



TO: Chair and Members of the Board of Health

FROM: Dr. Alexander Summers, Medical Officer of Health
Emily Williams, Chief Executive Officer

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2023-2024 RESPIRATORY SEASON REVIEW AND UPDATE

Recommendation

It is recommended that the Board of Health receive Report No. 59-23 re: “2023-2024 Respiratory Season Review and Update” for information.

Key Points

- COVID-19 cases and outbreaks continued to dominate the 2022-2023 respiratory season.
- Influenza activity in the 2022-2023 respiratory season was more comparable to pre-pandemic seasons, with nearly 500 confirmed cases and eight outbreaks in institutions.
- The 2022-2023 respiratory season was atypically extended, with respiratory outbreaks in institutions continuing to be reported throughout the spring and summer months.
- Current respiratory virus trends justified declaring a start to respiratory season on October 5th, 2023.

Background

This report offers an assessment and overview of the respiratory season in 2022 and 2023, while also outlining the MLHU’s preparedness for the upcoming 2023-2024 season. After a brief period of decreased circulation of respiratory viruses due to COVID-19 public health measures, the 2021-2022 respiratory season saw the resurgence of familiar pathogens such as Influenza and Respiratory Syncytial Virus (RSV), in addition to the ongoing presence of COVID-19. These trends have continued, and Middlesex-London region has seen a return to pre-pandemic prevalence of these diseases. Notably, the 2022-2023 season was characterized by an extended and more intense period of outbreak activity that persisted into the summer of 2023. COVID-19 has continued to dominate the number of laboratory-confirmed cases of respiratory illnesses reported locally and across the province.

COVID-19 Activity

There were over 7,800 COVID-19 cases confirmed among Middlesex-London residents in the 2022-2023 respiratory season. Cases ranged in age from less than a year old to over 100 years of age, with approximately half (49%) of all cases reported throughout the season being 65 years of age and over. Middlesex-London continued to see severe outcomes associated with COVID-19, with 117 deaths. For further details, please see [Appendix A – Table 1](#).

In institutional settings, there were 177 outbreaks during the 2022-2023 respiratory season with peaks in December 2022 and January 2023. Middlesex-London continued to see COVID-19 outbreak activity throughout the summer of 2023. This is unique in comparison to respiratory seasons prior to the COVID-19 pandemic, where there were often periods of no outbreak activity during summer months. A timeline of outbreak activity for the entire 2022-2023 season can be found in [Appendix A, Figure 1](#).

As of October 3, 2023, COVID-19 activity is moderate with increases to hospitalizations and wastewater data ([Appendix A – Figure 2 and Figure 3](#)). It is expected that transmission of COVID-19 will continue to increase throughout the fall with hospitalization expected to be like previous years.

Influenza Activity

In the 2022-2023 season, there were nearly 500 laboratory-confirmed influenza cases reported among Middlesex-London residents, which was comparable to pre-pandemic influenza seasons. Similar to COVID-19, influenza cases ranged in age from less than a year old to 100 years of age. However, approximately 41% of local influenza cases were reported among adults ages 20 to 64 years old, followed by children and youth 19 years of age and younger (32%). The first local case of influenza was reported on October 21, 2022, and the first institutional influenza outbreak declared on November 12, 2022. Similar to the 2021-2022 season, influenza activity extended later into the spring and summer than usual, with the last laboratory-confirmed case reported July 24, 2023.

Throughout the season, the majority of laboratory-confirmed cases were influenza A (94%), although for the first time since the 2019-2020 season, influenza B cases were identified among local residents, accounting for approximately 6% of laboratory-confirmed influenza cases. Of the influenza A samples that were subtyped (12%), all were typed as H3, except for a single H1N1 result.

There were eight institutional influenza outbreaks during the 2022-2023 respiratory season, with a peak in January 2023. No further influenza outbreaks were reported after January 2023.

The first influenza case for the 2023-2024 season was reported on October 2, 2023. This influenza A case was a resident of a long-term care home.

Other Respiratory Viruses

Through the 2022-2023 season, COVID-19 was identified in more than three-quarters (78%) of institutional outbreaks followed by the Health Unit. There were eight influenza outbreaks (4%) declared throughout the season, all of which were influenza A. Enterovirus and respiratory syncytial virus (RSV) were also frequently identified in institutional outbreaks (6% and 5%, respectively).

Vaccination

Vaccination for respiratory illness continues to be an important strategy to reduce the burden of disease in the community. In the fall of 2022, MLHU provided over 34,246 of COVID-19 doses at two mass vaccination sites and high-risk mobile clinics with an overall uptake well below previous demand. The Province launched a spring campaign in April of 2023 with MLHU administering 11,894 doses. Overall, the uptake and demand from the general population has decreased over time with the removal of legislated requirements, coupled with lower disease activity and morbidity.

As part of MLHU's respiratory fall vaccine campaign, influenza and COVID-19 vaccine will be offered to the public at the Western Fair clinic five days a week. Mobile clinics will be available 1 to 2 days a week in high risk settings and areas with lower vaccination uptake. The MLHU anticipates that the fall 2023 COVID-19 vaccine uptake will be similar to the previous influenza vaccine uptake of approximately 40% of the general population. See [Appendix B](#) for the vaccine availability timelines.

In addition, Health Canada has recently approved a new RSV vaccine called Arexvy. In Ontario, Arexvy will be distributed to eligible long-term care and retirement homes in October.

Respiratory Planning

The planning for the 2023-2024 respiratory season began in August 2023 and consisted of internal and external preparedness activities. The MLHU participated in a regional exercise led by Ontario Health West alongside 23 local partners. Additionally, the MLHU planned and facilitated a tabletop exercise for local high-risk institutional stakeholders, primarily long-term care and retirement homes. Thirty-seven participants attended this event, detailed further in [Appendix C – 2023-2024 Respiratory Preparedness Exercises](#).

Next Steps

While monitoring of respiratory diseases occurs from September to August each year, the 2023-2024 respiratory season was declared on October 5th, 2023. This respiratory season is expected to have a similar burden on Middlesex-London compared to last year. This burden will be managed through proactive infection prevention and control interventions, alongside vaccine administration, outbreak investigation and management.

This report was prepared by the Environmental Health and Infectious Disease Division and the Public Health Foundations Division.



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