

# WHAT IS A SOLAR ECLIPSE?

A solar eclipse occurs when the moon is positioned between Earth and the sun and casts a shadow over Earth.

## Tips for Safe Viewing of the Solar Eclipse:

- The only safe way to look directly at the sun is through specifically designed solar filters. These filters are used in both "eclipse glasses" or in solar eclipse viewers you hold up to your eyes.
- Even if they are very dark, your regular sunglasses are **not** safe for viewing the solar eclipse.
- While it might be tempting to pick up a cheap pair of solar-eclipse glasses from unauthorized vendors online, this puts you at significant risk of buying unsafe or counterfeit glasses that won't provide your eyes with adequate protection.
- You shouldn't be able to see anything through an authentic solar filter except the sun or equally bright light, such as the reflection of sunlight off a mirror.
- If you can see ordinary lights through your eclipse glasses or handheld viewer, they aren't safe and you are at a higher risk of damaging your eyes.
- Check your solar filter or eclipse glasses for any damage before using them. Any damage impacts the device's ability to protect you, so don't use them if you see any scratches or dents.
- Never look at the sun through an unfiltered camera, telescope or binoculars, even with eclipse glasses. By design, these lens-based devices intensify light rays, damaging the protective properties of eclipse glasses and your eyes.
- Damage to your eyes from unsafely staring at an eclipse may not happen until 4 to 12 hours after staring at the eclipse.

**Your eyes and vision are precious and regardless of what is happening in the sky, it is up to you to protect them. Please share this information with all of your family and friends.**



A list of safe vendors of eclipse glasses can be found at: <https://eclipse.aas.org/eye-safety/viewers-filters>

## When is the eclipse happening?

In Ontario, the solar eclipse is expected to start at **2:04 p.m.** and last for about two and a half hours on **Monday, April 8**. Many parts of Ontario will experience a total eclipse (the sun is 100% blocked by the moon) at about 3:20 pm. These times will vary by a few minutes depending where in Ontario you are located.



## What is Solar Retinopathy?

The retina is the part of the eye that sends light signals to the brain so you can see. Without a healthy retina, you can't see clearly. Staring at the eclipse can cause a condition called solar retinopathy, which is when solar radiation damages the eyes. It can even lead to permanent blind spots or distortions in your vision. This damage occurs when people underestimate the sun, thinking that an eclipse blocks enough of its light for it to be safe to look at.

## What are the symptoms of eye damage caused from looking at an eclipse?

- Blurry vision
- A blind spot in your central vision in one or both eyes
- Distortion in which a straight line looks bent or a door frame looks curvy
- Changes in the way you see colour, known as "dyschromatopsia"
- Increased sensitivity to light
- Eye pain or grittiness

**If you experience any of these symptoms contact your optometrist immediately.**