

STATE OF CONNECTICUT DEPARTMENT OF EDUCATION



To: Superintendents of Schools

From: John D. Frassinelli, Division Director

School Health, Child Nutrition, and Family Services

Date: March 21, 2024

Subject: Solar Eclipse - April 8, 2024

The Connecticut State Department of Education (CSDE) has received questions regarding the impact of the solar eclipse occurring on April 8, 2024, especially the concern that the height of the occlusion of the Sun will be occurring during school dismissal times. This memo provides information and helpful resources garnered from speaking with astronomers familiar with such events and from the American Astronomical Society (AAS) and the National Aeronautics and Space Administration (NASA) websites.

The Moon will begin to pass in front of the Sun at approximately 2:15 p.m. on April 8th. The path of the eclipse in Connecticut will result in approximately 90 percent of the Sun being blocked by the Moon at the height of the event – approximately 3:25 p.m. The maximum darkness that Connecticut will experience will occur at that time for 2-3 minutes before gradually brightening back to normal daylight levels. Therefore, 50 percent occlusion will occur at approximately 2:50 p.m. and again at 3:50 p.m. The Moon will completely pass by the Sun by approximately 4:30 p.m. Even at its darkest point (3:25 p.m.), experts indicate that light levels will be similar to dusk or pre-sunset light levels and individuals will be able to see their surroundings. By contrast, light levels during a total eclipse would be similar to visibility during a full Moon phase.

Except during a brief total phase of a total solar eclipse, when the Moon completely blocks the Sun's bright face, it is not safe to look directly at the Sun without specialized eye protection for solar viewing. Since there will not be a total solar eclipse occurring in Connecticut, there is no safe time to view the event without specialized glasses or filters. Viewing any part of the bright Sun, even through a camera lens, binoculars, or a telescope without a special-purpose solar filter secured over the front of the optics, will instantly cause severe eye injury.

Viewing must only occur through safe solar viewing glasses ("eclipse glasses") or a safe handheld solar viewer at all times. Eclipse glasses are not regular sunglasses. Regular sunglasses, no matter how dark, are not safe for viewing the Sun. <u>Safe solar viewers</u> are thousands of times darker and must comply with the <u>ISO 12312-2</u> international standard.

An alternative to eclipse glasses or a handheld solar viewer, is an <u>indirect viewing method</u>, which does not involve looking directly at the Sun. Commonly referred to as a <u>pinhole projector</u>,

this method projects an image of the Sun onto a nearby surface. Viewing occurs with the Sun at the viewer's back, onto the projected image rather than the Sun.

Finally, the CSDE encourages districts to not only share this information with families to support their safety and awareness, but also to engage students in related discussions and scientific inquiry.

Below are websites that may be helpful:

<u>National Aeronautics and Space Administration (NASA)</u>: This is the official website of NASA and also provides additional safety information regarding the eclipse: <u>Safety (NASA.GOV)</u>

<u>American Astronomical Society (AAS)</u>: This website provides information and resources regarding eclipses, safe viewing and eclipse glasses: https://eclipse.aas.org/eye-safety.

<u>Eclipse2024.org:</u> This organization has not been vetted by the CSDE including the eclipse glasses advertised on it's website, however it provides the option of providing specific times for the eclipse in Connecticut cities and towns: https://eclipse2024.org/eclipse_cities/

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