

Program/Service Information Report

Universal Influenza Immunization Program

September 15, 2018 – March 15 2019

To:	Board of Health
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Report No.:	BH.01.APR0319.C07
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Key Points

- Influenza and its complications are a leading cause of death and disability. Approximately 3,500 deaths and 12,200 hospitalizations are related to influenza on average, each year, in Canada.
- This season was the first in which high-dose trivalent vaccine (HD-TIV) was available for older adults. Supply was limited early in the season and the vaccine was not available through pharmacies.
- During the 2018/2019 season, a total of 89,427 doses of influenza vaccine were distributed or administered in Wellington-Dufferin-Guelph (WDG), to date.
- Influenza vaccine uptake for community healthcare workers remains low, impacting the ability to prevent and control facility outbreaks.

Strategic Directions & Goals

Building Healthy Communities - We will work with communities to support the health and well-being of everyone.

Operational Plan Objectives

To distribute influenza products for Ontario's Universal Influenza Immunization Program (UIIP) to community healthcare providers and to facilitate the provision of influenza immunizations in the community.

Summary of OPHS Requirements

OPHS Standard: Immunization

Goal:

- To reduce or eliminate the burden of vaccine preventable diseases through immunization.

Strategy:

- Disease Prevention/Health Protection

Requirements:

- Provide consultation to community partners on immunization and immunization practices, based on local needs and as requested.
- Promote and provide provincially funded immunization programs and services to eligible persons in the health unit, including underserved and priority populations.

Accountability Indicators:

- N/A

Performance variance or discrepancy identified:

- N/A

Highlights

Influenza and its complications are a leading cause of death and disability in Canada. According to the National Advisory Committee on Immunization (NACI), 12,200 influenza-related hospitalizations occur on average, in Canada, each year and approximately 4,750 are estimated to be in Ontario.^{1,2} The actual numbers will vary from year to year depending on the severity of the influenza season. NACI reports

approximately 3,500 deaths related to influenza on average each year in Canada, with 1,365 in Ontario. The highest mortality rate typically occurs among adults 65 years of age and older.¹

Influenza vaccines offer protection against influenza-related complications, though the amount of protection depends on how well the circulating flu strains match those contained in the vaccine.³ Vaccination is particularly important for groups at high-risk of complications including: young children, older adults, Indigenous peoples and pregnant women.⁴

The UIIP offers influenza vaccine free of charge each year to all individuals six months of age and older who live, work or go to school in Ontario.² Vaccine is procured by the Ministry of Health and Long-Term Care (MOHLTC) and is made available through:

- Primary care providers (e.g. physicians, nurse practitioners);
- Public health unit clinics;
- Pharmacies (for those 5 years of age and older); and
- Facilities such as long-term care homes, community health centres and hospitals.

WDGPH promotes local uptake of influenza vaccine by:

- Distributing vaccine products to local healthcare providers and facilities;
- Monitoring pharmacies for quantities on hand and cold chain compliance;
- Disseminating information regarding product availability, eligibility, and UIIP requirements to local health care providers, including pharmacists;
- Providing clinic appointments for influenza vaccine administration at Wellington-Dufferin-Guelph Public Health (WDGPH) offices throughout flu season;
- Promoting influenza vaccine to healthcare workers and monitoring the uptake rates; and
- Publicly promoting the importance of influenza vaccination and other measures people can take to prevent the flu.

2018/2019 Influenza Vaccines

Table 1: Influenza vaccines available through the UIIP in 2018/2019²

Product	Summary	Eligible Age Groups
Quadrivalent Inactivated Vaccine (QIV)	Injectable vaccine covering 4 strains	6 months and older
Quadrivalent Live Attenuated Vaccine (Q-LAIV)	Intranasal (inhaled) vaccine covering 4 strains	2-17 years old
High-Dose Trivalent Inactivated Vaccine (HD-TIV)	Higher-dose injectable vaccine covering 3 strains	65 years and older

Three types of influenza vaccine were provided by the MOHLTC for the 2018/2019 season and are summarized in Table 1. This was the first season that the high-dose HD-TIV was offered free of charge through the publicly-funded program for clients 65 years of age and older. HD-TIV provides better protection against influenza strains (including the A/H3N2 strain) that are associated with greater disease burden in individuals 65 years of age and older, compared to the standard dose trivalent vaccine.¹ There is currently no data on how HD-TIV compares to the quadrivalent inactivated vaccine (QIV).

The HD-TIV product was available in limited supply early in the season. Due to early influenza activity in the community, the MOHLTC requested that clients 65 years of age and older be offered QIV if no HD-TIV was readily available.

Publicly-funded HD-TIV was administered in WDGPH clinics and distributed to primary care providers, long-term care homes, and hospitals. However, publicly-funded HD-TIV was not available in pharmacies this season. For the 2018-2019 influenza season, the following quadrivalent influenza vaccines were available in pharmacies:

- QIV for individuals 5 years of age and older; and
- Q-LAIV for individuals 5 to 17 years of age.

Influenza Vaccine Distribution/Administration

Table 2: Vaccine doses distributed to local healthcare providers and facilities, by product

Product	Doses
Quadrivalent inactivated vaccine (QIV)	39,868
Quadrivalent live attenuated influenza vaccine (Q-LAIV)	1,020
High-dose trivalent vaccine (HD-TIV)	13,324
Total	54,212

WDGPH staff distributed a total of 54,212 vaccine doses to local healthcare providers and facilities between September 15, 2018 and March 15, 2019 (Table 2). WDGPH nurses administered a further 3,385 vaccine doses via in-house flu clinics and appointments.

WDG Pharmacies ordered an additional 31,830 doses through their distribution centre, of which 30,433 have been administered, to date. Clients in the community continue to readily access quadrivalent influenza vaccine from local pharmacies and the number of doses administered by pharmacies is greater every year. In Ontario, pharmacies are on track this season to deliver approximately 3.3% more doses compared to last year.

Overall, a total of **89,427** doses of influenza vaccine were either administered by WDGPH or distributed to partners in the community.

Healthcare Worker Influenza Immunization Reporting

NACI recommends that people who are capable of transmitting influenza to those at high-risk should receive annual vaccination, regardless of whether the high-risk person has been immunized.¹ Immunization of care providers reduces illness for healthcare workers and lowers the risk of death and other serious outcomes for their clients.¹ Research shows that immunization of care providers and residents is associated with decreased risk of outbreaks in acute care and long-term care facilities.¹

Table 3 indicates the percentage of healthcare workers by facility type that received annual influenza vaccine. Hospitals and long-term care facilities are required to report

healthcare worker influenza immunization rates to Public Health. Retirement homes are not required to report these rates, so the data is incomplete. Healthcare worker immunization rates are shared with each facility to inform their staff immunization programs.

Table 3: Healthcare worker immunization rates in WDG, by facility type

Facility Type	Median	Minimum	Maximum
Long-Term Care Homes	84.3%	26.6%	99.5%
Hospital	60.9%	37.7%	87.2%
Retirement Homes	72.2%	25.8%	100%

References

1. National Advisory Committee on Immunization. Summary of the NACI Seasonal Influenza Vaccine Statement for 2018–2019. Available at: <https://www.canada.ca/en/public-health/services/reports-publications/canada-communicable-disease-report-ccdr/monthly-issue/2018-44/issue-6-june-7-2018/article-1-summary-influenza-2018-2019.html>
2. Ministry of Health and Long-Term Care Population and Public Health Division. 2018/2019 Universal Influenza Immunization Program: Health Care Provider Q & A: General information. Available at: http://www.health.gov.on.ca/en/pro/programs/publichealth/flu/uiip/docs/flu_uiip_HCP_QA_2018-19.pdf
3. Rondy M, El Omeiri N, Thompson MG, Levêque A, Moren A, Sullivan SG. Effectiveness of influenza vaccines in preventing severe influenza illness among adults: A systematic review and meta-analysis of test-negative design case-control studies. *J Infect* [Internet]. 2017 Nov [cited 2019 Mar 20];75(5):381-394. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5912669/>
4. National Advisory Committee on Immunization. Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2018–2019. Available at: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-statement-seasonal-influenza-vaccine-2018-2019.html>

Related Reports

BH.01.APR0418.C08: Influenza Vaccine Clinics October 2017 – February 28, 2018 – Program/Service Information Report.