

Program/Service Information Report

COVID-19, Influenza and Respiratory Syncytial Virus

Vaccinations

2024/2025

To: Board of Health

Meeting Date: March 5, 2025

Report No.: **BH.01.MAR0525.C05**

Key Points

- Vaccination against COVID-19, influenza, and respiratory syncytial virus (RSV) is an effective way to reduce illness, prevent the spread of viruses, and manage health care system capacity during the respiratory virus season.^{1,2}
- In 2024, the leading cause of both hospitalization and death for respiratory viruses remained COVID-19, whereas prior to the pandemic it was influenza.³
- In Wellington, Dufferin and Guelph communities (WDG), public health, physicians and pharmacists provide influenza and COVID vaccines.
- Hospitals, long-term care and retirement homes, physicians and public health provide the RSV vaccine.
- Compared to 2023, in 2024 there were 32% fewer doses of COVID-19 vaccine administered in Wellington Dufferin Guelph (WDG), and 68% fewer doses administered in Wellington-Dufferin-Guelph Public Health (WDGPH) operated clinics.⁴
- During the 2024/2025 flu season, a total of 43,426 doses of influenza vaccine were administered in WDG by WDGPH and local pharmacies. Additionally, physicians received almost 21000 doses of influenza vaccine in the 2024/2025 respiratory season.⁵
- As of January 27, 2025, WDGPH administered 50 RSV vaccine or immunoglobulin doses and distributed 1,205 RSV vaccine doses and 2,505 immunoglobulin doses to providers for eligible groups.

Program Requirements

Compliance with OPHS and Accountability Indicators:

☒ In compliance

☐ Not in compliance. If not in compliance, provide additional information about the variance and how it will be addressed.

Highlights

COVID-19 Vaccines

The National Advisory Committee on Immunization (NACI) provides the Public Health Agency of Canada (PHAC) with ongoing public health advice in response to questions from PHAC relating to immunization.⁶ The last several years NACI has recommended individuals receive an updated COVID-19 vaccine starting in the fall when there is increased activity of respiratory viruses.¹ Unlike influenza, SARS-CoV-2 has been circulating year-round and since 2022, COVID-19 activity has consistently been higher from late summer to early January, coinciding with the fall/winter respiratory season.⁷ COVID-19 is a respiratory infection caused by the SARS-CoV-2 virus that remains a public health concern due to its potential to cause illness ranging from mild symptoms to severe outcomes, including hospitalization and death.⁶ Receiving an updated vaccine provides protection against COVID-19 because the strain(s) in the updated vaccines are likely to be more closely related to current circulating strains and the additional dose increases the immune response that has waned since an individual's last dose or previous infection.¹ This protection helps to reduce the impact of COVID-19 on the health care system while other seasonal viruses such as influenza and respiratory syncytial virus (RSV) are also circulating.⁶

As of January 8, 2025, there have been 180 hospitalizations in Wellington Dufferin Guelph (WDG) of patients with COVID-19, and over 7600 in Ontario for the current respiratory season. This represents approximately 78% and 71% respectively of total hospitalizations due to COVID-19, influenza, and RSV (Table 1).³ For the 2024/2025 respiratory season the leading cause of death for respiratory viruses was COVID-19.³

Table 1: Respiratory Virus Hospital Admissions (2024-2025 season)

	Total Admissions	Influenza Admissions		COVID-19 Admissions		RSV Admissions	
		Number	% of total admissions	Number	% of total admissions	Number	% of total admissions
WDG	230	36	15.6	180	78.3	14	6.1
Ontario	10,741	1,314	12.2	7,693	71.6	1,734	16.1

Internationally, strain selection assessments for COVID-19 vaccines occur on a regular basis, with the COVID-19 vaccines being updated once a year prior to the fall/winter respiratory season.¹ For the fall 2024 season Health Canada approved updated mRNA vaccines from Pfizer BioNTech (Comirnaty) and Moderna (Spikevax) that target the Omicron KP.2 lineage.⁸ These vaccines were approved for use for previously unvaccinated and vaccinated individuals.⁶ The updated protein subunit COVID-19 vaccine, Novavax, was not available in Ontario for the 2024/2025 season.⁸ Individuals who were unable to receive an mRNA vaccine were advised to speak to their health care provider about treatment options (e.g., Paxlovid) to reduce the duration and severity of illness.⁸

NACI made a strong recommendation that immunization was particularly important for those at increased risk of COVID-19 infection or severe disease.¹ These populations include:

- All adults 65 years of age or older
- People 6 months of age and older who are:
 - Residents of long-term care homes and other congregate living settings
 - Individuals with underlying medical conditions that place them at higher risk of severe COVID-19, including children with complex health needs
 - Individuals who are pregnant
 - Individuals in or from First Nations, Métis and Inuit communities
 - Members of racialized and other equity-deserving communities
 - People who provide essential community services

For those not listed above (i.e., not at increased risk), NACI also recommended that all other previously vaccinated and unvaccinated individuals (6 months of age and older) receive a COVID-19 vaccine. At WDGPH community clinics individuals ≤11 years of age received Moderna and individuals ≥12 years of age primarily received Pfizer, though Moderna could be used for all age groups ≥6 months.⁹ COVID-19 vaccine doses administered in WDG totalled 52,889 and 4,608 of those doses were provided at WDGPH clinics.⁴ This represented a significant decrease in doses administered from 2023-2024, but was aligned with other public health units (PHU) and the trend across the province (Table 2).

Table 2: Local and Provincial COVID-19 Vaccine Administration

	WDGPH Clinics	ON PHU Clinics	Total WDG Doses	Total ON Doses
2022	88,617	4,535,674	220,876	9,949,390
2023	14,559	701,122	77,401	3,273,070
2024	4,608	104,966	52,889	2,089,749
Year-over-Year Change (2023-2024)	-68%	-85%	-32%	-36%

Some populations are recommended to receive a second annual dose in the spring to mitigate the waning protection from COVID-19 vaccines.⁷ These populations include:

- Adults 80 years of age or older
- Adult residents of long-term care homes and other congregate living settings for seniors
- Individuals 6 months of age and older who are moderately to severely immunocompromised (due to an underlying condition or treatment)
- Adults 65 to 79 years of age who are at increased risk of severe COVID-19 disease

The minimum interval between COVID-19 doses is 3 months for previously vaccinated individuals. When deciding on the best time to get vaccinated, individuals can consider factors such as the time since their last dose or confirmed COVID-19 infection, the level of virus circulating in the community, and upcoming events (e.g., travel, major medical procedures, large gatherings, etc.).⁷

Influenza Vaccines

The influenza vaccination campaign is promoted annually under Ontario's Universal Influenza Immunization Program (UIIP) to all individuals aged 6 months and older in the WDG area. A seasonal influenza vaccine is one of the most effective ways to prevent influenza, prevent the spread of the virus, and manage health care system capacity during the respiratory virus season.² Annual vaccination is important because protection from the vaccine decreases over time and circulating strains of the virus change from year to year.² NACI provides PHAC with recommendations for annual influenza vaccinations based on risks and experiences from other parts of the world ahead of Canada's flu season. The influenza vaccine is offered through pharmacies, public health units, family physicians and other primary care providers, facilities such as Long-Term Care Homes (LTC) and hospitals.

The goal of the influenza program is to reduce overall burden on the health care system caused by influenza, including death. Individuals that are at greatest risk in the influenza season were strongly recommended to receive the vaccine.¹⁰ In 2024/2025 these populations included:

- Children 6 months to 5 years of age
- Adults 65 years of age and older
- Adults and children with certain chronic health conditions
- Individuals who are pregnant
- People of any age who are residents of nursing homes and other chronic care facilities
- Indigenous peoples
- Healthcare and other care providers, including childcare providers
- Household contacts of people at high risk
- Household contacts of people expecting a newborn during the influenza season or infants younger than six months of age because infants are at high risk but cannot receive the vaccine
- People providing services within relatively closed settings to people at high risk (e.g., crew on a cruise ship)
- People who provide essential services where absenteeism due to illness would cause an interruption in essential services
- People who are in direct contact with poultry infected with avian influenza during culling operations

Seasonal influenza presents an ongoing disease burden in Canada during the fall and winter months.¹⁰ As of January 8, 2025, there have been over 30 hospitalizations in WDG of patients with influenza, and over 1,300 in Ontario for the current influenza season.³ This represents approximately 15% and 12% respectively of total hospitalizations due to COVID-19, influenza, and RSV (Table 1).

Publicly funded influenza vaccines provided for the 2024/2025 UIIP included:

- Quadrivalent Inactivated Vaccine (QIV) for ≥ 6 months of age;
- High-Dose Quadrivalent Inactivated Vaccine (QIV-HD) for ≥ 65 years only; and
- Adjuvanted Trivalent Inactivated Vaccine (TIV-adj) for ≥ 65 years only.¹¹

During the 2024/2025 season, a total of 43,426 influenza doses were administered in WDG by public health staff and local pharmacies (as of January 27, 2025).⁵ Of the 4,204 influenza doses administered in WDGPH clinics, 1,607 clients identified as high risk (38.2%) and 718 as non-high risk capable of transmitting to high-risk individuals (17.1%).⁵ See Table 3.

Table 3: Influenza Vaccine Administration/Distribution (season to date as of January 27, 2025)

Provider	Influenza doses 2022-2023	Influenza doses 2023-2024	Influenza doses 2024-2025
Pharmacies (Administered)	47,804	44,203	39,222
Physicians (vaccine received)*	30,079	26,836	20,948
WDGPH (Administered)	11,725	5,517	4,204
LTC/RH (vaccine received)*	5,360	4,800	3,949
Hospitals (vaccine received)*	3,358	2,450	765
Total	98,326	83,806	69,088

*Health Units are not able to track the number of doses administered by these groups, only the number of vaccines ordered or distributed to these groups.

RSV Immunization

RSV is a major cause of lower respiratory illness, particularly among infants, children, and older adults. In Ontario, most deaths from RSV have occurred in those aged 60 years and older. During peak RSV season, hospitals have seen a surge in emergency room visits and admissions of young children and older adults requiring medical care, putting a strain on hospital resources.¹² See Table 1 above for hospital admission data for RSV this season.

The high-risk older adult RSV vaccine program that was introduced in 2023 continued in 2024/2025 with expanded eligibility.¹³ The program includes individuals who are 60 years of age and older who are also:

- Residents of LTC, Elder Care Lodges, RHs and similar settings
- Patients in hospital receiving alternate level of care including similar settings (e.g., hospital transitional programs)
- Patients receiving hemodialysis or peritoneal dialysis
- Recipients of solid organ or hematopoietic stem cell transplants
- Individuals experiencing homelessness
- Indigenous peoples

Individuals who received the RSV vaccine in the previous season (2023/2024) did not require an additional vaccine this respiratory season.

Ontario expanded the high-risk infant RSV prevention program in 2024/2025 to all infants and high-risk children up to 24 months of age. The expansion included the switch from the previous monoclonal antibody, Synagis (palivizumab), to a new monoclonal antibody, Beyfortus (nirsevimab) based on its efficacy, duration of protection, and safety profile.¹³ Beyfortus is an immunoglobulin product that protects against RSV-associated disease for at least 5 months.¹⁴ It comes as a 50 mg or 100 mg pre-filled syringe that can be administered intramuscularly like a vaccine.¹⁴ This immunoglobulin is only provided just prior to and during the active RSV season to infants who meet the eligibility criteria. The active season is generally from November to April, with some variation between seasons.¹³ The program includes infants who are residents of Ontario and are also:

- Born in 2024 prior to the RSV season
- Born during the 2024/2025 RSV season
- Children up to 24 months of age who remain vulnerable from severe RSV disease through their second RSV season

As an alternate to Beyfortus, those that are pregnant and are residents of Ontario and 32 to 36 weeks gestation at the start or during the 2024/2025 RSV season were eligible for a RSV vaccine. When administered during pregnancy, RSV protection is provided to the infant from birth to six months of age.¹³ However, if the decision was to immunize the infant with Beyfortus following birth, then vaccination during pregnancy is not provided.¹⁴

Publicly funded RSV vaccine and immunoglobulin provided for the 2024/2025 season included:

- GlaxoSmithKline (GSK)'s Arexvy for adults ≥60 years
- Pfizer's Abrysvo for adults ≥60 years and during pregnancy from 32-36 weeks gestation
- Sanofi's Beyfortus for eligible infants

WDGPH distributed RSV vaccine and immunoglobulin to various settings in the WDG region (Table 4). Distribution of Beyfortus from WDGPH to hospitals and primary care began the week of October 21, 2024. Physicians, Primary Care and hospitals in the region quickly responded and adapted to the addition of RSV immunoglobulin eligibility. Hospitals began providing the medication to new born infants prior to discharge and physicians and primary care began the significant task of protecting vulnerable infants who had been born in 2024 but prior to the start of the RSV program. From Table 4 you can see the significant contribution of primary care in the RSV program implementation. WDGPH administered 50 RSV immunizations at the health unit (16 RSV vaccine doses; 24 RSV immunoglobulin doses)¹⁴.

Table 4: RSV Doses Distribution (season to date as of January 27, 2025)

Setting	Doses Distributed from WDGPH	
	RSV Vaccine	RSV Immunoglobulin
LTC	208	0
Retirement Homes	418	0
Hospitals/Dialysis Units	40	705
Primary Care	472	1,796
Other	67	3
Total	1,205	2,504

WDGPH 2024 Respiratory Season Clinic Campaign

Like last year, influenza and COVID-19 mRNA vaccines were offered simultaneously at all WDGPH clinics. Clinics commenced on October 21, 2024 and continued for six weeks. In total WDGPH offered 71 clinics dedicated to influenza and COVID-19 immunization. Clinics were primarily held at the three public health offices (Guelph, Fergus and Orangeville). Five Saturday clinics were hosted at larger locations like St. James Collegiate High School (Guelph), Elora Community Centre (Elora), as well as the Orangeville public health office. Several clinics were held in locations throughout Wellington and Dufferin counties, such as community libraries to increase access and reduce barriers in more rural areas of the WDG region. Public Health Nurses from all WDGPH program areas and support staff from across the agency participated in these clinics, strengthening WDGPH's community response. Throughout the six weeks, walk-in clients were accommodated and clinics that were not getting booked were cancelled or rescheduled ahead of time.

WDGPH continues to prioritize accessibility and health equity for COVID-19 and influenza immunization (e.g., booking clients into clinics as appropriate, providing in-car vaccinations as needed, etc.). WDGPH promoted and supported respiratory season immunizations in the WDG region by monitoring facilities that stored vaccines to ensure cold chain requirements were met and by promoting the importance of respiratory vaccinations through physicians' advisories, social media platforms, on the WDGPH website and advertising in local newspapers. WDGPH is using internal feedback from this year's campaign to actively plan for next year's respiratory season immunizations.

Related Reports

[BH.01.MAR0624.C04](#) – COVID Vaccinations 2023

[BH.01.MAR0624.C06](#) – Influenza and Respiratory Syncytial Virus Vaccinations 2023/2024

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