A total solar eclipse visible in the United States is rare – and precious, just like your vision.

A total solar eclipse will track from the Pacific coast to the Atlantic. Mid-day on August 21, 2017, the shadow of the moon will begin over Oregon and move east to South Carolina. A partial solar eclipse will be viewable over the rest of the US.

Partial eclipses, annular eclipses, and the partial phases of total eclipses are never safe to watch without taking special precautions. Even when 99% of the Sun's surface is obscured during the partial phases of a total eclipse, the remaining photospheric crescent is intensely bright and cannot be viewed safely without eye protection.

Do not attempt to observe the partial or annular phases of any eclipse with the naked eye. Failure to use appropriate filtration may result in permanent eye damage or blindness!

NASA outlines do's and don'ts of viewing the eclipse:

- Do not look directly at the sun
- Do not use homemade filters or ordinary sunglasses, even very dark sunglasses
- Use special-purpose solar filters, such as eclipse glasses or handheld solar viewers, to view the eclipse. Read and follow filter instructions and supervise children
- In any stage of eclipse, do not look at the sun through a camera, telescope, binoculars or other optical device, and never use solar filters with these devices, as concentrated solar rays will damage them and can cause serious eye injury
- Inspect your solar filter before use; if it is scratched or damaged, discard the filter
- Pinhole projection is a safe way to view the sun in indirect fashion; A web search can provide instruction on "How to Build a Sun Viewer" and other methods of safely viewing the sun.

Camera / Phone Use: Just like our eyes, camera phones are sensitive to sun's powerful rays. Without the proper filter or settings, you could damage your camera/phone. The types of gear and or settings varies depending on the type of camera. Please keep in mind, while pointing the camera at the sun, you could accidently look through the lens and damage your eyes.

"Eclipse Glasses" & Handheld Viewers - Serious eye damage can occur from viewing the eclipse. According to the American Academy of Ophthalmology, Eclipse glasses must meet the international safety standard known as ISO12312-2. For reputable vendors of solar filters visit: https://eclipse.aas.org/resources/solar-filters.