
MEMORANDUM

PHD-C 2-2023

Subject: 2024 Eclipse

Date: March 7, 2023

To: Public Health and Social Services Committee

From: Patricia Martel, Manager Emergency Management

Key Facts

- One of nature's most spectacular and rarest phenomena is coming to Niagara on April 8, 2024. The region will be one of the few places in Canada that will be in the path of a total solar eclipse.
- These are rare events in which the moon passes in front of the sun and temporarily blocks its light, turning day into twilight. Another total solar eclipse will not occur in Ontario for over 100 years.
- Based on past total eclipses elsewhere, Niagara is expected to experience a very high influx of visitors travelling to see this event.
- Total solar eclipses generate significant media attention. National and international media coverage is expected.
- The rare and complex nature of this event requires emergency management planning to ensure that it is a positive experience and that any disruptions to critical infrastructure can be mitigated as much as possible.

Background

On April 8, 2024, all of Niagara Region will be in the path of a total solar eclipse. A total solar eclipse is a rare natural phenomenon for any particular point on the Earth's surface and has not occurred in southern Ontario for over 100 years. People who are under a total solar eclipse, in 'the path of totality', are able to see features of the sun that are not normally visible. The path of totality is a narrow corridor of approximately 100 to 115 km wide in which the sun appears to be completely covered by the moon for a short period of time. The region will be one of the few places in Canada that will be in the path of the total solar eclipse. Toronto and most of the GTA will be outside of the path and will only see a partial eclipse.

Situational Assessment

Regional Emergency Management conducted a review of the literature and connected with United States counterparts who managed the 2017 total eclipse in their jurisdictions to learn from their experiences. The following were key findings:

- A unified and coordinated emergency management approach will be required.
- Emergency planning must begin as early as possible due to the complex nature of this event.
- While this can be a positive event, there is a lot of potential for cascading hazards which can present a significant threat and must be managed. It is important to 'prepare for the worst, hope for the best'.

Potential Impacts

- **Visitors:** Niagara is expected to have a very high influx of visitors who come to view the eclipse. People in areas outside of the path of totality will only see a partial eclipse making the Niagara region a premier viewing destination. In addition, Niagara has other benefits including being a well known tourist destination, easily accessible, having a mixture of urban and rural areas for different viewing opportunities. It is difficult to estimate the number of visitors as total eclipses are rare events and occur in very different areas in terms of population, accessibility etc.
- **Media Attention:** Total solar eclipses generate significant media attention. National and international media coverage is expected.
- **Special Events:** It is likely that municipalities and other partners will decide to hold events for the eclipse. This is beneficial, as it can help with providing a safe environment for viewing the eclipse. In addition to organized special events with permits, there will likely be a number of other gatherings during the eclipse. This will range from private gatherings to people pulling over on the side of roads to watch. While there will be some known gatherings, other activities will be less formal and more disperse.
- **Resource Demand:** A large influx of people will increase the demand for resources. During the 2017 eclipse, there was increased demand for resources including gas, food and water. Some of the impacted states such as Oregon took measures to avoid disruption of key resources, including additional gas deliveries leading up to the eclipse.
- **Infrastructure:** Infrastructure use, particularly in smaller communities, could be significantly higher than normal. Road and highway congestion leading up to, and

immediately after, the eclipse is very likely and may require monitoring and mitigation measures.

- Emergency Management and Emergency Services: The influx of people and disperse nature of this event will require a coordinated emergency management response between Niagara Region Emergency Management and key emergency management partners. The eclipse could result in a higher demand and challenges for first responders which can be managed through coordination and planning measures. The State of Oregon noted that the development of contingency and staffing plans were necessary to ensure that they could protect public safety during the 2017 eclipse.
- Emergency Management will be taking the following actions to help the Region and partners prepare for the eclipse:
 - Lead working groups to ensure coordination and collaboration among internal departments, key emergency management stakeholders, and externals partners.
 - Develop event-specific plans and procedures.
 - Coordinate with partners to develop a unified approach to managing the eclipse.
 - Develop and offer additional REOC training and ensure that the REOC is prepared for a full activation.
 - Continue to advocate for provincial and federal participation.
 - Develop and run a full-scale exercise in October 2023.

Summary

The April 8, 2024 total solar eclipse will be a once in a lifetime experience for the residents and visitors of Niagara. It has the opportunity to be very beneficial in terms of tourism and could be very positive for local businesses. However, significant planning and coordination is needed, particularly from an emergency management perspective as this will be a very complex event requiring multi-tier planning and collaboration.

Respectfully submitted and signed by

Patricia Martel, Manager Emergency Management
Niagara Emergency Medical Services