

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health / CEO

DATE: 2018 November 15

2017–18 INFLUENZA SEASON IN MIDDLESEX-LONDON – FINAL REPORT

Recommendation

It is recommended that the Board of Health receive Report No. 069-18 re: “2017–18 Influenza Season in Middlesex-London – Final Report” for information.

Key Points

- The 2017–18 influenza season was the most substantial in recent years, with 870 laboratory-confirmed cases, 464 hospitalizations, 44 deaths, and 71 confirmed influenza outbreaks in facilities.
- Both influenza A (H3) and influenza B were prominent during the 2017–18 influenza season, and circulated throughout the season.
- The Health Unit began distributing influenza vaccine for the 2018–19 season to healthcare providers in early October.

Overview

This report provides the final analysis of the 2017–18 influenza season, the most substantial in recent years (Table 1). A total of 870 laboratory-confirmed cases of influenza were reported to the Health Unit during the 2017–18 season. As with every influenza season, many more people were likely infected with influenza, but did not have laboratory testing performed and so were not reported to the Health Unit. A graph showing when laboratory-confirmed cases occurred is provided in [Appendix A](#) (Figure 1).

Table 1: Influenza Cases, Middlesex-London, Influenza Seasons 2013–14 through 2017–18

	2013–14	2014–15	2015–16	2016–17	2017–18
Laboratory-confirmed cases	407	381	489	480	870
Hospitalizations	206	161	197	258	464
Deaths	17	14	19	16	44
Outbreaks	19	40	12	40	71

Middlesex-London cases ranged in age from 6 weeks to 102 years old; more than one-half (53%, 464/870) of laboratory-confirmed cases were hospitalized. Those aged 65 years and over accounted for 60% (523/870) of all cases and 70% (325/464) of hospitalizations. There were 44 deaths reported among individuals with laboratory-confirmed influenza, all among those 50 years of age and over.

Influenza Outbreaks

There were 71 influenza outbreaks declared in Middlesex-London facilities during the 2017–18 season; 40 (56%) in long-term care homes, 18 (25%) in hospitals, and 13 (18%) in retirement homes. The duration of influenza outbreaks ranged from 4 to 35 days, with an average of 13 days. Influenza A was identified in 34 (48%) outbreaks and influenza B was identified in 30 (42%) outbreaks; there were seven outbreaks where

both influenza A and B were identified. A graph showing when influenza outbreaks occurred is provided in [Appendix A](#) (Figure 2).

Median immunization coverage rates of staff at long-term care homes and hospitals in Middlesex-London and in Ontario are shown in Appendix A (Figure 3). In general, immunization coverage rates of staff in Middlesex-London hospitals was comparable to the province as a whole; local coverage rates for staff in long-term care homes was lower compared to median rates for all Ontario.

Timing of the Season and Strain Typing

The influenza season typically occurs from October to April. In the 2017–18 season, influenza activity peaked in late December 2017 and January 2018. The first confirmed influenza case was reported on October 4, 2017, with onset of symptoms on September 25, 2017 ([Appendix A](#), Figure 1). Influenza activity continued until May 2018, with the last case reported on May 23, 2018. Of the 870 laboratory-confirmed cases in Middlesex-London, 50% (435/870) were influenza B, 49% (429/870) were influenza A, and 0.7% (6/870) were infected with both influenza A and B at once. This season was unique in that both influenza A and influenza B circulated at the same time; in previous seasons, influenza B has tended to circulate later in the season than influenza A. As well, the number of cases attributed to influenza A and influenza B was fairly evenly split, whereas in previous seasons only one strain tended to predominate.

Influenza Immunization

Distribution of influenza vaccine for the 2018–19 season has begun. New for this season is quadrivalent influenza vaccine, which offers protection against two strains of A and two strains of B, and is available to everyone aged 6 months and over. In previous seasons, quadrivalent vaccine was available only to those aged 6 months through 17 years. As well, high-dose trivalent vaccine, offering enhanced protection against two A strains and one B strain, is available for those aged 65 and over. The high-dose trivalent vaccine is being recommended for clients at high risk for influenza and associated complications. The Health Unit is promoting receipt of influenza vaccine at healthcare provider offices and pharmacies, and is offering influenza vaccine during its regularly scheduled Immunization Clinics.

Conclusion

Confirmed cases, hospitalizations, and deaths reported during the 2017–18 influenza season were the highest numbers reported in recent years. Cases were reported from October 2017 to May 2018, with peak activity occurring in late December and January. Both influenza A and B circulated at the same time, and each accounted for approximately half of all cases. The Health Unit continues to encourage yearly influenza vaccination to reduce the risk of influenza infection in the community for the 2018–19 season.

This report was prepared by the Environmental Health and Infectious Disease Division and the Office of the Associate Medical Officer of Health.



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