



## **Solar Eclipse Safety while at Work**

### **Background**

During the afternoon of Monday April 8<sup>th</sup>, a solar eclipse will occur as the moon passes between the sun and the Earth. During that time, the moon will progress from blocking a part of the sun to blocking the entire sun and create the effect of nighttime during the day. Kingston is in the path of totality and will experience 100 percent totality during the event. The full effect (totality) of the eclipse will last only a couple of minutes. In Kingston, the partial eclipse begins at 2:09 p.m., with the peak eclipse occurring at approximately 3:22 p.m. The partial eclipse ends at 4:35 p.m.

### **Campus Activities and Operations**

During the eclipse, the university will continue operations and employees are expected to carry out their regular duties, however, all staff are encouraged to adopt flexible and remote arrangements where possible to allow them to experience the eclipse and help alleviate and avoid what may be significant traffic congestion. This SOP is for individuals who will be working on campus, particularly those who work outside. They should be aware that it is not safe to look directly at the sun during an eclipse.

### **Viewing Safety**

There is no risk associated with being outside and continuing to work during the solar eclipse. This risk is solely associated with looking at the eclipse. The safest way to view the celestial sight is with special solar filters. Dark sunglasses do not provide enough protection against UV rays — they can burn the cornea's transparent outer layer of cells or damage the light-sensitive cells in the retina at the back of the eye. Though you may not feel pain due to the retina's lack of pain sensors, looking directly at the sun could still cause damage and partial or full blindness which may develop later.

Safety tips for the Solar Eclipse:

- There is nothing particularly extra dangerous about the Sun during the partial eclipse: it is just that we are all tempted to look at it. Do not look at it without protection.
- Solar filters, or eclipse glasses, provide the only safe way to look directly at a partial or total eclipse. Eclipse glasses that meet the ISO 12312-2 standard have been issued to you. Eclipse glasses are also available at locations across campus.
- Put the solar glasses on prior to looking up at the sun and look away from the sun before removing the glasses.
- Don't do anything EXCEPT look at the sun with these eclipse glasses/filters on. They block so much light that you won't be able to see anything else. Thus, doing other work or driving is impossible with the glasses on.



## HEALTH and SAFETY BULLETIN

- During the few minutes of total eclipse (3:22-3:25pm approximately) it will be as dark as night/twilight. You may need extra light to work outside during this time – however I do recommend taking those few minutes to watch this once-in-a-lifetime event.
- If you are not using glasses supplied by the university, ensure the glasses meet ISO 12312-2 standard and the solar viewer or glasses include the manufacturer's name and address.
- Do not use solar glasses that are older than three years or have scratched lenses.
- Do not use homemade filters or ordinary sunglasses.
- Do not look at an eclipse through an unfiltered camera viewfinder, telescope, binoculars or other optical device even with a solar filter. Those items magnify sunrays and can quickly damage the retina.
- Employees and students cannot use building roofs for viewing.

### Vehicle and Pedestrian Traffic

The City of Kingston is anticipating large numbers of visitors to gather in the city. In addition, the university is providing solar eclipse viewing areas on the Tindall surface parking lot and Tindall Field for students, faculty, and staff who remain on campus. As a result, heavy vehicular and pedestrian traffic is expected on campus and surrounding areas throughout the day.

Please plan your travel to and from, and around, campus accordingly and recognize that traffic congestion may significantly slow your commute. When travelling around campus please pay particular attention to the large numbers of pedestrians that may be distracted while crossing or walking along the roadways.

### Eclipse Resources

[2024 Total Solar Eclipse | Department of Physics, Engineering Physics & Astronomy \(queensu.ca\)](#)

[Total solar eclipse of April 8, 2024 | Canadian Space Agency \(asc-csa.gc.ca\)](#)

[Solar Eclipse - KFL&A Public Health \(kflaph.ca\)](#)

[2024 Total Eclipse \(nasa.gov\)](#)