

## Ministry of Health

## Health Care Provider Fact Sheet: Influenza Immunization Information for the 2024/2025 Influenza Season

This document is intended for informational purposes only. It is not intended to provide medical or legal advice.

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#### A. General Information

## **Universal Influenza Immunization Program (UIIP)**

Ontario's Universal Influenza Immunization Program (UIIP) offers free influenza vaccine each year for individuals six months of age and older who live, work, or go to school in Ontario.

The influenza vaccine is available to the public through primary care providers, public health units, pharmacies (for those 2 years of age and older), and in various other settings such as long-term care homes, workplaces, hospitals, and community health centres. Vaccine product availability may vary by location. During the influenza season, Ontarians can contact their local <u>public health unit</u> if they require assistance locating influenza vaccine.

Individuals may be required to provide proof that they live, work, or attend school in Ontario to receive the publicly funded influenza vaccine. Many different identification (ID) documents are accepted to prove eligibility (e.g., health card, registered mail, pay stub, student card). Having a health card is NOT a requirement, however, some health care providers may request one for their services. Eligible individuals without a health card can receive the influenza vaccine from a community health centre, participating pharmacy, local <u>public health unit</u> or other community clinic.

## Importance of influenza vaccination

The influenza vaccine is the best defence against getting and spreading the influenza virus, helping to save lives and reduce the strain on our health care system. Protection against infection and illness from the influenza virus through influenza vaccination may provide added benefit in protecting against other diseases such as invasive Group A Streptococcal Disease (iGAS) or worsening of existing chronic illnesses such as cardiovascular disease.

Every year, individuals with influenza and influenza-related complications increase the pressures on the healthcare system in the fall and winter months. During the respiratory illness season and with the expected COVID-19 and respiratory syncytial virus (RSV) circulation this fall, it will be essential to prevent morbidity and mortality related to influenza to reduce the pressure on the health care system to ensure there is capacity to respond to emergent health care activity.

Visit the ministry's website for more information for health care providers regarding the COVID-19 vaccine program and RSV prevention program.

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#### B. Influenza Burden

## **Laboratory-confirmed cases**

Based on pre-pandemic data from the 2014/2015 to 2019/2020 influenza seasons, an average of 46,500 laboratory-confirmed cases of influenza were reported each year in Canada to the FluWatch program (Canada's surveillance system that monitors the spread of influenza and influenza-like illness). It is important to note that there are many more people infected with influenza each year in Canada; most people with influenza do not seek health care and/or do not have a specimen taken and are thus not included in the case counts for those with laboratory-confirmed influenza.

Laboratory-confirmed cases of influenza in Ontario were very low during the COVID-19 pandemic from the 2020/2021 to the 2021/2022 influenza seasons as a result of non-pharmaceutical health measures such as physical distancing, hand washing, and masking. Since the lifting of these pandemic measures, seasonal influenza circulation has returned to pre-pandemic levels in Ontario.

A total of 29,731 laboratory-confirmed influenza cases were reported in Ontario for the 2023/2024 season (as of July 28, 2024), which is higher than both the 2017/2018 and 2018/2019 influenza seasons.

### Hospitalizations and death data

According to Canada's <u>National Advisory Committee on Immunization (NACI)</u>, it is estimated that approximately 12,200 influenza-related hospitalizations and 3,500 deaths related to influenza occur on average in Canada each year. Influenza and pneumonia are ranked among the top 10 leading causes of death among the Canadian population. The actual numbers vary from year-to-year depending on the severity of the influenza season.

## B/Yamagata strain

Of note, there have been no confirmed naturally occurring B/Yamagata lineage virus detections since March 2020. As a result, the World Health Organization (WHO) no longer recommends the B/Yamagata strain to be included in the influenza vaccine formulations as it is no longer warranted.

For the 2024/2025 influenza season in Canada, vaccine availability is anticipated to remain unchanged. Quadrivalent formulations will continue to be supplied for public programs. No trivalent formulations will be available for standard dose or high dose inactivated influenza vaccines (i.e., QIV and QIV-HD), while adjuvanted inactivated

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influenza vaccines (i.e., TIV-adj) will remain trivalent and continue to be available in Canada. Strains in the influenza vaccines authorized in Canada are aligned with WHO recommendations for both trivalent and quadrivalent formulations.

Going forward, NACI supports the removal of the B/Yamagata strain from influenza vaccines and the transition to trivalent influenza vaccines, in alignment with public health and regulatory agencies globally, as soon as practically possible. Recognizing the significant logistical implications and potential complexities involved from a regulatory perspective, a gradual transition to trivalent vaccines is anticipated, with variability in vaccine supply across countries.

### C. 2024/2025 Universal Influenza Immunization Program

## **Eligibility**

	QIV			QIV-HD	TIV-adj
Age Group	FluLaval Tetra	Fluzone <sup>®</sup> Quadrivalent	Flucelvax <sup>®</sup> Quad	Fluzone <sup>®</sup> High-Dose Quadrivalent	Fluad®
6 months to 64 years	✓	<b>✓</b>	✓		
≥ 65 years	✓	✓	✓	✓	✓

See age specific Health Care Provider Fact Sheets for more detailed information about the publicly funded influenza vaccines available for the 2024/2025 UIIP.

# Priority populations for immunization (as soon as the vaccine becomes available)

Although infants less than six months of age are at high risk of complications from influenza, influenza vaccines are not authorized for use in infants less than six months of age because the vaccine does not work well in this age group due to the immaturity of the immune system of young infants.

To optimize co-administration with COVID-19 vaccine, health care workers, first responders, individuals with significant exposure to birds or mammals\*, and the following individuals at high risk of influenza-related complications or who are more likely to require hospitalization, should be prioritized to receive the influenza vaccine as soon as vaccine is available:

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- Residents, staff and care providers in congregate living settings (e.g. chronic care facilities, retirement homes)
- People 65 years of age and over
- All pregnant women
- All children 6 months to 4 years of age
- o Individuals in or from First Nations, Métis or Inuit communities
- Members of racialized and other equity deserving communities
- Individuals 6 months of age and older with the following underlying health conditions:
  - Cardiac or pulmonary disorders
  - Diabetes mellitus or other metabolic disease
  - Cancer
  - Conditions or medication which compromise the immune system
  - Renal disease
  - Anemia or hemoglobinopathy
  - Neurologic or neurodevelopment conditions
  - Morbid obesity (body mass index of 40 or more)
  - Children and adolescents (6 months to 18 years) undergoing treatment with acetylsalicylic acid for long periods

\*Individuals with significant exposure to birds or mammals include those likely to have significant exposure to influenza A(H5N1) through interactions with birds or mammals (such as poultry, livestock, slaughterhouse and processing plant workers, wildlife officers/researchers, and veterinarians). Seasonal influenza vaccines do not provide protection against infection with influenza A(H5N1) viruses. However, they may reduce the risk of seasonal human and influenza A(H5N1) virus co-infection and possible viral reassortment leading to a human-transmissible virus with pandemic potential.

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# Recommended populations for immunization (starting October 28, 2024)

The influenza vaccine is recommended for all people six months of age and older without contraindications, however, individuals in the following two groups are particularly recommended to receive the influenza vaccine, once eligible (starting October 28, 2024):

- I. Individuals capable of transmitting influenza to those listed in the section above and/or to infants under 6 months of age:
  - Care providers in the community
  - Household contacts (adults and children) of individuals at high risk of influenza related complications
  - Persons who provide care to children ≤ 4 years of age
  - o Members of a household expecting a newborn during the influenza season
  - Those who provide services within a closed or relatively closed setting to persons at high risk of influenza related complications (e.g. crew on a ship)
- II. People who provide essential community services

## **D. Vaccine Logistics**

## Recommended needle selection guidelines

Per the Canadian Immunization Guide's (CIG) Needle selection guidelines:

Age and weight (if applicable) of vaccine recipient		Preferred Site of Injection	Needle Gauge	Needle Length
6 to 12	months	Anterolateral thigh	22-25	7⁄8" − 1"
13 mor	iths to 12 years	Deltoid muscle	22-25	5⁄8" − 1"
	Individuals weighing <130 lbs	Deltoid muscle	22-25	5/8" – 1"
÷8	Males weighing 130-260 lbs	Deltoid muscle	22-25	1"
years+	Females weighing 130-200 lbs	Deltoid muscle	22-25	1"
5	Males weighing >260 lbs	Deltoid muscle	22-25	1½"
	Females weighing >200 lbs	Deltoid muscle	22-25	1½"

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## Post-puncture shelf life and product dimensions

Vaccine	Post-puncture shelf life	Package dimension (cm)		
Fluad <sup>®</sup>	Not applicable	15.4 x 13.0 x 2.4		
Flucelvax <sup>®</sup> Quad	Not applicable	15.4 x 13.0 x 2.4		
FluLaval Tetra	28 days*	10-dose package: 2.7 x 2.7 x 6.9 100-dose package: 46 x 110 x 51		
Fluzone® High-Dose Quadrivalent	Not Applicable	10.4 x 9.9 x 2.3		
Fluzone® Quadrivalent	Multi-dose vial 28 days*	Multi-dose vial 5.8 x 5.4 x 3.6		
Fluzone <sup>s</sup> Quadrivalent	Pre-filled syringe Not applicable	Pre-filled syringe 10.4 x 9.9 x 3.8		

<sup>\*</sup> Report all vaccine wastage. Return only unopened vials / syringes / ampoules to PHU or OGPMSS (for Toronto clients) as wastage. Discard opened vials / syringes / ampoules through biohazard waste.

#### E. Influenza Vaccine

#### Recommendations for use

Expert advisory groups recommend that the influenza vaccine be administered annually because influenza viruses change often and immunity wanes between influenza seasons. Each year, the composition of the seasonal influenza vaccine is intended to protect against the anticipated circulating strains.

#### Influenza strains

For the northern hemisphere's 2024/2025 season, the World Health Organization (WHO) has recommended the following strains be included:

Influenza Strains	Egg- based QIVs FluLaval Fluzone <sup>®</sup>	Egg- based TIVs Fluad <sup>®</sup>	Cell culture- based QIVs Flucelvax <sup>®</sup>
A/Victoria/4897/2022 (H1N1)pdm09-like virus;	✓	✓	
A/Thailand/8/2022 (H3N2)-like virus;	NEW	NEW	

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Influenza Strains	Egg- based QIVs FluLaval Fluzone <sup>®</sup>	Egg- based TIVs Fluad <sup>®</sup>	Cell culture- based QIVs Flucelvax <sup>®</sup>
A/Wisconsin/67/2022 (H1N1)pdm09-like virus;			NEW
A/Massachusetts/18/2022 (H3N2)-like virus;			NEW
B/Austria/1359417/2021 (B/Victoria lineage)-like virus;	✓	✓	✓
B/Phuket/3073/2013 (B/Yamagata lineage)-like virus*	✓		✓

<sup>\*</sup> Given there have been no confirmed naturally occurring B/Yamagata lineage virus detections since March 2020, the WHO no longer recommends it to be included in influenza vaccine formulations as it is no longer warranted. However, in instances where QIV manufacturing continues, this is the B/Yamagata strain recommended to be included.

## Vaccine efficacy

Influenza viruses are constantly changing – through antigenic drift (slow changes over time) and antigenic shift (sudden big changes). As a result, they can change from one season to the next and they can even change within the course of one influenza season. The influenza vaccine is made to protect against the influenza viruses that surveillance and research indicate will likely be most common during the upcoming influenza season as recommended by WHO.

Protection offered from the influenza vaccine varies from year-to-year depending on how well the strains included in the vaccine match the circulating strains. How well the influenza vaccine works also depends on other factors such as the age and health status of the person. Influenza immunization has been shown to reduce the number of physician visits, hospitalizations and deaths.

Although a less than ideal match between the vaccine strain(s) and circulating strain(s) may result in reduced vaccine effectiveness, even mismatched vaccines can generally provide some protection against circulating influenza viruses. Influenza vaccines also protect against multiple strains, therefore if one strain in the vaccine is not a good match to a circulating strain, there are other flu strains in the vaccine which may still be a good match to circulating virus strains.

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It generally takes about two weeks following immunization to develop protection against influenza. As protection wanes over time and influenza strains change frequently, it is important to be immunized each year (each influenza season). The vaccine will not protect against colds, other respiratory illnesses, or COVID-19 that may have some of the same symptoms and be mistaken for influenza.

## **Vaccine safety**

Influenza vaccines authorized for use in Canada are safe and well tolerated. As with other vaccines, they must be authorized for use by the Canadian regulator, Health Canada, following review of a products safety and how well it works (e.g. clinical trial and other evidence).

Once a vaccine is authorized for use in Canada, provincial surveillance in Ontario and national surveillance coordinated by Health Canada and the Public Health Agency of Canada ensures ongoing monitoring of vaccine safety and effectiveness. Please refer to the age specific Health Care Provider Fact Sheets for guidance on reporting Adverse Events Following Immunization (AEFI).

#### Adverse events

For details on common adverse events from the influenza vaccines, serious events requiring medical attention, and health care provider reporting guidance, please refer to the age specific Health Care Provider fact sheets.

Other rare events associated with the influenza vaccine include the following:

#### **Guillain-Barré Syndrome (or GBS)**

GBS is a rare disease that causes muscle paralysis and has been associated with certain infectious diseases (e.g., *Campylobacter*, a bacteria that causes diarrhea). Some studies have found a possible small association between injectable flu vaccine and GBS. Overall, these studies estimated the risk for GBS after vaccination as fewer than 1 or 2 cases of GBS per one million people vaccinated. Other studies have not found any association. In comparison to the very small risk of GBS, the risk of illness and death associated with influenza is much greater. GBS also, rarely, occurs after flu illness. Even though GBS following flu illness is rare, GBS is more common following flu illness than following flu vaccination. Anyone who has developed Guillain-Barré Syndrome (GBS) within six weeks of a previous influenza vaccination should generally NOT be vaccinated, HOWEVER, this should be weighed against the risks of not being protected against influenza.

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#### Oculorespiratory Syndrome (ORS)

In Canada, during the 2000/2001 influenza season, ORS was reported after administration of the influenza vaccine in some individuals. Symptoms include redness in both eyes that are not itchy, plus one or more respiratory symptoms occurring within 24 hours of influenza immunization, with or without swelling of the face. Since the 2000/2001 influenza season, there have been far fewer cases of ORS reported per year.

Individuals who experienced ORS symptoms in the past may be safely reimmunized with influenza vaccine except for those who have experienced ORS with severe lower respiratory symptoms (wheeze, chest tightness, difficulty breathing) within 24 hours of influenza immunization. These individuals should seek expert medical advice before being immunized again with influenza vaccine.

#### **Additional information**

Please visit the following websites or call your local public health unit:

- a) Universal Influenza Immunization Program: <a href="www.ontario.ca/page/universal-influenza-immunization-program">www.ontario.ca/page/universal-influenza-immunization-program</a>
- b) Public Health Agency of Canada National Advisory Committee on Immunization (NACI) Statement on Seasonal Influenza Vaccine: <a href="www.phac-aspc.gc.ca/naci-ccni/#rec">www.phac-aspc.gc.ca/naci-ccni/#rec</a>
- c) Public Health Ontario: <u>www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/influenza</u>
- d) Immunize Canada: www.immunize.ca
- e) Centers for Disease Control and Prevention (CDC) Seasonal Influenza: <a href="https://www.cdc.gov/flu">www.cdc.gov/flu</a>
- f) List of public health unit locations: <a href="www.ontario.ca/page/public-health-unit-locations">www.ontario.ca/page/public-health-unit-locations</a>

Version française disponible en communiquant avec le 1-866-532-3161 ATS: 1-800 387-5559 (web site: <a href="www.ontario.ca/fr/page/programme-universel-de-vaccination-contre-la-grippe">www.ontario.ca/fr/page/programme-universel-de-vaccination-contre-la-grippe</a>)

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