

SOLAR ECLIPSE

Info sheet brought to you by the



OHIO
OPTOMETRIC
ASSOCIATION

On Monday, April 8th, those within a 124-mile-wide band across the state of Ohio will experience a **total solar eclipse** for the first time since 1806 – an event that will not occur in the state for another 75 years! The total eclipse will be viewable to anyone in the counties shaded in blue or green on the map to the left. Those within the counties shaded in yellow and still within the grey band will experience a partial eclipse.

Sun

Moon

Earth

A total solar eclipse is rare, and on average, one happens somewhere on earth only once every 1.5 years. However, since the United States became a nation in 1776, only 21 total solar eclipses have crossed the lower 48 states!

According to NASA, a solar eclipse occurs when the moon passes between the earth and the sun casting a shadow on earth that fully or partially blocks the sun's light in some areas.

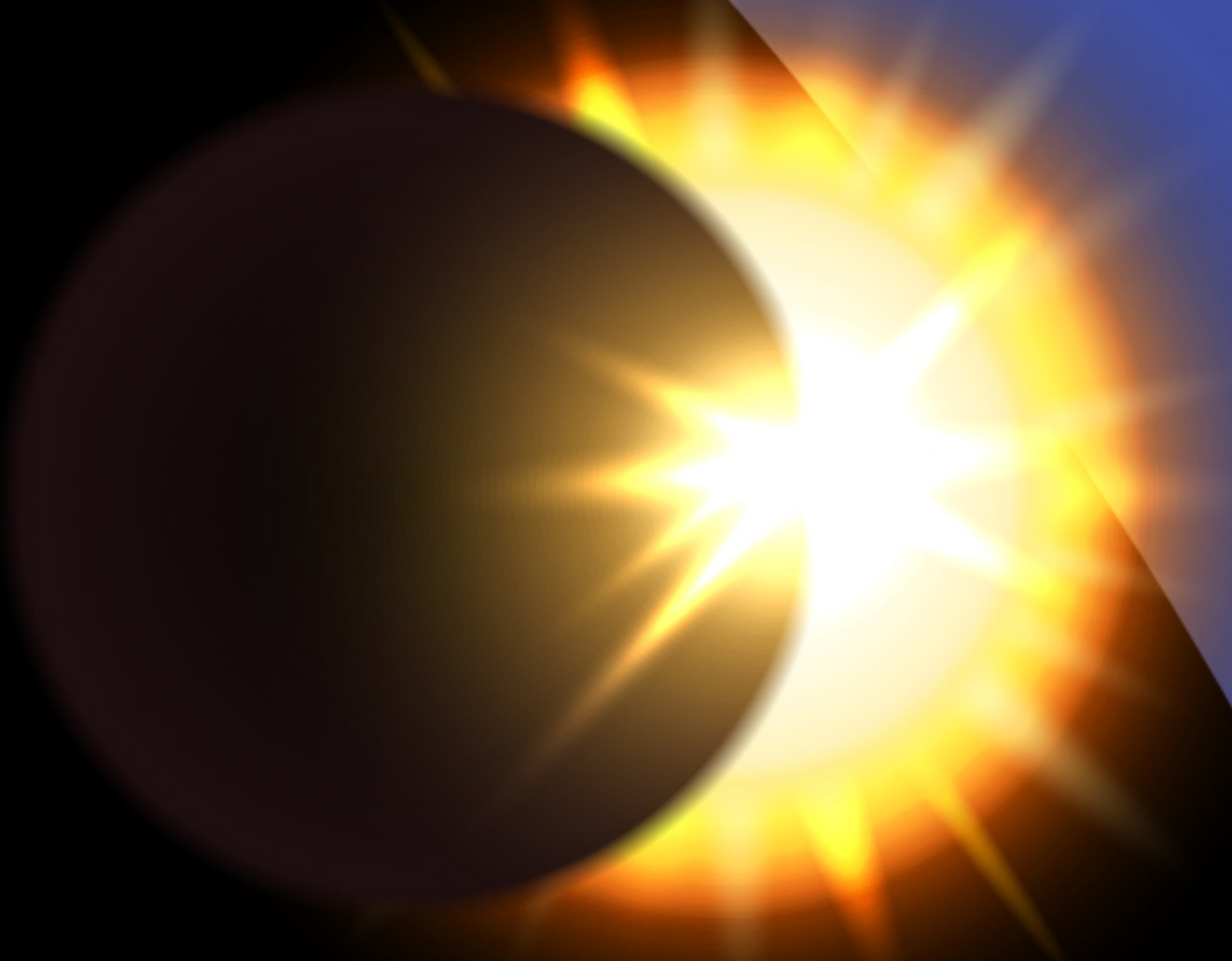
MONDAY
4/8/24

visit www.ooa.org/solareclipse for more resources

Critical Eye Safety Recommendations

from Doctors of Optometry for Viewing Any Part of the Solar Eclipse

Partial (unsafe viewing
without solar filter)



Annular (unsafe viewing
without solar filter)



Total (brief safe viewing
without solar filter)



It is not safe to look directly at the eclipse unless you are using eye protection specifically for solar viewing. The only exception is during the very brief phase of a total solar eclipse when the moon completely blocks the sun. See examples to the left.

How to Safely View The Solar Eclipse

Use approved solar viewers or filters when viewing the eclipse, and do not remove them while looking at the eclipse.

Homemade filters or regular sunglasses, even if dark, are NOT safe for looking at the eclipse.

Safe solar shades are thousands of times darker than regular sunglasses and should comply with the ISO 12312-2 international standard.

Do not look at the sun through a camera (including your phone camera), a telescope, binoculars, or any other optical device while using your solar viewers – the concentrated solar rays will damage the filter and enter your eye(s), causing serious injury.

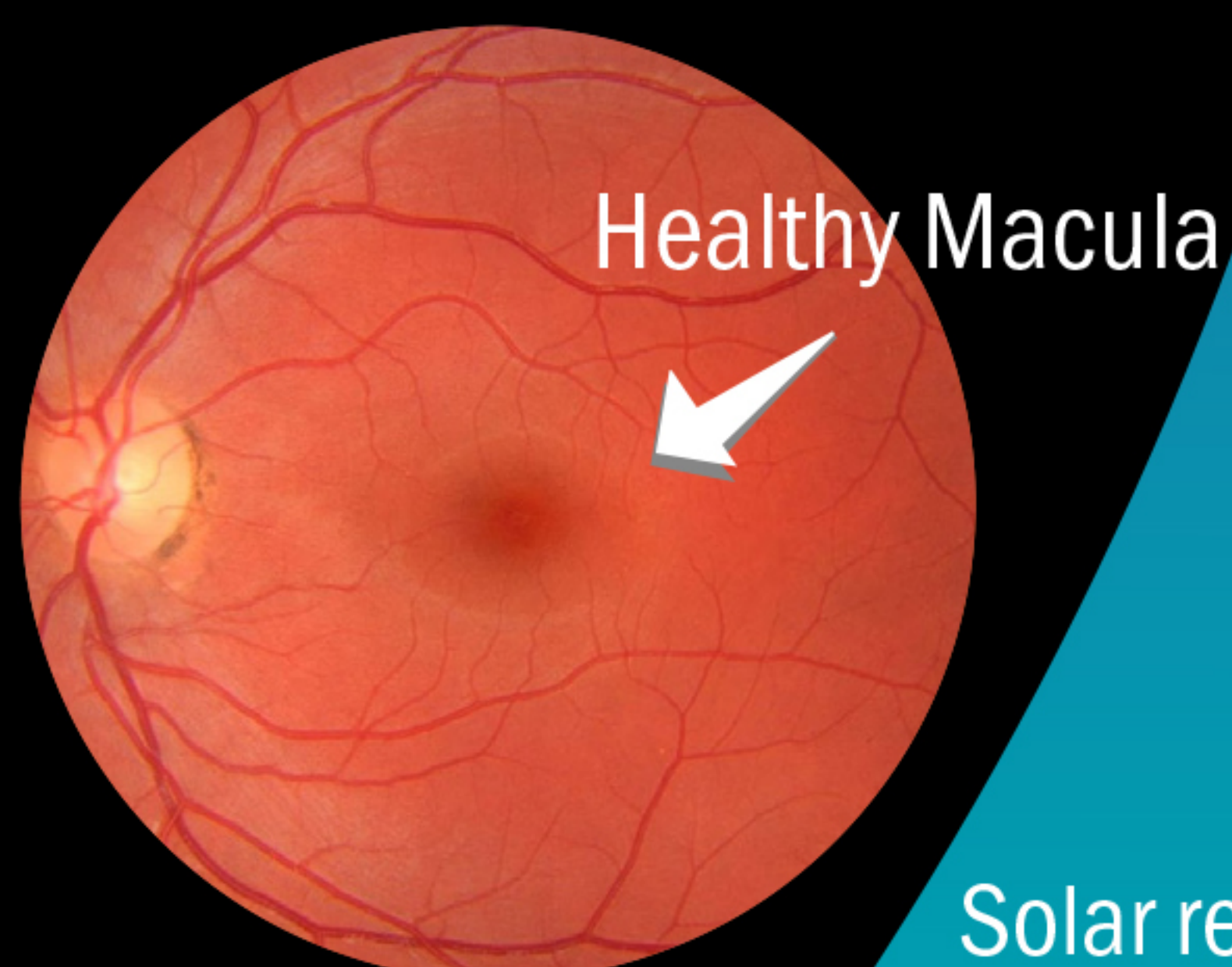
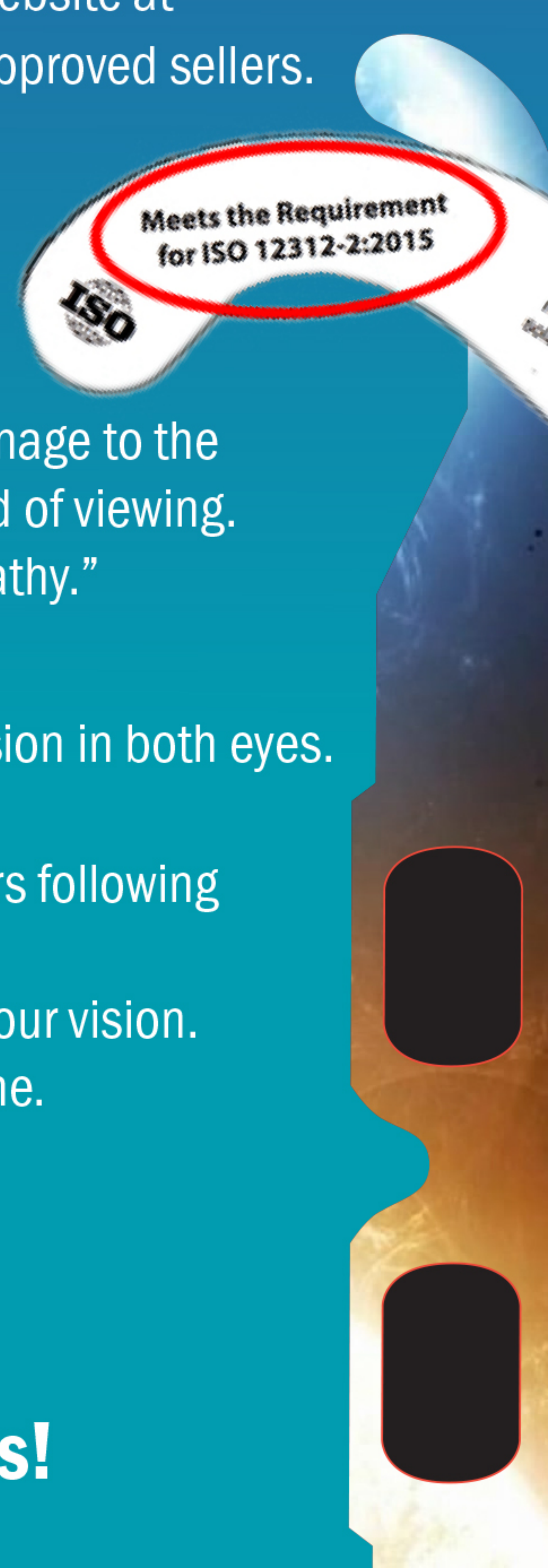
Do not directly view any part of the eclipse through a camera (including your phone camera), binoculars, or a telescope without a solar filter placed over the viewing lens.

The Ohio Optometric Association does not endorse any particular brand of solar viewers. Go to the American Astronomical Society website at www.eclipse.aas.org/resources/solar-filter to find a list of approved sellers.

What Could Happen to My Eyes ?



Photochemical toxicity from UV rays can cause painless damage to the center of the retina, called the macula, in less than a second of viewing. This damage can be permanent and is called “solar retinopathy.”



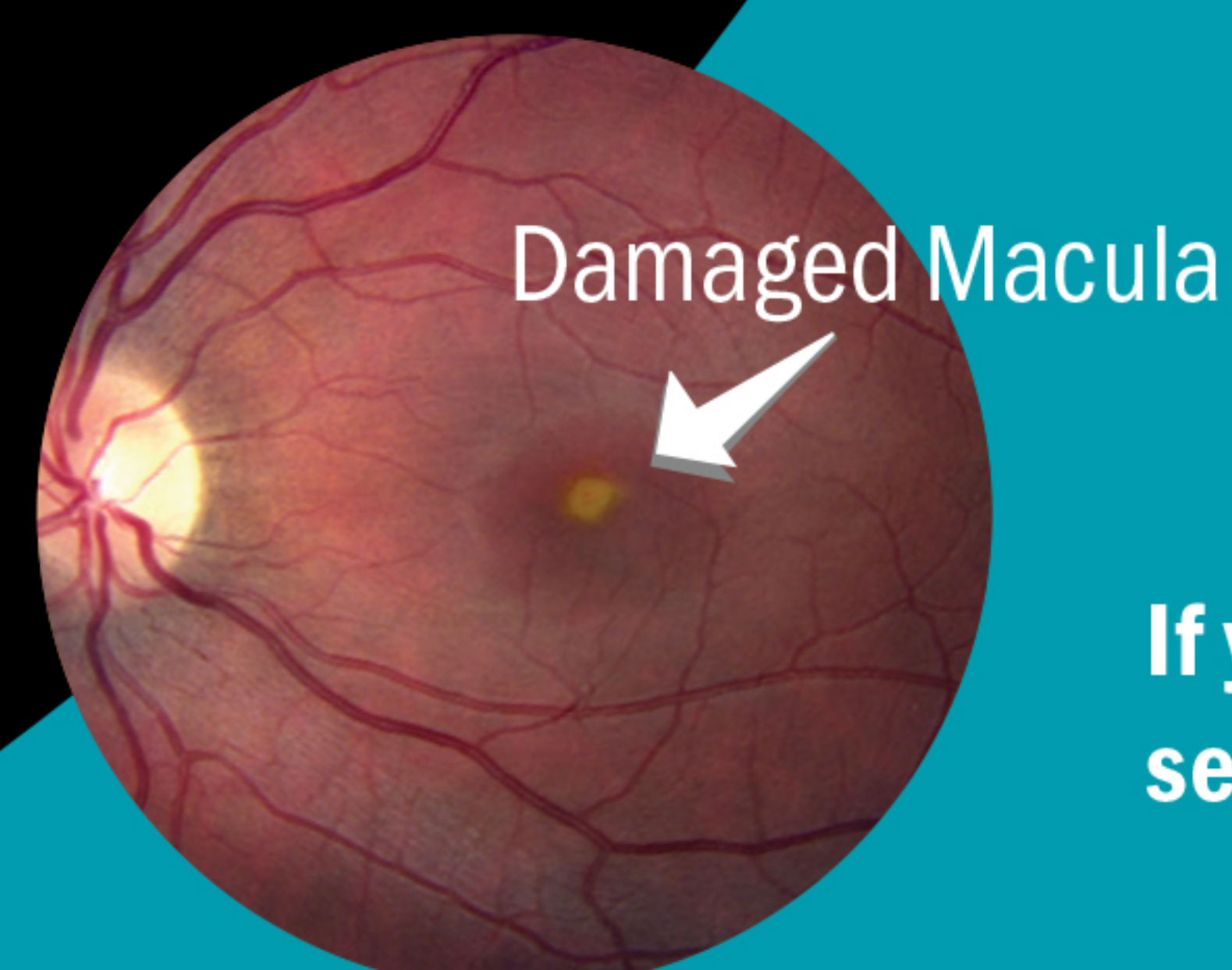
Healthy Macula

Normal Retina

Solar retinopathy can cause visual acuity loss and/or central blind spots in the vision in both eyes.

Symptoms of solar retinopathy can occur within seconds up to a few hours following exposure and include:

- Blurry vision in both eyes and central or paracentral blind spot in your vision.
- Changes in color perception, waviness of straight lines, or headache.



Damaged Macula

Damaged Retina

If you think you are experiencing any changes in your vision, please see your optometrist for a dilated examination and evaluation.

Visit ooa.org/solareclipse for more resources!