins to reappear very slightly, immediately use your solar viewer again to watch the remaining partial phase of the eclipse.
- Never look at the uneclipsed or partially eclipsed sun through an unfiltered camera, telescope, binoculars or other similar devices.
 - This is important even if you are wearing eclipse glasses or holding a solar viewer at the same time. The intense solar rays coming through these devices will damage the solar filter and your eyes.
- Talk with an expert astronomer if you want to use a special solar filter with a camera, telescope, binoculars or any other optical device.



HOW DO I KNOW IF I DAMAGED MY EYES DURING THE ECLIPSE?

According to the American Academy of Ophthalmology, if your eyes feel a little funny after an eclipse, it may not be a sign of [solar retinopathy](#). Damage from the eclipse is unlikely to cause pain or discomfort in your eyes because the retina does not have any pain nerves. Instead, you would notice visual symptoms within four to six hours. But some may notice symptoms after 12 hours.

WHAT ARE THE SYMPTOMS OF EYE DAMAGE FROM AN ECLIPSE?

If you are concerned that you may have sustained damage, here are some symptoms to look out for:

- Blurry vision
- Headache
- A blind spot in your central vision in one or both eyes
- Increased sensitivity to light
- [Distorted vision](#), in which a straight line looks bent, or a door jamb looks curvy
- Changes in the way you see color, known as “dyschromatopsia”

HOW IS SOLAR RETINOPATHY TREATED?

There is no treatment for solar retinopathy. But it is important to see your ophthalmologist if you experience difficulties with your vision. An ophthalmologist will take a scan of the eye to see the extent of any damage. Many people recover after three to six months, but some will suffer from permanent vision loss, in the form of a small blind spot and distortion.