

Thursday, April 4, 2024

Dear Staff,

As many may know from media reports, parts of North America will experience a Solar Eclipse on April 8th, 2024. This is an exciting meteorological event, which also poses potential risks to viewers. Consequently, we are providing the following information **on behalf of Dr. Alex Choi, Medical Health Officer, Vancouver Coastal Health.**

A solar eclipse occurs when the moon passes directly or partially in front of the sun, thus blocking out the sun fully or partially from sight. In the lower mainland this event will be a partial eclipse, expected to start around 10:40am and end around 12:20pm. While it is dangerous to look at the sun anytime, the risk of harm is higher during a solar eclipse because we are more tempted to look, and some of our protective mechanisms that would make us turn away may be less effective due to lower light levels. Even during a partial eclipse intense radiation from the sun can cause severe damage to the eyes.

It's crucial to avoid looking directly at the sun during the eclipse, especially for children, as their eyes let in more light to the retina than adult eyes. Young children also may not fully understand the risks or be able to follow safety directives and may require more supervision.

In order to avoid the risk of permanent damage, it is reasonable to keep students indoors during the eclipse and put the blinds down, particularly for younger students.

The eclipse can be watched live [online](#). Should classrooms choose to organise a learning opportunity around this, such as viewing with a pinhole projector, recommendations for safe watching should be followed.

Recommendations:

- **Avoid direct viewing:** Never look directly at the eclipse under any circumstances.
- **Only use safe viewers:** Only view the eclipse if you have safe viewers and filters that meet the international standard ISO 12312-2.
- **Avoid homemade filters:** Do not use homemade filters, sunglasses, ski goggles, camera lenses, smoked glass, photographic film, or x-ray film by themselves or in combination with a binocular or telescope.
- **Pinhole projector:** If you don't have eclipse viewers that meet the international standard, create a pinhole projector and focus on the projected image, not the sun itself.
- **Supervise children during this event.**

For more information, see:

- Canadian Space Agency: [How to safely watch a solar eclipse - Canadian Space Agency \(asc-csa.gc.ca\)](https://www.asc-csa.gc.ca/en/education/activities/2024/solar-eclipse)
- Canadian Association of Optometrists: <https://opto.ca/eye-health-library/solar-eclipse-safety>
[Student Project: How to Make a Pinhole Camera | NASA/JPL Edu](#)