

Ministry of Health

Health Care Provider Qs & As: Influenza Immunization Information for the 2022/2023 Influenza Season

This Qs & As sheet is intended for informational purposes only. It is not intended to provide medical or legal advice.

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A. Universal Influenza Immunization Program

1. What is the Ontario 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.

2. Where and how can Ontarians access publicly funded influenza vaccine?

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 public health unit if they require assistance locating influenza vaccine. A list of local public health units is available at: www.health.gov.on.ca/en/common/system/services/phu/locations.aspx.

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 public health unit or other community clinic.

3. Why is it important to get the influenza vaccine during the COVID-19 pandemic?

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.

Every year, individuals with influenza and influenza-related complications increase the burden on the healthcare system in the fall and winter months. During the COVID-19 pandemic and with the potential for COVID-19 circulation this fall, it will be essential to prevent morbidity and mortality related to influenza to reduce the burden on the health care system to ensure there is capacity to respond to COVID-19 activity.

B. Influenza Burden

4. How many people typically become infected with influenza every year?

Based on 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.

In the 2020/2021 influenza season, the number of laboratory-confirmed cases of influenza in Ontario were very low at <30. Since the emergence of COVID-19 in Canada in January 2020, the detection and containment of COVID-19 transmission has been the focus of health officials across Canada. In March of 2020, non-pharmaceutical health measures such as restrictions (e.g., community measures), physical distancing, hand washing, and masking were implemented to reduce the spread of COVID-19. These measures coincided with an abrupt end to the 2019/2020 influenza season in Canada in mid-March 2020. Seasonal influenza circulation in Canada (and worldwide) has remained low since the spring of 2020. Influenza immunization remains important, however, due to the potential for increased influenza activity during the 2022/2023 influenza season with the lifting of these measures.

5. How many people are hospitalized or die of influenza every year?

According to Canada's National Advisory Committee on Immunization (NACI), 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. For more information, visit www.canada.ca/en/public-health/services/publications/vaccines-immunization/canadian-immunization-guide-statement-seasonal-influenza-vaccine-2022-2023.html

6. Who should receive the influenza vaccine?

The influenza vaccine is recommended for all people six months of age and older without contraindications. 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.

To reduce the risk of severe illness that could arise from co-infection with COVID-19 and influenza, individuals who are at high risk of severe COVID-19 related illness or those capable of transmitting influenza to those at high risk of severe and critical

illness related to COVID-19 are particularly recommended to receive the influenza vaccine this fall.

Per NACI, individuals in the following four groups are particularly recommended to receive the influenza vaccine:

- I. Individuals at high risk of influenza-related complications or who are more likely to require hospitalization:
 - All pregnant individuals
 - People who are residents of nursing homes or other chronic care facilities
 - People ≥ 65 years of age
 - All children 6 months to 4 years of age
 - Indigenous peoples
 - Adults or children 6 months of age and over with the following chronic 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)
 - Children and adolescents (6 months to 18 years) undergoing treatment with acetylsalicylic acid for long periods
- II. Individuals capable of transmitting influenza to those listed in group I and/or to infants under 6 months of age:
 - Health care workers and other care providers in facilities and community settings

- Household contacts (adults and children) of individuals at high risk of influenza related complications
 - Persons who provide care to children ≤ 4 years of age
 - 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)
- III. People who provide essential community services
- IV. Poultry industry workers
- Although seasonal influenza vaccination will not prevent avian influenza infection, NACI recommends seasonal influenza vaccination for poultry workers, based on the rationale that preventing infection with human influenza strains may reduce the theoretical potential for human-avian reassortment of genes, should such workers become co-infected with human and avian influenza viruses.

C. 2022/2023 Universal Influenza Immunization Program

7. What influenza vaccines are publicly funded for individuals 6 months of age and older in Ontario as part of the 2022/2023 UIIP?

	Quadrivalent Inactivated Vaccine		
UIIP Abbreviation	QIV		
NACI Abbreviation	IIV4-SD		
Vaccine product	FluLaval Tetra	Fluzone® Quadrivalent	Afluria® Tetra
Age indication	≥6 months	≥6 months	≥5 years
Manufacturer	GSK	Sanofi Pasteur	Seqirus
Vaccine type	Egg-based	Egg-based	Egg-based
Micrograms of hemagglutinin	15 µg	15 µg	15 µg
Dosage	0.5 mL	0.5 mL	0.5 mL
Format	MDV	1. MDV 2. PFS	1. MDV 2. PFS
Route	IM	IM	IM
Most common allergens¹	<ul style="list-style-type: none"> • Egg protein² • Thimerosal³ 	<ul style="list-style-type: none"> • Egg protein² • Thimerosal³ 	<ul style="list-style-type: none"> • Egg protein² • Neomycin • Polymyxin B • Thimerosal³

MDV = Multi-dose vial PFS = Prefilled syringe IM = Intramuscular injection

¹Any component in a vaccine may be a potential allergen. This table identifies the most common allergens.

²The National Advisory Committee on Immunization (NACI) indicates that egg allergy is not a contraindication for influenza vaccination and that egg-allergic individuals may be vaccinated against influenza using the full dose of any age-appropriate product. See section IV of the Canadian Immunization Guide chapter on Influenza and statement on seasonal influenza vaccine for 2018-2019 for studies supporting the NACI recommendation for egg-allergic individuals (www.phac-aspc.gc.ca/naci-ccni/#rec).

³Multi-dose vial format only.

8. In addition to the QIVs listed in question 7, which influenza vaccines are publicly funded for individuals 65 years of age and older in Ontario as part of the 2022/2023 UIIP?

	High-Dose Quadrivalent Inactivated Vaccine	Adjuvanted Trivalent Inactivated Vaccine
UIIP Abbreviation	QIV-HD	TIV-adj
NACI Abbreviation	IIV4-HD	IIV3-Adj
Vaccine product	Fluzone [®] High-Dose Quadrivalent	Fluad [®]
Age indication	≥65 years	≥65 years
Manufacturer	Sanofi Pasteur	Seqirus
Vaccine type	Egg-based	Egg-based
Micrograms of hemagglutinin	60 µg	15 µg
Dosage	0.7 mL	0.5 mL
Adjuvant	No	Yes
Format	PFS	PFS
Route	IM	IM

	High-Dose Quadrivalent Inactivated Vaccine	Adjuvanted Trivalent Inactivated Vaccine
Most common allergens¹	<ul style="list-style-type: none"> • Egg protein² 	<ul style="list-style-type: none"> • Egg protein² • Kanamycin • Neomycin

PFS = Pre-filled syringe IM = Intramuscular injection

¹Any component in a vaccine may be a potential allergen. This table identifies the most common allergens.

²The National Advisory Committee on Immunization (NACI) indicates that egg allergy is not a contraindication for influenza vaccination and that that egg-allergic individuals may be vaccinated against influenza using the full dose of any age-appropriate product. See section IV of the Canadian Immunization Guide chapter on Influenza and statement on seasonal influenza vaccine for 2018-2019 for studies supporting the NACI recommendation for egg-allergic individuals (www.phac-aspc.gc.ca/naci-ccni/#rec).

Important notes:

- Fluzone[®] Quadrivalent and Fluzone[®] High-Dose Quadrivalent are DIFFERENT products. Fluzone[®] High-Dose Quadrivalent is authorized ONLY for those 65 years of age and over.
 - Please use caution when administering Fluzone[®] products to ensure that the right vaccine is being administered to the right person.
- Publicly funded influenza vaccines must be administered by a regulated health professional who is authorized under the *Regulated Health Professions Act, 1991* to administer vaccines, or by a trained individual under a delegation made in accordance with the requirements set by the regulatory College of the regulated health professional.
- Trained pharmacists, pharmacy technicians, pharmacy students and interns may ONLY administer publicly funded influenza vaccine to individuals 2 years of age and older.
- Publicly funded vaccine may be administered to individuals who meet the eligibility criteria for the UIIP (i.e. individuals who are 6 months of age and older who live, work, or study in Ontario) and without contraindications to the vaccine.

9. Which influenza vaccines are different age groups eligible to receive through the Ontario Universal Influenza Immunization Program?

Age Group	QIV			QIV-HD	TIV-adj
	FluLaval Tetra	Fluzone® Quadrivalent	Afluria® Tetra	Fluzone® High-Dose Quadrivalent	Fluad®
6 months to 4 years	✓	✓			
5 to 64 years	✓	✓	✓		
≥ 65 years	✓	✓	✓	✓	✓

10. Which influenza vaccine should individuals ≥65 years of age receive?

Please refer to the following:

- Question 5 in the Health Care Provider Qs & As: Information for individuals ≥65 years of age fact sheet and;
- Public Health Ontario's *Influenza Vaccines for the 2022-2023 Influenza* available at: www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/influenza.

11. What are the recommended needle gauge and lengths for intramuscular injections for different age groups?

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 months to 12 years		Deltoid muscle	22-25	5/8" – 1"
13 years+	Individuals weighing <130 lbs	Deltoid muscle	22-25	5/8" – 1"
	Males weighing 130-260 lbs	Deltoid muscle	22-25	1"
	Females weighing 130-200 lbs	Deltoid muscle	22-25	1"

Age and weight (if applicable) of vaccine recipient		Preferred Site of Injection	Needle Gauge	Needle Length
13 years+	Males weighing >260 lbs	Deltoid muscle	22-25	1½"
	Females weighing >200 lbs	Deltoid muscle	22-25	1½"

12. What are the post-puncture shelf life and product dimensions for the vaccine products offered in the 2022/2023 UIIP?

Vaccine	Post-puncture shelf life	Package dimension (cm)
FluLaval Tetra	28 days*	2.7 x 2.7 x 6.9
Fluzone® Quadrivalent	Multi-dose vial 28 days*	Multi-dose vial 3 x 2.9 x 6.2
	Pre-filled syringe Not applicable	Pre-filled syringe 10.4 x 9.9 x 3.8
Afluria® Tetra	Multi-dose vial 28 days*	Multi-dose vial 6.1 x 6.0 x 3.1
	Pre-filled syringe Not applicable	Pre-filled syringe 12.5 x 6.1 x 9.4
Fluzone® High-Dose Quadrivalent	Not Applicable	9.9 x 10.4 x 2.3
Fluad®	Not applicable	12.7 x 6.35 x 9.4

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

13. Which strains of influenza are recommended to be included in the vaccine products offered in the 2022/2023 UIIP?

For the northern hemisphere's 2022/2023 season, the World Health Organization (WHO) has recommended the following strains be included:

Influenza Strains	Egg-based QIVs	Egg-based TIVs (Fluad®)
A/Victoria/2570/2019 (H1N1)pdm09-like virus;	✓	✓
A/Darwin/9/2021 (H3N2)-like virus;	✓	✓
B/Austria/1359417/2021 (B/Victoria lineage)-like virus;	✓	✓
B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.	✓	

D. Influenza Vaccine

14. How well does the influenza vaccine protect against influenza?

Influenza viruses change frequently (this is called antigenic drift) – 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.

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.

15. Do any of the publicly funded influenza vaccines offer protection against COVID-19?

The influenza vaccine will not protect against respiratory viruses other than influenza, including the coronavirus that causes COVID-19, but will help prevent infection and illness from the influenza virus.

16. Can the influenza vaccine be given at the same time as other vaccines?

Vaccine	Intervals (if applicable)
COVID-19 and other vaccines	<p>The influenza vaccines (i.e., QIV-HD, TIV-adj, and QIV) may be given concomitantly with, or at any time before or after, other vaccines, including COVID-19 vaccine for individuals 5 years of age and older ONLY*. There are no direct studies on the co-administration of Shingrix® with Fluvad® (TIV-adj) or Fluzone® High-Dose Quadrivalent (QIV-HD) - see Shingrix® section below.</p> <p>If given by injection at the same time, separate limbs should be used if possible. Alternatively, the injections may be administered into the same muscle separated by at least 2.5 cm (1"). Different immunization equipment (needle and syringe) must be used for each vaccine.</p>
Shingrix®	<p>No studies have been conducted that have assessed the co-administration of Shingrix® with adjuvanted or high-dose influenza vaccines. With Fluvad®, it is unknown how the adjuvants may interact when Shingrix® is co-administered.</p>

*Co-administration with COVID-19 vaccine is NOT currently recommended for individuals 6 months to under 5 years of age. It is advised to wait 14 days between vaccine products

when administering COVID-19 vaccine and other vaccines to prevent mistakenly connecting an adverse event to one particular vaccine or the other.

17. Will the influenza vaccine increase risk of infection or severe outcomes related to COVID-19?

No.

Expert groups and evidence indicate that getting the influenza vaccine will not increase your risk of COVID-19 infection or severe outcomes related to COVID-19.

18. Do individuals need to receive the influenza vaccine every year?

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 influenza vaccine aims to address the anticipated circulating strains.

19. Are the influenza vaccines safe?

Yes.

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 it is closely monitored for vaccine safety and effectiveness through provincial surveillance in Ontario and by Health Canada and the Public Health Agency of Canada.

20. What are the risks from the influenza vaccine?

The influenza vaccine, like any medicine, can cause adverse events, which in most cases are mild, lasting only a few days. Life-threatening allergic (anaphylactic) reactions are very rare. If they do occur, it is typically within a few minutes to a few hours after receiving the vaccine. If this type of reaction occurs, medical attention should be sought immediately. For details on common adverse events from the influenza vaccines, as well as serious events requiring medical attention, please refer to the age specific Health Care Provider Qs & As 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. Individuals who have developed GBS within 6 weeks of an influenza vaccination, should generally avoid subsequent influenza vaccinations, however, this should be weighed against the risks of not being vaccinated.

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 re-immunized 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.

Health care providers (e.g., physicians, nurses and pharmacists) are required by law (i.e., *Health Protection and Promotion Act*, section 38) to report adverse events following immunization (AEFI). Reports should be made using the Ontario AEFI Reporting Form (available at: www.publichealthontario.ca/vaccinesafety) and sent to the local public health unit.

A list of public health units is available at:

www.health.gov.on.ca/en/common/system/services/phu/locations.aspx.

For additional information on influenza or the vaccine, please visit the following websites or call your local public health unit:

- a) Universal Influenza Immunization Program: www.ontario.ca/influenza
- b) Public Health Agency of Canada - National Advisory Committee on Immunization (NACI) Statement on Seasonal Influenza Vaccine: www.phac-aspc.gc.ca/naci-ccni/#rec
- c) NACI Guidance for influenza vaccine delivery in the presence of COVID-19: www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/guidance-influenza-vaccine-delivery-covid-19.html
- d) Interim guidance on continuity of immunization programs during the COVID-19 pandemic: www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/interim-guidance-immunization-programs-during-covid-19-pandemic.html
- e) Public Health Ontario: www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/influenza
- f) Immunize Canada: www.immunize.ca
- g) Centers for Disease Control and Prevention (CDC) - Seasonal Influenza: www.cdc.gov/flu
- h) List of public health unit locations: www.health.gov.on.ca/en/common/system/services/phu/locations.aspx

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