

Ministry of Long-Term Care

Assistant Deputy Minister Long-Term Care Operations

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Ministère des Soins de longue durée

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MEMORANDUM TO: Long-Term Care Licensees

FROM: Kelly McAslan, Assistant Deputy Minister, Operations Division

RE: Preparedness for Total Solar Eclipse

To ensure the safety of long-term care home staff and residents, the Ministry of Long-Term Care would like to provide information and recommendations to prepare for the upcoming total solar eclipse.

On April 8, 2024, from approximately 2:00 PM to 4:30 PM, parts of Ontario will experience a total solar eclipse. A total solar eclipse is a rare celestial event where the Moon passes between Earth and the Sun, casting a shadow on the Earth's surface. This moving shadow, called "the path of totality", is a narrow path approximately 110-115 kilometres wide where the sun appears to be completely covered. The sky will darken, as if it were dawn or dusk. Weather permitting and with appropriate eye protection, people in the path of a total solar eclipse can see the sun's corona (the outer atmosphere of the sun), which is otherwise usually obscured by the bright face of the sun. More information on the stages of the total solar eclipse and what to expect on April 8th have been appended to this memo.

The eclipse itself poses no risk to Ontarians who use approved solar eclipse glasses with specialized filters when viewing the eclipse, or who do not look directly at the sun. However, mass gatherings are expected in southern Ontario to view the eclipse, especially in areas with larger totality durations such as Niagara Falls and Kingston.

Guidance for safely viewing the eclipse, anticipated impacts, and recommended preparedness activities have been provided below:

Safe Viewing of the Eclipse

It is not safe to look at the sun without approved eye protection. Regular sunglasses will
not protect people's eyes. It is not safe to view the eclipse through a camera/phone lens,
telescope, binoculars, or any other optical device. Approved eye protection must be
used to view all stages of a solar eclipse – even when viewing a partial eclipse.

- Looking at even a small sliver before or after the eclipse without eye protection can be harmful to one's vision. Health impacts may include retinal burns, blurred vision, and loss of eyesight (immediate or delayed onset).
- Glasses with specialized filters adhering to the ISO 12312-2 international standard can be worn to prevent eye damage. Glasses should be inspected for wrinkles or scratches ahead of use and should not be used if damaged.
- Glasses must be put on when looking away from the sun. Once ensured that eclipse glasses are fully covering one's field of vision, they can safely look at the eclipse. People should look away from the sun before taking their eclipse glasses off.
- If appropriate eye protection is not available, alternate viewing strategies should be considered, such as <u>an eclipse box</u> or a <u>LiveStream</u>.
- Anyone beginning to experience temporary visual loss, blurred vision, or eyesight loss during or after the event, should speak to their eye care professional (e.g., optometrist) or their health care provider as soon as possible. Anyone experiencing blindness after viewing the eclipse (immediate or delayed), should seek emergency care immediately.
- Eye damage may not be immediately apparent, and symptoms can take 12-48 hours to appear.

Licensees are encouraged to communicate with residents, caregivers, families, and staff ahead of time to reinforce awareness of the event and how to view the eclipse safely. To support these communication efforts, I have included some suggested messaging in the appendix of this memo and a Solar Eclipse Information and Safety poster that long-term care homes may use to convey precautions residents and families may take. The poster has been appended to this memo.

Please be advised that the Ministry of Long-Term care has confirmed with Supply Chain Ontario that there will not be a supply of solar eclipse glasses to provide to long-term care homes. Residents, families, and staff procuring solar eclipse glasses should take caution in ensuring that this protective eyewear is obtained from a credible vendor: <u>Suppliers of Safe Solar Viewers</u> & Filters | Solar Eclipse Across America (aas.org)

Anticipated Impacts to Ontario

Increased traffic volume on highways, including the Queen Elizabeth Way (QEW) and the Highway 401, is anticipated as well as at the border crossings. This may limit the availability of fuel supplies as well as response times for emergency services. Additionally, cellular networks and wi-fi being stressed may lead to challenges with communication.

Recommended Preparedness Activities for Licensees:

 Staffing Plans: We encourage all homes to have staffing plans in place for that day, especially if you anticipate being affected by high traffic volumes in your area. Homes may also wish to consider how staffing schedules may need to be adapted to accommodate anticipated congestion on roads and major arteries, while ensuring the continued delivery of safe and quality care to residents, including necessary changes to reduce staff travel during 2:00 PM to 4:30 PM. Consideration should also include adjustments to the timing of shift changes that typically occur during this time and associated potential adaptations in routine care for residents at the time of shift changes. Homes may wish to consult with their Behavioural Supports Ontario (BSO) team to discuss interventions that may be appropriate to address unexpected shifts in service provision to residents. With the sky expected to darken as if it were dawn or dusk, homes should also identify potential adjustments in the provision of care to residents during this time.

- Plan for onsite supplies: Prepare to have adequate food and other supplies, including medication, onsite as planned deliveries in the days leading up to April 8th, on that date, and the day(s) immediately afterward may be affected.
- Plan for potential disruptions to admissions or transfers: Resident transfers and admissions may be affected and/or rescheduled.
- ✓ Where possible, collaborate with local level partners in planning and preparedness activities (i.e., municipal level planning with key partners and other long-term care homes in your region).
- Communicate to residents: Develop messaging for residents and families on potential risks and impacts of the eclipse. Communication should be employed using various communication techniques (i.e., email; hard-copy communications; communications posted at entry points of the home, elevators, and in dining areas; verbal announcements during recreation activities and mealtimes, etc.).
- Plan for visitors: Consider if changes to visitor policies and/or visiting hours may be appropriate for that day to ensure that families and/or other essential caregivers have an appropriate amount of time to travel to homes to visit residents.
- Consider how residents, families, and staff can best enjoy this once in a lifetime event. Licensees may wish to proactively explore opportunities to create <u>LiveStream</u> viewing experiences inside their home, and are encouraged to engage in conversations about the solar eclipse with residents, families, and staff as soon as possible.
- ✓ Plan for Infection Prevention and Control (IPAC) safety measures for residents, families, and staff gathering to view the total solar eclipse, or view and experience the solar eclipse via LiveStream at your home. A reminder to all those who may attend the solar eclipse gathering to not attend if feeling unwell. As required in the IPAC Standard and the updated Ministry of Long-Term Care COVID-19 guidance document, masking in non-outbreak situations in long-term care homes continues to be required for staff, based on a point-of-care risk assessment before every resident interaction, and based on the return-to-work protocols. Masking in non-outbreak situations is recommended for visitors and caregivers, but not required. Staff may consider wearing a mask during prolonged direct resident care defined as one-on-one within two metres of an individual for fifteen minutes or longer.

- Plan for safety in and around your home, including traffic patterns and darkness occurring during totality which is expected to last for approximately 3 minutes. During all stages of the total solar eclipse, window coverings should be drawn closed for residents, visitors, and staff who are not intending to view the eclipse from inside the home.
- ✓ For any critical events or other issues that may occur on that day, follow existing processes to notify the ministry of any issues.

Please see attached resources from Destination Ontario, the Canadian Space Agency, the City of Toronto, and the National Aeronautics and Space Administration (NASA) for additional information on how to safely view the eclipse. Plans to view a total solar eclipse should be in place, at a minimum, 7-10 days in advance.

If you have any questions about this memo, please contact EOC.Operations.MLTC@ontario.ca.

Sincerely,

Kelly McAslan Assistant Deputy Minister Long-Term Care Operations Division Ministry of Long-Term Care

Appendix: Key Messages and Resources:

Destination Ontario

Watch the 2024 solar eclipse | Destination Ontario

How to View the Eclipse Safely

Solar eclipses guide: when is the next solar eclipse? | Canadian Space Agency (asc-csa.gc.ca)

Solar Eclipse Safety – City of Toronto

Animation of the Total Solar Eclipse on April 8, 2024

The 2024 solar eclipse - Canadian Space Agency (asc-csa.gc.ca)

Eclipse Education: Canadian Space Agency

David Saint-Jacques, Canadian Space Agency Astronaut, invites you to watch the total solar eclipse - Canadian Space Agency (asc-csa.gc.ca)

Eclipse Education: National Aeronautics and Space Administration (NASA)

Stages of a Total Solar Eclipse:

During a total solar eclipse, you will see multiple unique features as the eclipse progresses.

- Partial eclipse: As the Moon passes between the Sun and Earth, at first it does not completely cover the sun. The sun appears to have a crescent shape.
- Shadow bands: Shadow bands are rapidly moving, long, dark bands separated by white spaces that can be seen on the sides of buildings or the ground just before and after totality, though they can be very faint and difficult to photograph.
- Baily's Beads: As the Moon continues to move across the Sun, several points of light shine around the moon's edges. Known as Baily's Beads, these are light rays from the sun streaming through the valleys along the moon's horizon.
- Diamond Ring: Baily's Beads will begin to disappear until eventually, only a single bright spot will remain along the edge of the moon's shadow. This bright spot resembles the diamond in a giant diamond ring formed by the rest of the sun's atmosphere.
- Totality: Totality is when the Moon completely blocks the bright face of the Sun. This stage can also reveal the chromosphere (a region of the solar atmosphere, appearing as the thin circle of pink around the moon) and the corona (the outer solar atmosphere, appearing as streams of white light).

After totality, viewers will be able to experience the features they saw earlier in the eclipse again.

Safely viewing a total solar eclipse:

The sun's surface is so bright that if you stare at any portion of it, no matter how small, it produces enough light to damage individual retinal cells. It takes a few seconds for this to happen, but afterward, you will see a spot as big as the solar surface you glimpsed when you look away from the sun at some other scenery. Depending on how long you gazed at the sun and how badly the retinal cells were damaged, this spot will either fade away in time or remain permanent. You should never assume that you can look away quickly enough to avoid eye damage because every person is different in terms of their retinal sensitivity, and you do not want to risk being the one who damages their eyes just to try to look at the sun.

Why it is not safe to look at the sun even when only a small part of it is visible:

The rods and cones in the human retina are very sensitive to light. Normally during daylight conditions, the iris contracts so that only a small, safe amount of light passes through the lens and then reaches the retina. However, the sun's surface is so bright that even a thin sliver of its light can still damage the eye if you were to look directly at it. When exposed to direct sunlight, retinal cells will become damaged, sometimes permanently. This can happen even after a quick glance at the sun, so it is very important to never look at the sun directly.

Key (plain language) Messages:

- A solar eclipse is expected on April 8, 2024.
- In Ontario, the solar eclipse is expected to start at about 2:04 p.m. and last for about two and a half hours.
- The sun will be completely covered (eclipsed) at approximately 3:20 p.m. to 3:23 p.m. Eastern Daylight Time.
- A solar eclipse happens when the Moon passes between the Sun and the Earth. The Sun is partly or completely covered by the Moon causing darkness during the day.

- Different parts of the province will have different views of the eclipse. In some areas the sun will be completely covered, while in other areas it will only be partly covered.
- During a total solar eclipse there is something called "the path of totality". This is a narrow area about 100-115KM wide where the Sun will appear to be completely covered by the Moon for about 2-3 minutes.
- Areas of the province that are expected to be in the path of totality include Niagara, Hamilton, and Kingston.
- You should not look at the sun directly during the eclipse!
- You need glasses with specialized filters adhering to the ISO 12312-2 international standard to look at a partial or total solar eclipse. Your regular eyeglasses or sunglasses aren't good enough.
- Looking at the Sun without proper protection may cause something called solar retinopathy which means damage to the retina, the tissue at the back of the eye.
- If you suffer this kind of damage, your symptoms might not appear until 12-48 hours later and you may need medical treatment.